

PhD thesis

Statutory audit and corporate governance: Evidence from the small and medium-sized AIM companies

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Statutory Audit and Corporate Governance: Evidence from the Small and Medium-Sized AIM Companies

A thesis submitted to Middlesex University in partial fulfilment of the requirements for the degree of Doctor of Philosophy

June 2023

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Abstract

This thesis revolves around the "triangle relationship" among the shareholders, directors, and statutory auditors of a sample of small and medium-sized AIM companies of the London Stock Exchange for the financial periods covering 2010 to 2015 towards the demand and supply of statutory audit services, aiming to provide answers to the research questions of three empirical studies as follows. Firstly, what are the drivers of statutory audit fee? Secondly, what are the triggers of statutory auditor switching? Thirdly, what are the determinants of audit report lag?

The first empirical study of this thesis shows that the small and medium-sized AIM companies that formed audit committee tends to pay lower statutory audit fee while a newly appointed statutory auditor tends to charge lower statutory audit fee at the initial engagement. However, the dual role of nominated adviser cum broker or the newly appointed chief executive officer does not influence the level of statutory audit fee.

The second empirical study of this thesis reveals that the appointment of new chief executive officer or new nominated adviser can trigger the statutory auditor switching in the following year. In addition, the small and medium-sized AIM companies are more likely to switch statutory auditors when the level of statutory audit fee or non-audit fee is costlier. On the other hand, they are also more likely to switch statutory auditors if they have audit committee and received modified audit report.

The third empirical study of this thesis demonstrates that the extent of audit report lag for the small and medium-sized AIM companies is explained by the level of auditor-client negotiations and not by the corporate governance characteristics. The audit report lag is longer when the level of discretionary accruals is higher or when modified audit report is issued. However, the existence of audit committee, chief executive officer cum chairman, or nominated adviser cum broker does not enhance the financial reporting timeliness.

Other than contributing to the existing literature into the aspects of statutory audit for smaller listed companies, this thesis also provides the preliminary and entirely new evidence on the influential role of the unique advisory feature of nominated adviser when fixing the statutory

audit fee, deciding the statutory auditor switching, and determining the audit report lag of AIM companies.

Key words: Statutory audit; Corporate governance; Statutory audit fee; Statutory auditor switching; Audit report lag; AIM; SME; Audit committee; Nomad; NomadBro.

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List of abbreviations

Abbreviation Full description

AGM Annual general meeting
CEO Chief executive officer

FRC Financial Reporting Council

GAAP Generally accepted accounting principles

IAASB International Auditing and Assurance Standards Board

IASB International Accounting Standards Board

IFAC International Federation of Accountants

ISA International Standard on Auditing

LSE London Stock Exchange

Nomad Nominated adviser

NomadBro Nominated adviser cum broker, i.e., both positions are held by the same

firm

OLS Ordinary least-squares

QCA Quoted Companies Alliance

QCA Code QCA Corporate Governance Code

SEC Securities and Exchange Commission

SME Small and medium-sized enterprise

SOX Sarbanes-Oxley Act of 2002

System GMM System generalised method-of-moments

UK United Kingdom

US United States

USM Unlisted Securities Market

VIF Variance inflation factor

Chapter 1. Introduction

This chapter provides background to this thesis and spells out the motivations together with the objectives, research methodology and data as well as highlighting the main findings and contributions.

1.1. Background to this thesis

This thesis revolves around the "triangle relationship" among the three key participants of a company, namely shareholders, directors, and statutory auditors, towards the demand and supply of statutory audit services. Statutory audit is an independent monitoring mechanism performed by the statutory auditor to mitigate the agency problems arising from the conflict of interest and information asymmetry between the directors and shareholders. In the United Kingdom ("UK"), all listed companies are mandatory to engage a statutory auditor in accordance with the provisions of the Companies Act 2006 to conduct an audit on their financial statements prepared by the board of directors (thereafter known as "board" or "directors") whereby the statutory auditor issues an auditor's report addressed to the shareholders for inclusion in the annual report presented in the annual general meeting ("AGM"). De jure, the shareholders appoint the statutory auditor and authorise the board to fix the auditor's remuneration. However, in practice, the board has de facto control over the appointment and remuneration of the statutory auditor. During the statutory audit, the audit team would interact with the management team in obtaining sufficient appropriate audit evidence and reporting their audit opinion directly to the shareholders through the auditor's report. The statutory audit could be viewed as an external corporate governance mechanism that plays a vital role in enhancing the credibility of financial information of a company. Such audit serves to provide comfort and confidence to the shareholders on the quality of financial statements prepared by the directors on a timely basis. The timely release of the audited financial statements could bridge the information asymmetry gap and facilitate shareholders' informed investment decisions (e.g., Habib and Bhuiyan, 2011) while the unduly delay would receive negative market reactions and higher information asymmetry (e.g., Ashton, Willingham and Elliott, 1987; Jaggi and Tsui, 1999). Apparently, corporate governance mechanisms are the cornerstone for financial reporting quality while auditor competence and

independence are the backbone for audit quality, which could enhance the company performance to a greater height over time.

The relationships between the statutory auditors and their clients have attracted greater attention from corporate stakeholders and have come under closer scrutiny of regulators over time upon the exposure of a series of accounting scandals and corporate failures around the world (e.g., Enron in the United States ("US"); Parmalat in the Europe; Carillion in the UK). For instance, the collapse of Enron in the corporate world and the demise of Arthur Anderson from the accounting profession have directly triggered the legislation response and consequently the implementation of the Sarbanes-Oxley Act of 2002 ("SOX") by the US Securities and Exchange Commission ("SEC") in the early 21st century to improve the corporate governance as well as the audit quality, and to restore investors' confidence and faith. On the other hand, Financial Reporting Council ("FRC") issued The UK Corporate Governance Code 2018 and The Audit Quality Framework (February 2008) while the International Auditing and Assurance Standards Board ("IAASB")¹ developed and approved "A framework for audit quality: Key elements that create an environment for audit quality" (2014) to promote stronger corporate governance and higher audit quality. Most recently, the UK government responded to several drivers for change that included corporate failures and the need to increase the quality of audit, and proposed to establish a strong, independent regulator, the Audit, Reporting and Governance Authority, replacing the FRC, with increased powers to raise standards and hold those responsible for delivering them to account (Department for Business, Energy & Industrial Strategy, May 2022). Apparently, it is equally vital to appoint a competent board to implement the internal governance for an effective financial reporting as well as to appoint a reputable statutory auditor to exercise effective external governance for a high level of audit quality. One of the agency theory concepts is that the shareholders appoint the directors to manage the company's assets and to run the day-to-day operations who in turn report to them through the financial statements. As agents to the shareholders, inevitably the directors may occasionally act for their own self-interest benefitting from the information asymmetry on their

¹ The IAASB is an independent standard-setting body that serves the public interest by setting high-quality international standards for auditing, assurance, and other related areas, and by facilitating their adoption and implementation (IAASB, 2016). The IAASB develops auditing and assurance standards and guidance for use by all professional accountants under a shared standard-setting process involving the Public Interest Oversight Board, which oversees the activities of the IAASB, and the IAASB Consultative Advisory Group, which provides public interest input into the development of the standards and guidance; the structures and processes that support the operations of the IAASB are facilitated by the International Federation of Accountants ("IFAC") (IAASB: A framework for audit quality: Key elements that create an environment for audit quality, 2014).

end. Hence, different levels of corporate governance mechanisms, such as appointments of non-executive directors and independent directors, and formation of different committees for audit, remuneration, and nomination, are established to manage such conflicts and to meet shareholders' goals. To assess the accountability of the directors for the resources entrusted to them in discharging their stewardship responsibility, the shareholders appoint another agent, i.e., the statutory auditor, to conduct an audit on the financial statements prepared by the directors and to express an independent opinion on the true and fair state of the financial statements therefrom. The audit quality concepts, among others, are the joint probability that an auditor will detect material misstatements in the financial statements and report appropriately on the audit report (DeAngelo, 1981), or the provision of greater assurance that the financial statements faithfully reflect the firm's underlying economics, conditioned on its financial reporting system and innate characteristics (DeFond and Zhang, 2014). Past studies have related audit quality to auditor size (e.g., DeAngelo, 1981), auditor reputation (e.g., Simunic, 1980), statutory audit fee (e.g., Low, Tan and Koh, 1990), non-audit fee (e.g., Zaman, Hudaib and Haniffa, 2011), auditor tenure (e.g., Myers, Myers and Omer, 2003), audit opinion (e.g., Lennox, 2003), auditor switching (e.g., Schwartz and Menon, 1985), and quality of financial statements (e.g., Antle, Gordon, Narayanamoorthy and Zhou, 2006).

This thesis investigates the demand and supply of statutory audit of the small and medium-sized enterprises ("SMEs") quoted on the AIM (formerly known as Alternative Investment Market) of the London Stock Exchange ("LSE") through three stand-alone empirical studies, namely drivers of statutory audit fee under chapter 3, triggers of statutory auditor switching under chapter 4, and determinants of audit report lag under chapter 5. Overall, the lightly regulated market that AIM companies are operating in opens up avenue for SME research on smaller listed companies that potentially engaged in distinctive corporate governance characteristics and are more prone to price-sensitivity approach.

1.2. Motivations for this thesis

Many past studies (e.g., Simunic, 1980; Pong and Whittington, 1994; Robinson and Owen-Jackson, 2009; Zaman et al., 2011; Ghafran and Yasmin, 2018; Cairney and Stewart, 2019) across the developed and developing countries have investigated into the various aspects of demand and supply of statutory audit services, which encompass the corporate governance

mechanisms, the level of audit quality, and the financial reporting timeliness, among others. Under the mandatory environment, all the listed companies in the UK are required to appoint one of the audit firms to perform a statutory audit on their financial statements on an annual basis. The key questions surrounding the statutory audit where both the audit clients and the audit firms are particularly interested in would be the auditor's remuneration and retention as well as the timeliness of financial and audit reporting. Past studies have examined the drivers of statutory audit fee that were associated with client size, client complexity, client risk, and corporate governance characteristics (e.g., Siminic, 1980; Pong and Whittington, 1994; Carcello, Hermanson, Neal and Riley, 2002; Zaman et al., 2011). On the other hand, some past studies revealed that one of the incentives for companies to switch their statutory auditors was to obtain a reduced statutory audit fee (e.g., Beattie and Fearnley, 1995; Hay, Knechel and Wong, 2006) or to solicit a better audit opinion from the succeeding auditors upon switching (e.g., Chow and Rice, 1982; Craswell, 1988; Lennox, 2000; Cairney and Stewart, 2019). Inevitably, the issuance of modified audit report involved auditor-client negotiations over financial reporting issues occurred (e.g., Salterio, 2012) that would prolong the audit report lag (e.g., Abernathy, Barnes, Stefaniak and Weisbarth, 2017; Habib, Bhuiyan, Huang and Miah, 2019; Durand, 2019).

Majority of past studies (e.g., Simunic, 1980; Pong and Whittington, 1994; Robinson and Owen-Jackson, 2009; Zaman et al., 2011; Ghafran and Yasmin, 2018; Cairney and Stewart, 2019) were based on larger listed companies with only a handful of studies focusing on SMEs (e.g., Clatworthy and Peel, 2007; Xue and O'Sullivan, 2023). This thesis differs from past studies in the two important and interesting aspects as follows. Firstly, given the scarcity of research on smaller listed companies and potential distinct corporate governance mechanisms as well as cost-saving strategy adopted by the SMEs, this thesis is motivated to investigate into the factors affecting the aspects of statutory audit of the small and growing companies listed on the young and lightly regulated AIM of the LSE. AIM is a junior market of the LSE that is dominated by SMEs and has distinct corporate governance mechanism as compared to larger companies on the Main Market of the LSE. As noted, the formation of audit committee is based on a voluntary compliance as AIM companies are not legally bound to comply with the provisions of The UK Corporate Governance Code (LSE: AIM Rules for Companies, 2021). In contrast to past studies that focused on characteristics of audit committee (e.g., Zaman et al., 2011; Ghafran and Yasmin, 2018; Cairney and Stewart, 2019), this thesis focuses on the voluntary formation of audit committee in influencing the auditor remuneration and retention,

and audit timeliness, which could be of interest to SMEs when deciding whether to form an audit committee or not bearing in the mind the benefits and costs of having an audit committee. On the other hand, this thesis examines, for the first time to the best of my knowledge, the central role of the nominated adviser ("Nomad") as the external governance mechanism in advising their AIM clients on auditing related matters. The retention of a Nomad, who must be a firm or company that has practised corporate finance for at least the last two years and one that has acted on at least three relevant transactions during that two-year period, and employ at least four qualified executives with evidence to the satisfaction of the LSE (LSE: AIM Rules for Nominated Advisers, 2019), at all times is a compulsory compliance that is unique to this lightly regulated AIM market in instilling the confidence of the investors while offering appropriate investor protection (LSE: A Guide to AIM, 2015). In addition, AIM companies are not required to adhere to the auditor rotation and tendering regulations imposed on FTSE 350 companies (Financial Reporting Council ("FRC"), 2017) which makes their statutory auditor switching a voluntary rather than a compulsory decision. On the other hand, SMEs have greater auditor choice and might be more likely to adopt cost-minimisation strategy as compared to larger companies in term of cost sensitivity and saving when considering auditor's remuneration, retention, and timeliness. Thus far, AIM companies have attracted relatively little research attention (e.g., Mallin and Ow-Yong, 1998; Mallin and Ow-Yong, 2008; Farag, Mallin and Ow-Yong, 2014), particularly on the external audit aspects (e.g., Clatworthy and Peel, 2007; Xue and O'Sullivan, 2023). Mallin and Ow-Yong (1998; 2008) examined the corporate governance aspects of AIM companies while Farag et al. (2014) investigated the inter-relationship between corporate governance, venture capital ownership, and financial performance in AIM companies. On the other hand, Clatworthy and Peel (2007) examined the effect of corporate status on statutory audit fee of UK quoted companies (i.e., companies on Main Market, AIM, and Ofex) and unquoted companies. Most recently, Xue and O'Sullivan (2023) examined the impact of risk, corporate governance and auditor size on the determinants of audit fees of AIM companies, focused on largest AIM companies and not AIM SMEs. The absence of research interest could be due to lack of readily available data on databases that makes the manual data collection from the companies' annual reports a tedious process. Secondly, the limited number of SME research studies on the relationship between statutory audit and corporate governance is surprising given the SMEs are the cornerstone of economic development and growth in most countries around the world. According to the most recent business statistics, over 99% of UK businesses are SMEs and SMEs accounted for 61% of UK employment and 51% of business turnover as of 1st January 2022 (House of Commons Library,

2022). Moreover, there were around 1,250 small and mid-sized quoted companies in the UK, representing 93% of all quoted companies, employing approximately 3 million people, representing 11% of private sector employment in the UK, and contributed over £26 billion in annual taxes (Quoted Companies Alliance and UHY Hacker Young Associates, 2020). Consequently, any policy implications arising from the findings of SME research could potentially influence the country's economic development and growth as well as in sustaining the wider market confidence.

1.3. Objectives of this thesis

This thesis aims to investigate the key questions surrounding the auditor's remuneration and retention as well as the timeliness of financial and audit reporting where both the audit clients and the audit firms are particularly interested in during the conduct of the annual statutory audit by attempting to answer the following research questions in three separate empirical studies:

Research question 1: What are the drivers of statutory audit fee?

Research question 2: What are the triggers of statutory auditor switching?

Research question 3: What are the determinants of audit report lag?

The institutional setting for this thesis is AIM listed companies that are dominated by SMEs, which provides a great opportunity to examine the impacts of corporate governance of smaller listed companies and other aspects, such as cost-minimisation strategy, auditor independence, and auditor-client negotiations on the related aspects of statutory audit. The hypotheses for the above research questions are illustrated under chapter 3, chapter 4, and chapter 5 respectively together with the fundamental concepts, theoretical frameworks, empirical studies, and research gaps.

1.4. Contributions of this thesis

This thesis contributes to the audit and corporate governance literature and has implications for policy development. Specifically, to the best of my knowledge, there has been little research

conducted on AIM companies in the context of auditing, except for the very recent study conducted by Xue and O'Sullivan (2023) on largest AIM companies, since its launch in 1995 by the LSE for emerging or smaller companies even though AIM attracted younger companies from the UK and overseas (Farag, et al., 2014), and is one of the five out of eleven second-tier stock markets in existence, which have been launched by the stock exchanges of the four largest European economies, namely Germany, France, Italy, and the UK (Vismara and Paleari, 2012). Subject to less stringent admission rules and operating under lightly regulated market, AIM companies have distinctive corporate governance mechanism from the larger listed companies. The existence of audit committee in AIM companies, if any, is of voluntary basis as opposed to the compulsory formation of audit committee in the larger listed companies. Such flexibility enables this thesis to examine the role played by the audit committee in discharging their internal governance responsibilities in certain aspects of statutory audit for AIM companies. The findings of the thesis would provide better understanding to the practitioners on the governance role played by the audit committee, and would assist the policy makers in refining corporate governance mechanism to better suit the AIM and smaller listed companies as "one size does not fit all" (LSE, 2012). Another key distinction for AIM companies is the compulsory retention of Nomad at all times throughout their lifetime on the AIM market. In some cases, the Nomad is also the appointed broker. The Nomad system is unique to AIM companies, which was implemented by the LSE as a balance regulatory framework under this lightly regulated market (LSE: A Guide to AIM, 2015). The Nomad plays multiple roles as gatekeeper, adviser, and regulator of AIM companies; and an AIM company should discuss with its Nomad and seek guidance from its Nomad on which corporate governance code it will seek to follow and implement. To the best of my knowledge, no past studies examined the role of Nomad from statutory audit perspectives. Examining and understanding the role played by the Nomad in discharging their external governance responsibilities would assist the policy makers when debating the pros and cons of this regulatory framework in offering appropriate investor protection. Moreover, unlike the past studies which mostly focussed on larger listed companies (e.g., Simunic, 1980; Pong and Whittington, 1994; Robinson and Owen-Jackson, 2009; Zaman et al., 2011; Ghafran and Yasmin, 2018; Cairney and Stewart, 2019), this thesis is focussed on SMEs on the AIM market. Despite there are around 1,250 small and mid-sized quoted companies in the UK, representing 93% of all quoted companies, employing approximately 3 million people, representing 11% of private sector employment in the UK, and contributed over £26 billion in annual taxes (Quoted Companies Alliance and UHY Hacker Young Associates, 2020), and 99% of UK businesses are SMEs and SMEs accounted for 61%

of UK employment and 51% of business turnover as of 1st January 2022 (House of Commons Library, 2022), limited research has been conducted on SMEs in the context of auditing. The findings of this thesis would provide the directors of smaller listed companies the important insights into the key factors affecting their statutory audit fee, statutory auditor switching, and audit report lag, and hence would facilitate their informed judgement and decision on the level of audit quality, auditor choice, auditor independence and audit timeliness while addressing their cost-minimisation strategy and the level of auditor-client negotiations. Similarly, the findings of this thesis would provide the practitioners better understanding when making decisions on auditing related matters, and provide evidence and insights to policy makers when drafting auditing guidance and regulations for AIM and smaller listed companies, particularly in setting the statutory audit fee of SMEs, in deciding whether auditor rotation should be imposed on SMEs, and also in refining the required timeline for SMEs to publish their annual report. The details of the contributions for the three empirical studies of this thesis are illustrated under chapter 3, chapter 4, and chapter 5 respectively.

1.5. Structure of this thesis

The remainder of this thesis is organised as follows. Chapter 2 provides an overview of AIM as well as the key concepts and theoretical framework relating to the three empirical studies of this thesis. The first empirical study examines the drivers of statutory audit fee and is illustrated in chapter 3 followed by the second and third empirical study examining the triggers of statutory auditor switching and the determinants of audit report lag (chapter 4 and chapter 5 respectively). Finally, chapter 6 concludes with summaries of key issues together with limitations of this thesis and recommendations for future research.

Chapter 2. AIM, key concepts, and theoretical framework

This chapter provides an overview of AIM as well as the key concepts and theoretical framework relating to the three empirical studies of this thesis.

2.1. AIM of the London Stock Exchange

AIM (formerly known as Alternative Investment Market) of the LSE in the UK is a lightly regulated market with smaller capitalisation as compared to the Main Market on the LSE. AIM is a stock market launched in 1995 for smaller growing companies² that do not require a particular track record or trading history; since then, AIM has successfully attracted national and international market participants seeking listing on a world-class public market with over 3,500³ companies across the globe joined AIM in its 20-year history having raised over £90 billion through new and further issues to support their growth and development (LSE: A Guide to AIM, 2015). It is the home for 40 different sectors of business activities operating in more than 100 countries across the world with a combined market capitalisation of over £70 billion (LSE: A Guide to AIM, 2015). AIM is one of the five out of eleven second-tier stock markets in existence launched by the stock exchanges of the four largest European economies, namely Germany, France, Italy, and the UK (Vismara and Paleari, 2012). AIM is the world's leading growth market, and it has already lived through more than two complete economic cycles since its launched in 1995 by the LSE for emerging or smaller companies. As of 2021, AIM was the home for 705 UK companies and 111 international companies with a combined market capitalisation of over £130 billion (AIMListing, 2022). Currently, AIM companies operate in 37 sectors, 90 sub-sectors, and 26 countries (AIMListing, 2022).

SMEs are cornerstone of economic development and growth in most countries around the world. SMEs have been the backbone of UK businesses and this situation has stayed consistent over time as illustrated by the national statistics reported for 2022 by the House of Commons

² The first page of the admission document of an AIM company must distinctly disclose that "AIM is a market designed primarily for emerging or smaller companies to which a higher investment risk tends to be attached than to larger or more established companies. AIM securities are not admitted to the official list of the United Kingdom's Financial Conduct Authority" (LSE: AIM Rules for Companies, 2021).

³ This number was updated by the AIM Listing Ltd to over 3,700 companies, which raised over £100 billion in capital with 95 international companies joined AIM over the last 5 years (<u>The AIM Market | AimListing</u> [accessed 21st July 2021]).

Library (2022), for 2020 by the Department for Business, Energy & Industrial Strategy (2020), and for 2014 by the House of Commons Library (2015). The most recent business statistics by the House of Commons Library (2022) reported that as of 1st January 2022, there were 5.5 million (2020: 6.0 million; 2014: 5.2 million) private sector businesses in the UK with the SMEs accounting for 99.9% (2020: 99.9%; 2014: over 99.9%) of them; out of those SMEs, 95.4% (2020: 95.7%; 2014: 95.6%) were microenterprises with 0-9 employees, 3.9% (2020: 3.6%; 2014: 3.7%) were small enterprises with 10-49 employees, and 0.7% (2020: 0.6%; 2014: 0.6%) were medium-sized enterprises with 50-249 employees. On 3rd January 2018, AIM was registered as a SME growth market (LSE: AIM Rules for Companies, 2018, page 3). Quoted Companies Alliance ("QCA"), the independent membership organisation that champions the interests of small and mid-sized quoted companies, reported that there were around 1,250 small and mid-sized quoted companies in the UK, representing 93% of all quoted companies, employing approximately 3 million people, representing 11% of private sector employment in the UK, and contributed over £26 billion in annual taxes (Quoted Companies Alliance and UHY Hacker Young Associates, 2020). Being the largest junior stock exchange in the world (Farag et al., 2014) and given the growing attractiveness of AIM as a secondary market to those small and growing UK and overseas companies, its success is imperative to sustain the wider market confidence.

To instil the confidence of the investors over AIM companies under this lightly regulated market, the LSE has implemented a balanced regulatory framework that was specifically designed with market participants to meet the needs of growing companies while offering appropriate investor protection (LSE: A Guide to AIM, 2015). One of the rulebooks is AIM Rules for Companies, which explicitly require that an AIM company must always retain a Nomad and a broker since its admission and throughout its lifetime on the AIM market. The appointment of a Nomad as the key adviser is a unique feature of AIM companies and the responsibilities of the Nomad are spelt out in another rulebook, i.e., AIM Rules for Nominated Advisers. A Nomad must be a firm or company that practised corporate finance, and must be approved and licensed by the LSE, who is responsible for advising and guiding an AIM company on its responsibility in relation to admission to the AIM market as well as its continuing obligations once on the market (LSE: AIM Rules for Nominated Advisers, 2019). The role and responsibility of Nomad as part of the external governance mechanisms are further illustrated under the forthcoming section 2.2. AIM has exported the concept of its unique feature of Nomad to Italy (i.e., AIM Italia), Tokyo (i.e., Tokyo AIM), and US (i.e., OTCQX)

(Farag et al., 2014), which could be seen as a key corporate governance mechanism in achieving a desirable audit quality level. Such regulatory feature is emulated by OTCQX, the leading over-the-counter market in the US, which has acknowledged in its website that the Nomad's advisory role has inspired its own "community-based" listing process (Farag et al., 2014).

Compared to larger listed companies, the AIM SMEs are expected to present different audit challenges in view of their different governance structure, greater auditor choice, and cost-sensitivity and saving strategies when considering auditor's remuneration and retention, and the timeliness of financial and audit reporting.

2.2. Principles of corporate governance

The Cadbury Code in 1992 produced by the Cadbury Committee has been evolved into The UK Corporate Governance Code 2018 and is now under the responsibility of the FRC⁴. The definition of corporate governance as the system by which companies are directed and controlled to facilitate effective, entrepreneurial, and prudent management that can deliver the long-term success of the company, is still the classic definition of the context of the code (FRC: The UK Corporate Governance Code 2016, 2018). Therefore, it is about what the board of a company does and how the board establishes the culture, values, and ethics of the company, which should be distinguished from the day-to-day operational management of the company by full-time executives (FRC: The UK Corporate Governance Code 2016). The most recent updates to The UK Corporate Governance Code 2018 places greater emphasis on relationships between companies, shareholders, and stakeholders, and promotes the importance of establishing a corporate culture that is aligned with the company's purpose and strategy, and should promote integrity, openness, and value diversity. The UK Corporate Governance Code is applicable to all companies with a premium listing, whether incorporated in the UK or elsewhere.

The UK Corporate Governance Code 2018 focuses on the application of the principles described under five categories, namely (1) Board leadership and company purpose; (2)

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⁴ The FRC represents UK interests in international standard-setting and is responsible for promoting high-quality corporate governance and reporting to foster investment as well as promoting the quality of corporate reporting and auditing (FRC, 2016).

Division of responsibilities; (3) Composition, succession, and evaluation; (4) Audit, risk, and internal control; and (5) Remuneration. Appropriate disclosure should be made in the annual report on the applications of the principles and provision of the code. A clear division of responsibilities should exist whereby the chairman and the chief executive officer ("CEO") should not be the same individual. The board should include an appropriate combination of executive and independent non-executive directors, and the board should among themselves form nomination committee, audit committee, and remuneration committee. A majority of members of the nomination committee should be independent non-executive directors while all the members of the audit committee and remuneration committee should be independent non-executive directors. One of the main roles and responsibilities of the audit committee should be conducting the tender process and making recommendations to the board, about the appointment, re-appointment, and removal of the external auditor, and approving the remuneration and terms of engagement of the external auditor, and reviewing and monitoring the external auditor's independence and objectivity.

The foundation concept of "comply or explain" has been continuously in operation in the corporate governance code since the introduction of Cadbury Code, and is strongly supported by both companies and shareholders, and has been widely admired and imitated internationally (FRC: The UK Corporate Governance Code, 2016). It is crucial for the regulator to establish the processes and structures forming the basic benchmark as minimum acceptable standard and best practices for companies; however, there would be no "one size fits all" approach. Hence, it is the responsibility of board to use this flexibility wisely. An alternative to complying should be justified with background explanations, a clear rationale for the action the company is taking, and in explaining the impact that the action has had (FRC: The UK Corporate Governance Code, 2018).

Given the simplified regulatory environment specifically designed for the AIM market, this means that AIM companies are not legally bound by the AIM rulebooks to comply with the provisions of The UK Corporate Governance Code; however, the QCA has produced some corporate governance guidelines designed especially for small and mid-sized quoted companies, and the Nomad expects these to be followed (LSE: A Guide to AIM, 2015). Pursuant to Rule 26 of the AIM Rules for Companies, an AIM company must maintain an upto-date website, free of charge, containing detailed information on the company and amongst others are applications of corporate governance (LSE: AIM Rules for Companies, 2021). Until

September 2018, the AIM companies had the choice of either stating on their website which corporate governance code they followed or noting that they did not follow a specific code and setting out their own arrangements (LSE: AIM Rules for Companies, 2016). However, in September 2018, the LSE required all companies on AIM to adopt a corporate governance code for the first time. The updated rules required all AIM companies to state on their website which corporate governance code they followed, how they comply with that code and where they depart from that code, provide an explanation of the reasons for doing so; this information should be reviewed annually and the website should include the date on which this information was last reviewed (LSE: AIM Rules for Companies, 2018, 2021). Subsequent surveys of two different periods revealed that 89% (89%), 10% (6%), and 1% (5%) of companies on AIM had chosen to follow the QCA Corporate Governance Code ("QCA Code"), The UK Corporate Governance Code, and a mix of codes at the end of 2019 and 2018 respectively (Quoted Companies Alliance and YouGov, 2019).

The QCA Code is a practical, outcome-oriented approach to corporate governance that is tailored for small and mid-sized quoted companies in the UK, which has become a valuable reference for growing companies wishing to follow good governance examples since its initial release in 2013 (Quoted Companies Alliance and UHY Hacker Young Associates, 2020). There are 10 corporate governance principles⁵ contained in the QCA Code published in 2018 that focus on delivering growth and maintaining a dynamic management framework. Broadly, the QCA Code provides principles on maintaining a well-functioning and balanced board, that includes non-executive and independent directors, led by the chair; and also describes the roles and responsibilities of the chair, CEO, and sub-committees (such as audit, remuneration, and nomination committees, where exist).

It is mandatory for AIM companies to always retain a Nomad and a broker (LSE: AIM Rules for Companies, 2021). The Nomad must be a firm or company that has practised corporate finance for at least the last two years and one that has acted on at least three relevant transactions during that two-year period, and employ at least four qualified executives with evidence to the satisfaction of the LSE (LSE: AIM Rules for Nominated Advisers, 2019). The Nomad are so important to AIM that they must be approved to act in such capacity by the LSE to ensure that the existing and prospective AIM companies have access to high-quality advice

⁵ The 10 essential principles under the QCA Code are shown in Appendix A.

and support (LSE: AIM Rules for Companies, 2021). The LSE will suspend an AIM company's securities trading if the AIM company ceases to have a Nomad and if the AIM company fails to appoint a replacement Nomad within one month of that suspension, and consequently the LSE will cancel the admission of the AIM company's securities (LSE: AIM Rules for Companies, 2021). Apparently, the Nomad is the key adviser and primary regulator of an AIM company, who must always act with due skill and care in ensuring the AIM company continues to understand its obligations under the AIM rules (LSE: AIM Rules for Nominated Advisers, 2019). On the other hand, the broker monitors the trading activity for securities of an AIM company and alerts the Nomad to substantial price or trading movements (LSE: AIM Rules for Nominated Advisers, 2019).

The positions of Nomad and broker can be held by the same party ("NomadBro") or two different parties ("Nomad only") (LSE: A Guide to AIM, 2015). Mallin and Ow-Yong (1998) revealed that AIM companies who engaged NomadBro were more likely to have audit committee and no duality in board leadership. They also found that AIM companies which engaged NomadBro were more likely to exhibit stronger corporate governance than Nomad only companies, which they argued that it might be due to the reputational effect whereby NomadBro firms have more to lose if their AIM client companies collapse. Nevertheless, the findings in their another later study no longer supported the reputational effect in encouraging high-quality governance as they found that NomadBro or Nomad only has no influential impact on the corporate governance disclosure level by AIM companies (Mallin and Ow-Yong, 2008). The Nomad plays multiple roles as gatekeeper, adviser, and regulator of AIM companies; and an AIM company should discuss with its Nomad and seek guidance from its Nomad on which corporate governance code it will seek to follow and implement. With the recent change of AIM rules requiring all AIM companies to follow a corporate governance code, the recommendations by their Nomad were taken into consideration in their eventual decision to go with the chosen code; and this was the second most popular method as highlighted in a recent survey (Quoted Companies Alliance and YouGov, 2019), which reflects the influential role of the Nomad in the AIM companies.

The corporate governance mechanisms specify the distribution of rights and responsibilities among different participants in the companies, such as board, shareholders, and other stakeholders, and spell out the rules and procedures for making decisions on companies' affairs. The board could arguably be the stewards vis-à-vis the agents of the shareholders of a company,

who would always safeguard the assets of the company to the best interest of the shareholders in the former role (Donaldson and Davis, 1991) and who might occasionally act for the benefit of their own self-interest at the expense of the shareholders in the latter role (Jensen and Meckling, 1976). Hence, the control in the form of check and balance on the board is essential to ensure fairness, transparency, and accountability in financial reporting as well as to facilitate judgements and protections against abuse and to catch the occasional rogue.

Both the directors and Nomad are the key participants in the corporate governance mechanism of AIM companies in which the directors, such as audit committee and CEO, set up the internal governance structure with sufficient appropriate procedures, resources and controls, and the Nomad, who must be a firm or a company that practised corporate finance, and must be approved and licensed by the LSE, provides the advisory and monitoring functions under the external governance structure (Mallin and Ow-Yong, 1998). Given the greater flexibility available to the AIM companies in choosing their own corporate governance code that best fit their nature and environment, it opens up avenue for researchers to examine the impact of different governance practices on statutory audit of SMEs.

The survival of a company in the competitive capital market has inevitably increased the need of good corporate governance in the corporate world. Broadly, the board of the AIM companies are responsible for the proper implementation of the internal governance mechanism while the appointed Nomad, broker, and statutory auditor are expected to conduct the external governance mechanism with due care and professionalism. Inevitably, as important as good corporate governance principles are for audit quality and company performance, it is vital to ensure that the compliance costs would not outweigh the benefit for many AIM companies because "one size does not fit all" (LSE, 2012).

2.3. Statutory audit

Financial statement audit is one of the common types of audit and assurance services provided by an independent firm of auditors engaged by their client who demanded information to conduct investigation on the subject matter and form an opinion therefrom. The purpose of financial statement audit is to enhance the degree of confidence of intended users in the financial statements prepared by management of the entity with oversight from those charged with governance (FRC: International Standard on Auditing ("ISA") (UK) 200, 2020).

Statutory audit is a financial statement audit that is conducted in compliance with the law by an independent firm of auditors (i.e., statutory auditor), appointed by the shareholders of a company, on the financial statements prepared by the board, and expressed an opinion therefrom. As the basis of the auditor's opinion, the provisions of ISA (UK) 200 (FRC, 2020) require the auditor to obtain sufficient appropriate audit evidence in providing reasonable assurance about whether the financial statements as a whole are free from material misstatements, whether due to fraud or error. The date of auditor's report shall be no earlier than the date on which the auditor has obtained sufficient appropriate audit evidence to base the auditor's opinion on the financial statements, including evidence that all components of financial statements have been prepared and of the directors' assertation that they have taken responsibility for those financial statements. (FRC: ISA (UK) 700, 2020). Such audit could provide comfort to the principal-agent relationship arising from the information asymmetry and potential conflict of interest between the shareholders and board. At the same time, the statutory audit could be seen as a risk sharing process between both agents, board and statutory auditor (Simunic, 1980), simply because the audit of financial statements does not relieve the board who is solely and primarily responsible for the preparation of financial statements from their responsibilities (FRC: ISA (UK) 200, 2020). The "triangle relationship" among the shareholders, board, and statutory auditor of a company is further illustrated under the forthcoming section 2.5.

The shareholders of a company appoint the statutory auditor to conduct an audit on the financial statements prepared by the directors in accordance with the provisions of the Companies Act and to express an independent opinion therefrom. The appointments of directors and statutory auditor accordingly arising to the bonding and monitoring costs in the form of directors' remuneration and statutory audit fee, which are part and parcel of the agency cost incurred by the company in protecting the shareholders' wealth within the context of exercising proper corporate governance mechanisms and demanding for a high level of audit quality. Choosing and appointing a right statutory auditor is a crucial decision for any company simply because a high-quality audit could mitigate the principal-agent's conflict of interest arising from the separation of ownership and management in companies. A statutory auditor once appointed will hold office till the conclusion of the forthcoming AGM of that company whereby the

statutory auditor can express their interest to seek re-appointment or to retire without seeking re-appointment; while a company may choose to change statutory auditor at the AGM or part way through the financial year. Therefore, the decision to switch statutory auditor has to be properly thought through considering the potential switching costs and potential benefits from having a new firm of statutory auditors.

The provisions of statutory audit services to each company are unique although generally they are of the similar nature. It is simply because the audit works to be performed on individual company are specifically designed to best suit the environment and position of the company after taking into consideration the level of audit risk given the company characteristics. Accordingly, different level and amount of resources will be allocated to complete the audit, which include the staff expertise and skill as well as the numbers of hours spent (Low et al., 1990) to ensure the efficiency and effectiveness of the audit, and at the same time to uphold the audit professionalism. An AIM company is required to prepare, publish, and send to shareholders the audited annual accounts within six months after the end of the period to which they relate; such accounts must be prepared in accordance with International Accounting Standards, or certain generally accepted accounting principles ("GAAP"), or the accounting and company legislation and regulations that are applicable in its country of incorporation, where appropriate (LSE: A Guide to AIM, 2015). The electronic copy of annual audited accounts must be made available on that AIM company's website pursuant to Rule 26 of the AIM companies and must be sent to the LSE (LSE: AIM Rules for Companies, 2021). The timely release of the audited financial statements could bridge the information asymmetry gap and facilitate shareholders' informed investment decisions (e.g., Habib and Bhuiyan, 2011) while the unduly delay would receive negative market reactions and higher information asymmetry (e.g., Ashton et al., 1987; Jaggi and Tsui, 1999).

In order to form an audit opinion, the statutory auditor would develop an audit plan establishing the nature, timing, and extent of audit procedures through the conduct of compliance and substantive tests⁶ to obtain sufficient appropriate audit evidence that would reduce the audit

⁶ ISA (UK) 330 (FRC, 2018): Test of controls (i.e., compliance test) is an audit procedure designed to evaluate the operating effectiveness of controls in preventing, or detecting and correcting, material misstatements at the assertion level whilst substantive test is an audit procedure designed to detect material misstatements at the assertion level through tests of details of classes of transactions, account balances and disclosures, and substantive analytical procedures.

risk⁷, namely inherent risk, control risk, and detection risk⁸, to an acceptable low level (FRC: ISA (UK) 200, 2020). As such, when the inherent risk and/or control risk increase, the statutory auditor will have to reduce the detection risk by increasing substantive tests to maintain a desirable level of overall audit risk (Hogan and Wilkins, 2008). However, if the client has superior financial reporting with strong internal control system that the statutory auditor can rely upon, then the scope and extent of substantive tests will be reduced because of the lower level of inherent and control risks.

The relationships between statutory audit and statutory audit fee, statutory auditor switching, and audit report lag are further illustrated under chapters 3, 4, and 5 respectively.

2.4. Audit quality

The Audit Quality Framework (February 2008) issued by the FRC is designed to support effective communication between statutory auditors, audit committees, directors, shareholders, and other stakeholders on audit quality. The framework promotes the following key drivers of audit quality: the culture within an audit firm; the skills and personal qualities of audit partners and staff; the effectiveness of the audit process; the reliability and usefulness of audit reporting; and factors outside the control of statutory auditors that could be affecting audit quality. An audit is a dynamic and complex activity with many inter-related activities and the FRC recognises that audit quality is a dynamic concept and that the drivers and indicators of audit quality may change over time. Apparently, the key drivers of audit quality involve the competencies and independencies of statutory auditors in performing their duties and discharging their responsibilities appropriately with due care and professionalism.

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⁷ ISA (UK) 200 (FRC, 2020): Audit risk is the risk that the auditor expresses an inappropriate audit opinion when the financial statements are materially misstated. Audit risk is a function of the risks of material misstatement and detection risk. Risk of material misstatement is the risk that the financial statements are materially misstated prior to audit. This consists of inherent risk and control risk.

⁸ ISA (UK) 200 (FRC, 2020): Inherent risk is the susceptibility of an assertion about a class of transaction, account balance or disclosure to a misstatement that could be material, either individually or when aggregated with other misstatements, before consideration of any related controls. Control risk is the risk that a misstatement that could occur in an assertion about a class of transaction, account balance or disclosure and that could be material, either individually or when aggregated with other misstatements, will not be prevented, or detected and corrected, on a timely basis by the entity's internal control. Detection risk is the risk that the procedures performed by the auditor to reduce audit risk to an acceptably low level will not detect a misstatement that exists and that could be material, either individually or when aggregated with other misstatements.

In February 2014, the IAASB developed and approved "A framework for audit quality: Key elements that create an environment for audit quality" with the expectation in achieving a continuous improvement to audit quality nationally and internationally. The IAASB recognises that audit quality is a complex subject and there is no definition or analysis of it that has achieved universal recognition. Moreover, the perspectives of audit quality varied among stakeholders. This framework describes the input, process, and output factors as well as the key interactions and contextual factors that contribute to audit quality at the engagement, audit firm, and national levels, for financial statement audits. Broadly, the input stage involves the design of audit tests and allocation of staff and other relevant resources for implementation by the assigned staff to obtain sufficient appropriate audit evidence in the process stage to form audit opinion in the audit report to be issued to the shareholders in the output stage. During these stages, key interactions occur between the audit clients and statutory auditors in reviewing and assessing the contextual factors, such as the corporate governance mechanisms implemented by the directors in producing the financial statements, the audit regulatory framework applied by the statutory auditors in performing audit testing, among others. The statutory auditors are said to have obtained reasonable assurance about whether the financial statements as a whole are free from material misstatement when they have obtained sufficient appropriate audit evidence to reduce audit risk to an acceptably low level (FRC: ISA (UK) 200, 2020). Reasonable assurance is a high level of assurance but not an absolute level of assurance because there are inherent limitations of an audit (FRC: ISA (UK) 200, 2020). From the demand and supply perspectives, the demand level for audit services will in turn influence the supply of audit quality level. The perceived quality of audits will affect the degree of reliance placed by users on audit reports.

Most recently, the Department for Business, Energy & Industrial Strategy (May 2022) published the UK government's responses to the consultation on restoring trust in audit and corporate governance (March 2021) as part of the wider plan to reform the audit and corporate governance sector to prevent further audit failings following the collapse of companies including Carillion. The new regulator, Audit, Reporting and Governance Authority, will be created to replace the FRC to implement high-quality regulation and high standards, and to improve the reporting and directors' accountability at the largest companies, public and private; action to improve competition and choice in the audits of the largest publicly traded companies; and making audit a more effective tool for giving stakeholders reliable and relevant information about companies (Department for Business, Energy & Industrial Strategy, May 2022). Some

of the powers given to the Audit, Reporting and Governance Authority will be to set minimum requirements for audit committees in relation to the appointment and oversight of auditors, alongside powers to monitor and enforce those standards; and to realise a well-functioning audit market that promotes effective competition in order to drive higher audit quality and market resilience (Department for Business, Energy & Industrial Strategy, May 2022). These new requirements will be applicable to public interest entities⁹ and therefore, are not applicable to AIM SMEs.

There are various definitions for audit quality arising from past studies as follows. DeAngelo (1981) defined audit quality as the joint probability that an auditor will detect material misstatements in the financial statements and report appropriately on the audit report. To do so, it is crucial that the statutory auditors are technically competent and independent in fact as well as in appearance. In order to be competent, the statutory auditors must be equipped with relevant and reliable resources in terms of employees, expertise, and technology facilities in performing audit assignments while in order to be independent, the statutory auditors must be prepared to report any material findings arising from the audit assignments without the influence of their audit clients that would compromise auditor independence. Palmrose (1988) defined audit quality in terms of level of assurance in which the probability of financial statements contains no material omission or misstatements; higher level of assurance corresponds to higher audit quality, and vice versa. Francis (2004) conceptualised audit quality as a theoretical continuum ranging from very low to very high audit quality. On the other hand, DeFond and Zhang (2014) define higher audit quality as greater assurance that the financial statements faithfully reflect the firm's underlying economics, conditioned on its financial reporting system and innate characteristics.

Audit quality is multi-dimensional and normally unobservable plus coupled with the varied perspectives from varied stakeholders on the definition and interpretation of the level of audit quality have made the measurement of audit quality a difficult task and a controversial issue. Many stakeholders of a company including the shareholders have no direct information

⁹ Large private companies, companies traded on AIM or other multilateral trading facilities, and limited liability partnerships with both 750+ employees and an annual turnover of £750 million+ are treated as public interest entities and will be required to meet all of the same audit requirements as existing public interest entities (Department for Business, Energy & Industrial Strategy, May 2022).

available to them in assessing the level of audit quality. For instance, the shareholders of an AIM companies would only rely on auditor's report as the primary output for audit quality evaluation relative to their directors who would have more direct insights into the audit process and would be able to better evaluate the level of audit quality. There are multiple drivers of audit quality and past studies have adopted numerous proxies or surrogates as audit quality indicators, such as auditor size (e.g., DeAngelo, 1981), auditor reputation (e.g., Simunic, 1980), statutory audit fee (e.g., Zaman, et al., 2011), auditor tenure (e.g., Myers, Myers and Omer, 2003), audit opinion (e.g., Lennox, 2003), auditor switching (e.g., Schwartz and Menon, 1985), and quality of financial statements (e.g., Antle, et al., 2006). For instance, DeAngelo (1981) argued that larger audit firms supplied higher audit quality simply because they have more to lose by failing to report a discovered breach in a particular client's records; in other word, audit quality is not independent of audit firm size. Therefore, it is arguably that big 4 audit firms are more competent and independent relative to other audit firms as they have more resources, and they would incur higher reputation loss and risk if their clients were to fail subsequently resultant from perceived audit failure. Another instance, it is assumed that higher statutory audit fee indicates more extensive audit works were performed, and hence would result to higher audit quality (Zaman et al., 2011). These observable outcomes are real-world data that could reflect the practical scenarios but the causal relationship between the variables of interest is not always clear-cut as they are prone to the validity of surrogates and omission of variables (Beattie, Fearnley and Hines, 2013).

In summary, audit quality ranges from very low to very high level of assurance and it boils down to auditor competence and auditor independence in performing and discharging their duties with due care and professionalism.

2.5. Theoretical framework

The "triangle relationship" among the shareholders, directors, and statutory auditor of a company serves to create comfort and confidence to the shareholders and other stakeholders in general through the independent audit opinion expressed by the statutory auditor on the annual financial statements prepared by the directors (Pong and Whittington, 1994). Among the many theories that have been used to explain the framework for statutory audit and corporate

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¹⁰ See Appendix B for illustrations.

governance, the agency theory, stewardship theory, and signalling theory appear to be the most appealing theories for this thesis. The demand and supply of audit services in the context of corporate governance and audit quality alongside the underpinning theories and concepts that appear to overlap with one another in some contexts are illustrated in the forthcoming subsections.

2.5.1. Agency theory

Agency theory concentrates on the relationship between the principals and agents. It posits the existence of agency problem arising from the information asymmetries and goal conflicts between the principals and agents (Jensen and Meckling, 1976). Agents might not always act in the best interests of principals; consequently, principals would have to incur monitoring cost, bonding cost, and residual loss (collectively known as agency costs) to ensure the smooth implementation of the principal-agent relationship (Jensen and Meckling, 1976). The presence of appropriate corporate governance mechanisms should be helpful in alleviating such agency costs (Fama and Jensen, 1983).

The agency theory fits the relationship of the shareholders, who are the principals, and the directors, who are the agents, of a company with the existence of the separation of ownership and management (Jensen and Meckling, 1976). Shareholders are the owners of a company who elect the directors to manage the company's assets and to run the day-to-day operations of the company. On the other hand, the directors are the agents of the shareholders who manage the shareholders' funds entrusted to them by exercising proper corporate governance. In view of information asymmetries as well as conflict of interests, the agency theory predicts that the directors might be motivated to maximise their own self-interests at the expense of the shareholders (e.g., Jensen and Meckling, 1976; Eisenhardt, 1989). Hence, to mitigate the potential loss, the shareholders appoint another agent, i.e., the statutory auditor, to perform audit on the financial statements prepared by the directors to ensure their interests are well protected. The appointment of a high-quality statutory auditor would be one of the external governance mechanisms (Francis and Wilson, 1988). Such mechanism incurs monitoring cost in the form of statutory audit fee, which is part of the agency costs. Clearly, the mechanisms of corporate governance and statutory audit are interrelated holding both the board and

statutory auditor respectively accountable to the shareholders in terms of the true and fair view on the financial statements of a company from their own perspectives.

The appointment of non-executive directors could be seen as another monitoring device that the shareholders could rely on. The information asymmetries arise between the non-executive directors who have no direct involvement in the day-to-day business operations vis-à-vis the executive directors who are actively engaging in the daily business decisions. From the perspective of agency theory, an audit committee consists of majority non-executive directors is one of the monitoring devices for which the shareholders can evaluate the performance of the board through financial reporting process that is enhanced by the audit opinion (e.g., Collier and Gregory 1996; Carcello et al., 2002). On the other hand, the board leadership with two different directors for the roles of board chairman and CEO would serve as a check and balance monitoring structure in making the internal control system stronger; hence, resulting in lower control risk and lower audit risk (Hogan and Wilkins, 2008). Conversely, the NomadBro position of the AIM companies, who plays an important role under the external governance mechanism, appeared to exert stronger corporate governance on those AIM companies when they play the dual roles of Nomad and broker (Mallin and Ow-Yong, 1998).

Clearly, the agency theory recognises statutory audit as one of the effective monitoring devices to reduce information asymmetries and to mitigate conflict of interest; hence, the demand for high level of audit quality is strongly related to the agency theory. This thesis examines the drivers of statutory fee as one of the monitoring costs under agency theory (Jensen and Meckling, 1976), and incorporate the agency-related incentives within the agency theory to explain the motivation for statutory auditor switching in searching for familiar and more accommodating statutory auditor (William, 1988) and looking for more aligned audit opinion (Lennox, 2000), and apply the self-interest tendency within the agency theory to demand for a timely and shorter audit report lag to reduce the information asymmetries between the board and shareholders (Ghafran and Yasmin, 2018). In summary, the director who is the agent of the shareholders in a company is the best bet to shoulder the responsibility for the integrity of corporate governance and audit quality amid the information asymmetries and self-interest tendencies under the monitoring mechanism of principal-agent relationship.

2.5.2. Stewardship theory

Stewardship theory is seen to be an alternative view to agency theory from the perspective of managerial motivation (Donaldson and Davis, 1991). Stewardship theory portrays the role of directors as the stewards of a company, who manage the company's assets and run the day-to-day operations of the company with honesty, integrity, and utmost good faith to maximise the shareholders' wealth (Donaldson and Davis, 1991), which is one of the theoretical foundations of corporate governance.

Under the UK context, the directors of a company are primarily and legally responsible for the preparation of financial statements of the company and its group (The National Archives: Sections 394 and 399, Companies Act 2006), and are accountable to the shareholders, and they are also expected to discharge their stewardship responsibility with reasonable care, skill, and diligence (The National Archives: Section 174, Companies Act 2006) through the preparation of financial statements that possess the accounting framework's qualitative characteristics of comparability, verifiability, timeliness, and understandability (International Accounting Standards Board ("IASB"): Conceptual Framework for Financial Reporting, 2018). In other words, directors are expected to be meticulous, conscientious, and capable of acting in the best interest of the shareholders over their own self-interest even in the absence of the monitoring mechanism.

From the perspective of stewardship theory, an audit committee consists of majority non-executive directors which reviews the internal control system of the business operations with due care and ensures that a strong internal control system is implemented within the company. The stronger the internal control system, the lower the inherent and control risks of a company, which in turn would reduce the audit work (e.g., Goddard and Masters, 2000). CEOs are the stewards who strive to act in the best interests of their stakeholders, and they believe that meeting organisational goals would be meeting their personal goals (Donaldson and Davis, 1991). Stewardship theory argues that shareholders' interests are maximised by shared incumbency of the roles of board chairman and CEO as evidenced by Donaldson and Davis (1991). Such effective structure enhances the internal control system within the company, which in turn would reduce the audit work (e.g., Zaman, et al., 2011). Similarly, Mallin and

Ow-Yong (1998) found that AIM companies demonstrated stronger corporate governance under the NomadBro dual leadership.

Clearly, the stewardship theory recognises that good corporate governance and statutory audit substitutes each other in the sense that stronger internal control implemented within the company reduces the audit risk and lowers the audit efforts. This thesis assumes this substitution rationale in examining the drivers of statutory audit fee (Tsui, Jaggi and Gul, 2001), and incorporates the good steward rationale within the stewardship theory to explain the motivation for statutory auditor switching in searching for fresh and valuable ideas to enhance the quality of audit as well as to satisfy the shareholders' need for assurance (Williams, 1988), and examines how the presence of stronger internal control within the company could result in a timely and shorter audit report lag (Ghosh and Tang, 2015). In summary, the shareholders of a company appoint the directors and entrust them with the stewardship responsibility to exercise transparent and accountable corporate governance mechanisms in maximising the shareholders' wealth.

2.5.3. Signalling theory

Signalling theory focuses on the existence of information asymmetry between two different parties whereby the party with information should send out relevant information to the other party to prevent negative presumptions arising from lack of information. Signalling theory is aligned with the "market for lemons" perspective developed by Akerlof (1970), who presumed that the sellers of goods knew the quality of goods whereas the buyers were not aware of the quality differentiation; hence, the sellers should provide relevant information, such as brand name, to buyers to mitigate the information asymmetry situation and to avoid the bad (i.e., "lemon") assumption made by the buyers on the product. Apparently, "silence is golden" principle is not applicable when interpreting "market for lemon" perspective simply because no news might indicate bad news.

The information asymmetry arises resulting from the existence of separation of ownership and management in a company whereby the directors are well-equipped with all the information of the company while the shareholders would have to rely on the directors for information. Past studies demonstrated that audit committee could constrain opportunistic reporting and is

associated with more credible reporting (e.g., DeFond and Jiambalvo, 1991; Dechow, Sloan and Sweeney, 1996); therefore, the existence of audit committee could signal proper implementation of corporate governance mechanism within a company.

The signalling theory explores how the statutory audit can be considered as a signal from the directors to the shareholders of a company. The appointment of high-quality auditor could signal the high quality of financial information (Huang, Parker, Yan and Lin, 2014) while the statutory auditor switching could send positive as well as negative signal depending on the perception of the stakeholders (Malek and Saidin, 2014), and a timely and shorter audit report lag could be perceived as a signal of quality information and could prevent suspicion of material information concealment (Asthana, 2014). Therefore, the signaling theory provides a theoretical framework for this thesis.

2.5.4. Other theories

Other than the agency theory, stewardship theory and signalling theory as illustrated above, there are stakeholder theory and institutional theory, among others, that are relevant to the research on statutory audit and corporate governance simply because there is no agreed theoretical framework that governed such subject areas.

Stakeholder theory focuses on the relationship between organisations and their stakeholders. Freeman and Reed (1983) provided two definitions for stakeholder: a wide sense of stakeholder and a narrow sense of stakeholder. The narrow sense of stakeholder represents any identifiable group or individual on which the organisation is dependent for its continued survival (such as employees, customers, suppliers, owners) while the wide sense of stakeholder extended to also include any identifiable group or individual who can affect the achievement of an organisation's objectives or who is affected by the achievement of an organisation's objectives, such as competitors, government agencies, public interest groups (Freeman and Reed, 1983). Rather than primarily focusing on shareholders from financial perspective, the stakeholder theory expands to include the interests of many other different groups related to social, environmental, and ethical considerations (Friedman and Miles, 2002; Phillips, Freeman and Wicks, 2003; How, Lee and Brown, 2019). The roles of corporate governance and statutory audit as monitoring mechanisms under the stakeholder theory could protect not only the

shareholders' interest but all other stakeholders' interests; however, it could pose difficulties in meeting the needs of all stakeholders equally, and directors may pursue other stakeholders' interests at the expense of the shareholders. Sternberg (1999) criticised stakeholder theory to be unworkable because the theory assumes agents to be equally accountable to all stakeholders and have no particular duty to their principals, which effectively means that the agents are accountable to no one. For instance, lenders and shareholders do not have the same interests in reducing statutory audit fee. The stakeholder theory is not adopted as one of theoretical framework for this thesis because it focuses on the interests of all stakeholders, and unlike the agency theory and stewardship theory that revolve around the monitoring roles of directors and statutory auditors, and that are primarily emphasising to maximise the shareholders' interests and wealth.

Institutional theory deals with factors affecting organisations within a social environment. Organisations must be responsive to external expectations of regulators, professions, and public interest groups, among others, in order to receive support and legitimacy (DiMaggio and Powell, 1983; Scott, 1987; Oliver, 1991; Yazdifar, Zaman, Tsamenyi and Askarany, 2008). The exclusion of the institutional theory from the theoretical framework of this thesis is mainly due to AIM companies are operating under a more lightly regulated regime that facilitates diversity in the corporate governance mechanisms. Moreover, the behaviour of statutory auditors is influenced by their own firm professional practices rather than factors presence within an institutional context. The triangle relationship among the shareholders, directors, and statutory auditors would be better prescribed within the principal-agent context that arises from potential self-interest behaviour and information asymmetries.

Chapter 3. Drivers of statutory audit fee

Abstract

This study investigates the drivers of statutory audit fee for the small and medium-sized AIM companies of the London Stock Exchange. AIM companies are governed by a lighter touch regulatory regime and follow less rigorous corporate governance mechanisms, and are required to always retain a nominated adviser.

Employing the system generalised method-of-moments estimator on an unbalanced panel data of 1,325 observations from 236 small and medium-sized AIM companies for the financial periods covering 2010 to 2015, the major findings of this study reveal that a small and medium-sized AIM company that formed audit committee tends to pay lower statutory audit fee while a newly appointed statutory auditor tends to charge lower statutory audit fee at the initial engagement. On the other hand, a newly appointed chief executive officer has no significant influence on the statutory audit fee. Similarly, the provision of the nominated adviser and broker positions by a single firm does not influence the statutory audit fee.

The findings of this study offer numerous useful insights. Worth highlighting is the high explanatory power of the past value of statutory audit fee, which indicating the temporal, dynamic, and persistent relationships. Another useful contribution is the potential fee-cutting phenomenon exhibited in the initial engagement upon the switched of statutory auditor. Moreover, this study also confirms empirically the intuitive phenomenon that an AIM microenterprise pays lower statutory audit fee as compared to an AIM small enterprise and an AIM medium-sized enterprise. Not forgetting also to reflect on the positive but insignificant results revealed by the nominated adviser cum broker, and the negative but insignificant result revealed by the chief executive officer turnover; both elements are under-researched corporate governance mechanisms that deserve further attention and investigation. Furthermore, future studies are required to corroborate the highly significant negative influence of the existence of audit committee in the small and medium-sized AIM companies on the level of statutory audit fee, which offers contrasting evidence when comparing to most past studies.

3.1. Introduction

This section provides an overview of statutory auditor fee and spells out the motivations together with the objectives as well as highlighting the main findings and contributions.

3.1.1. Overview of statutory audit fee

One of the ordinary businesses in an AGM of a company in the UK and many Commonwealth countries is for the shareholders to re-appoint the retiring statutory auditor who wishes to seek re-appointment or to appoint a new statutory auditor to replace the retiring statutory auditor and to authorise the board to fix the auditor's remuneration. The appointed statutory auditor would conduct an audit on the financial statements prepared by the board in accordance with the provisions of the Companies Act and express an independent opinion therefrom to enhance the confidence of the intended users in the financial reporting process. The annual cost paid by the company to the statutory auditor for the provision of such statutory audit services is termed as statutory audit fee.

What is the basis of billing for the statutory audit services rendered? Obviously, the client would like to know the basis of audit billing arising from the issuance of a standardised report encompassing the audit opinion in few paragraphs by the statutory auditor. Inevitably, clients complain of the higher fee charged by the statutory auditors while conversely, statutory auditors find fees are insufficient to cover the audit costs (Low, et al., 1990). Fee negotiation has been a prevalent discussion among the statutory auditors and their clients in an attempt to reach a fee that is mutually acceptable to both parties within the context of high audit quality while maintaining a mutually good auditor-client relationship (Low et al., 1990). It is important that the audit clients are satisfied that they receive professional services that are value for money; similarly, the statutory auditors deserve the fair compensation for the services rendered (Low et al., 1990). Therefore, it is essential for the policy makers to provide guidelines on the statutory audit fee setting that build on high-quality audits at reasonable costs.

3.1.2. Motivations for this study

Audit quality and corporate governance have attracted great attention and emphasis of corporate stakeholders and policy makers on the verge of accounting scandals and corporate failures around the world (e.g., Enron in the US; Parmalat in the Europe; Carillion in the UK), and the global financial crisis. There is an enormous body of past research that examined the level of audit quality as surrogated by the statutory audit fee from the perspectives of client attributes, corporate governance mechanisms, and auditor characteristics on various organisations across the world in the US (e.g., Simunic, 1980; Carcello, et al., 2002), UK (e.g., Pong and Whittington, 1994; Zaman, et al., 2011, Xue and O'Sullivan, 2023), and Australia (e.g., Goodwin-Stewart and Kent, 2006).

Evidently, statutory audit fee was positively associated with client size, client complexity, client risk, and auditor size across studies, samples, and countries (e.g., Simunic, 1980; Pong and Whittington, 1994), which was further evidenced from the meta-analysis conducted by Hay et al. (2006). However, there were mixed and inconclusive results gathered from past studies in term of the relationship between the corporate governance mechanisms and the statutory audit fee (e.g., Collier and Gregory, 1996; Carcello et al., 2002); another meta-analysis conducted by Hay (2013) revealed that governance and regulation were now more widely researched but the resultant outcomes reflected that such relationship was complex. Furthermore, most researchers have apparently focused their attention on the large companies quoted on the Main Market of the stock exchange (e.g., Simunic, 1980; Zaman et al., 2011).

Given the scarcity of research on smaller listed companies and potential distinct corporate governance mechanisms as well as cost-saving strategy adopted by the SMEs, this study is motivated to investigate the drivers of statutory audit fee of the small and growing companies listed on the young and lightly regulated AIM of the LSE. For example, the formation of audit committee is a voluntary compliance as AIM companies are not legally bound to comply with the provisions of The UK Corporate Governance Code while retention of a Nomad and a broker at all times is a compulsory compliance (LSE: AIM Rules for Companies, 2021). On the other hand, the board of smaller listed companies like AIM companies could be more sensitive to the level of statutory audit fee as it represents a larger proportion of their operating expenses as compared to a tiny proportion of the operating expenses for the large companies. Thus far, AIM

companies have attracted relatively little research attention (e.g., Mallin and Ow-Yong, 1998; Mallin and Ow-Yong, 2008; Farag et al., 2014), particularly on the external audit aspects (e.g., Clatworthy and Peel, 2007). Mallin and Ow-Yong (1998; 2008) examined the corporate governance aspects of AIM companies while Farag et al. (2014) investigated the interrelationship between corporate governance, venture capital ownership, and financial performance in AIM companies. On the other hand, Clatworthy and Peel (2007) examined the effect of corporate status on statutory audit fee of UK quoted companies (i.e., companies on Main Market, AIM, and Ofex) and unquoted companies. Most recently, Xue and O'Sullivan (2023) examined the impact of risk, corporate governance and auditor size on the determinants of audit fees of largest AIM companies as opposed to AIM SMEs. The absence of research interest could be due to lack of readily available data on databases that makes the manual data collection from the companies' annual reports a tedious process.

3.1.3. Objectives of this study

This study aims to investigate the drivers of statutory audit fee from the perspective of corporate governance mechanisms of the AIM SMEs of the LSE. The research questions for this study are as follows:

Research question 1: What is the relationship between the internal governance mechanism and the statutory audit fee of AIM SMEs?

Research question 2: What is the relationship between the external governance mechanism and the statutory audit fee of AIM SMEs?

Of particular interests to this study are the existence of audit committee and the CEO turnover as the proxies for the internal governance mechanism whilst the retention of Nomad and broker from different firm or the retention of NomadBro, and the statutory auditor switching as the proxies for the external governance mechanism of the AIM SMEs. Both the directors and Nomad are the key participants in the corporate governance mechanism of AIM companies in which the directors, such as audit committee and CEO, set up the internal governance structure with sufficient appropriate procedures, resources and controls, and the Nomad, who must be a firm or a company that practised corporate finance, and must be approved and licensed by the

LSE, provides the advisory and monitoring functions under the external governance structure (Mallin and Ow-Yong, 1998), and in some cases, the Nomad is also the appointed broker. On the other hand, the appointed statutory auditor is an independent firm of auditors who reports directly to the shareholders through audit report is another form of external governance structure in the AIM companies. This study focuses on the existence of audit committee and role of Nomad for AIM SMEs as opposed to Xue and O'Sullivan (2023) that focused on the levels of audit committee disclosures and characteristics of audit committee in largest AIM companies. Hypotheses of this study have been developed to address the above research questions; details of which are discussed under section 3.2 covering the fundamental concepts, theoretical frameworks, empirical studies, and research gaps.

3.1.4. Main findings of this study

The main findings of this study are as follows.

Firstly, this study reveals that an AIM SME that formed audit committee tends to pay lower statutory audit fee, which support the substitution rationale that stronger internal governance mechanism implemented by the audit committee through the stewardship responsibilities discharged by the non-executive directors is associated with lower statutory audit fee.

Secondly, as predicted the newly appointed CEO of an AIM SME manages to negotiate for a lower statutory audit fee but the result is not statistically significant, which might due to the reasons of CEO turnover are not available for separate analysis.

Thirdly, an AIM SME engages NomadBro appears to be paying higher statutory audit fee than another AIM SME engages Nomad only but the result is not statistically significant, which implies that the Nomad of an AIM SME does not play an influential role in driving the level of statutory audit fee.

Fourthly, the newly appointed statutory auditor tends to charge lower statutory audit fee at the initial engagement, which is consistent with the price-cutting phenomenon by the new statutory auditor in securing the initial audit engagement and potentially the existence of "low-balling" scenario.

Fifthly, the immediate last period of statutory audit fee reveals positive and highly significant influence on the current level of statutory audit fee, which indicating the temporal, dynamic, and persistent relationships.

Finally, an AIM microenterprise tends to pay lower statutory audit fee as compared to an AIM small enterprise and an AIM medium-sized enterprise, which empirically confirming the intuitive phenomenon viewed from the perspective of client size.

3.1.5. Contributions of this study

This study contributes to the existing literature on the drivers of statutory audit fee as follows.

Firstly, to the best of my knowledge, this is the one of very few studies that focuses on AIM SMEs to determine the drivers of their statutory audit fee from the perspective of corporate governance mechanisms. Clatworthy and Peel (2007) investigated the effect of UK corporate status on statutory audit fee when they examined AIM companies simultaneously with other corporate status using binary variables but they did not incorporate the corporate governance mechanisms in their study. Until very recently, Xue and O'Sullivan (2023) examined the impact of the levels of audit committee disclosures and characteristics of audit committee on the statutory audit fee of largest AIM companies. Hence, this study provides entirely new evidence in relation to the voluntary formation of audit committee, and the role of NomadBro or Nomad only in driving the level of statutory audit fee, which facilitates preliminary understanding on those unique corporate governance features of AIM companies from external audit perspective. The findings expose the active role played by the audit committee of AIM SMEs in promoting stronger corporate governance mechanism that resulting to lower statutory audit fee. On the other hand, the Nomad has no influential role in driving the statutory audit fee of AIM SMEs. The findings of the study provide evidence to the directors and shareholders of AIM SMEs that they could enjoy a lower statutory audit fee with the existence of audit committee, and they could also obtain discount from new statutory auditor at the initial engagement.

Secondly, the sample set of AIM companies represents a crucial yet relatively under-researched area. AIM seems attractive to younger companies from the UK and overseas (Farag, et al., 2014), and is one of the five out of eleven second-tier stock markets in existence, which have been launched by the stock exchanges of the four largest European economies, namely Germany, France, Italy, and the UK (Vismara and Paleari, 2012). AIM is the world's leading growth market and it has already lived through more than two complete economic cycles since its launched in 1995 by the LSE for emerging or smaller companies.

Thirdly, this study extends the existing statutory audit fee literature from the SME perspective, which is largely absent. SMEs form the backbone around the world. It has been reported that there were around 1,250 small and mid-sized quoted companies in the UK, representing 93% of all quoted companies, employing approximately 3 million people, representing 11% of private sector employment in the UK, and contributed over £25 billion in annual taxes (Quoted Companies Alliance and UHY Hacker Young Associates, 2020), and there were 99% of UK businesses are SMEs and SMEs accounted for 61% of UK employment and 51% of business turnover as of 1st January 2022 (House of Commons Library, 2022). This study confirms the intuitive phenomenon that an AIM microenterprise pays lower statutory audit fee as compared to its other SME counterparts. Over 95% of SMEs in the UK are microenterprises (Department for Business, Energy & Industry Strategy, 2020), which could potentially be more sensitive to the control of annual total costs including the statutory audit fee; hence, the findings of this study could facilitate an informed fee negotiation process, and assist the policy makers when providing guidelines in setting the statutory audit fee for SMEs.

Finally, instead of employing the typical ordinary least squares ("OLS") regression estimators as adopted in most of the past studies (e.g., Simunic, 1980; Clatworthy and Peel, 1997), this study employs the system generalised method-of-moments ("system GMM") estimator (e.g., Abdallah, Goergen and O'Sullivan, 2015; Klumpes, Komarev and Eleftheriou, 2016; Kacer, Peel, Peel and Wilson, 2018). This study reveals the highly significant positive relationship between the current statutory audit fee and the immediate past period of statutory audit fee, which provides further evidence on the temporal, dynamic, and persistent nature of the statutory audit fee.

3.1.6. Structure of this study

The remainder of this chapter is organised as follows. The second section contains the literature review, which is made up of the background to this study, the key concepts and theoretical framework underpinning this study, the analysis of past studies in identifying the research gaps, and the formulation of hypotheses for this study. Research methodology and data are established in the third section. The fourth section critically assesses and discusses the empirical results. Finally, the fifth section concludes with summaries of key issues together with limitations of this study and recommendations for future research.

3.2. Literature review

This section provides background to this study and presents a review of the key concepts and theories together with the related empirical studies, which identify the research gaps, inform the research questions, and facilitate the design of testable hypotheses for this study.

3.2.1. Background to this study

Corporate governance and audit quality have come under closer scrutiny amidst the occurrence of corporate failures and in the wake of accounting scandals around the world (e.g., Enron in the US; Parmalat in the Europe; Carillion in the UK). More regulations and acts have been enacted particularly in the developed countries (e.g., SOX, 2002; A framework for audit quality: Key elements that create an environment for audit quality, 2014) over time to mitigate the situations and to prevent further potential accounting scandals and corporate failures that would affect many stakeholders, such as shareholders, directors, employees, and auditors, and the global economy. For instance, the collapse of Enron in the corporate world and the demise of Arthur Anderson from the accounting profession have directly triggered the legislation response and consequently the implementation of the SOX by the US SEC in the early 21st century to improve the corporate governance as well as the audit quality, and to restore investors' confidence and faith. More recently, the IAASB developed and approved "A framework for audit quality: Key elements that create an environment for audit quality" in

February 2014 with the expectation in achieving a continuous improvement to audit quality nationally and internationally.

3.2.2. Relationship of statutory audit and statutory audit fee

Statutory audit is a financial statement audit that is conducted in compliance with the law by an independent firm of auditors (i.e., statutory auditor), appointed by the shareholders of a company, on the financial statements prepared by the board, and expressed an opinion therefrom. In return of such services rendered, the statutory auditor receives a fee from the company, which is termed as statutory audit fee.

Firstly, I focus and explore the nature, timing, and extent of statutory audit. In order to form an audit opinion, the statutory auditor would develop an audit plan establishing the nature, timing, and extent of audit procedures through the conduct of compliance and substantive tests to obtain sufficient appropriate audit evidence that would reduce the audit risk, namely inherent risk, control risk, and detection risk, to an acceptable low level (FRC: ISA (UK) 200, 2020). If the client's internal control system is strong and the statutory auditor can place a great deal of reliance on the system, then the scope and extent of substantive tests will be reduced because of the lower level of inherent and control risks, and hence result in lower audit efforts and lower statutory audit fee without compromising the audit quality (e.g., Collier and Gregory, 1996). In contrast, high audit risk will inevitably lead to increased audit efforts in performing substantive tests, and to a higher statutory audit fee and higher perceived audit quality (e.g., Vafeas and Waegelein, 2007). These plausible empirical results inform that audit hours and audit efforts are the core determinants of audit billing: larger client require more audit works; higher complexity of client operations required more audit works; and higher client risk levels require more audit works, which inevitably translated to higher statutory audit fee. Most past studies found that client size, client complexity, and client risk were positively associated with the statutory audit fee (e.g., Simunic, 1980; Chan, Ezzamel and Gwilliam, 1993).

Secondly, I explore the dual rationales on the demand and supply of statutory audit services. Previous studies (e.g., Collier and Gregory, 1996; O'Sullivan, 1999; Carcello et al., 2002; Goodwin-Stewart and Kent, 2006; Xue and O'Sullivan, 2023) have tested the relationship between the statutory audit fee and the corporate governance mechanisms in their statutory

audit fee model by incorporating board characteristics (such as greater use of non-executive directors and separate role for board chairman and CEO) and audit committee characteristics (such as the existence of audit committee and audit committee independence) as proxies for good corporate governance. Past studies discussed two different rationales between the relationship of the corporate governance mechanisms and the statutory audit fee with regards to the demand for audit services by the client and supply of audit services by the statutory auditor (e.g., Collier and Gregory, 1996; O'Sullivan, 1999; Carcello et al., 2002; Goodwin-Stewart and Kent, 2006).

The demand rationale assumes improved corporate governance to indicate stronger monitoring mechanism that would require for higher level of audit quality, thus more audit hours and audit efforts are required to complete the audit, which translated to higher statutory audit fee; this rationale assumes that good corporate governance and statutory audit complements each other. On the other hand, the supply rationale assumes improved corporate governance to indicate stronger internal control system that could reduce inherent and control risks of a company, thus reducing audit risk and less audit hours and audit efforts are required to complete the audit, which translated to lower statutory audit fee; this rationale assumes that good corporate governance and statutory audit substitutes each other. These plausible counter-arguments have been tested in the statutory audit fee model of past studies, which revealed mixed results under varied circumstances although most of the empirical results supported the complementary rationale that improved corporate governance was associated with higher statutory audit fee.

For instances, Collier and Gregory (1996) found that the existence of audit committee increased the sized-related statutory audit fee and upheld the audit quality to ensure that it was not compromised while Carcello et al. (2002) found that a more independent, diligence and expert board demanded higher audit quality that resulted to higher statutory audit fee to protect board's reputation, avoid legal liability, and promote shareholders' interest. Nevertheless, Tsui, Jaggi and Gul (2001) found that a board with no CEO duality, that is the role of board chairman and CEO was held by two separate directors, was associated with lower audit risk, thus lower audit efforts and statutory audit fee; this finding supported the alternative rationale of substitution. Whilst O'Sullivan (1999) found no relationship between the board and audit committee characteristics, and the statutory audit fee, which might due to the fee reduction as a result of stronger internal control was counter-balanced by the fee increment as a result of higher audit quality demanded by audit committee. In a more recent study conducted by Xue

and O'Sullivan (2023) on AIM companies, they found that higher levels of audit committee disclosures were associated with higher statutory audit fee, which supported the complementary rationale.

In summary, these plausible counterarguments for the expected relationship between the corporate governance mechanisms and the statutory audit have been evidenced in the past studies on varied scenarios, and would be applied appropriately into this study.

3.2.3. Theoretical framework

The "triangle relationship" among the shareholders, directors, and statutory auditor of a company portrayed in the agency theory and stewardship theory are the cornerstone in driving the statutory audit fee. These underpinning theories appear to overlap with one another in some contexts and are further illustrated as follows.

The principal-agent relationship exists between the shareholders, who are the principals, and the directors, who are the agents, within the separation of ownership and management in a company (Jensen and Meckling, 1976). In addition, the shareholders appoint another agent (i.e., statutory auditor), in accordance with the provisions of the company law to perform audit on the financial statements prepared by the directors to ensure that their interests are well protected. Clearly, the directors are responsible for the integrity of corporate governance and audit quality amid the information asymmetries and self-interest tendencies under the monitoring mechanism of such principal-agent relationship.

The appointment of non-executive directors, the formation of audit committee consists of majority of non-executive directors, and the separate individual holding the position of board chairman and CEO are some of the good internal governance mechanisms recognised within the principles of corporate governance. In order to discharge their agency role to the shareholders and at the same time to protect their self-interest, the audit committee members tend to demand for more extensive works from the statutory auditor when reviewing the nature and scope of the audit. This demand tendency from the audit committee members could drive the statutory audit fee higher due to more audit hours, and staff expertise and skill will be assigned to complete the audit. Empirical results found that the existence of an independent

audit committee was significantly, positively associated with the statutory audit fee (e.g., Abbott, Parker, Peters and Raghunandan, 2003; Zaman et al. 2011; Xue and O'Sullivan, 2023). Obviously, the additional cost arising from the demand of higher audit quality by the audit committee has been passed on to the client during the audit fee billing. On the other hand, the check and balance monitoring structure established through board leadership with two separate head would enhance the internal control system resulting to lower control risk and lower statutory audit fee (Tsui, et al., 2001).

From the perspective of the statutory auditor, a change of CEO would pose higher business and audit risk resulting to higher statutory audit fee (Huang, Parker, Yan and Lin, 2014), which is consistent with the agent's self-interest prophecy as postulated under the agency theory. While a new CEO, another agent of a company, might tend to exhibit short-term profit increasing behavior in pursuing his/her own self-interest at the expense of the stakeholders' long-term value (Harrison and Fiet, 1999). A new CEO is likely seeking to control all overhead costs to establish an early record of success in order to secure the current new position or as a stepping stone for future position (Harrison and Fiet, 1999). Therefore, the new CEO is likely to negotiate with the statutory auditor for a lower statutory audit fee as part and parcel of the cost-cutting process within the internal governance mechanism. On the other hand, the statutory auditor switching has been found to be negatively associated with the statutory audit fee, which reflecting the price-cutting phenomenon by the new statutory auditor in securing the initial audit engagement and potentially the existence of "low-balling" in the agency relationship (e.g., Pong and Whittington, 1994; Gregory and Collier, 1996).

Stewardship theory is one of the theoretical foundations of corporate governance that portrays directors as the steward of a company, who are accountable to the shareholders and would always act in the best interest of the shareholders even in the absence of the monitoring mechanism (Donaldson and Davis, 1991). In other word, the shareholders of a company appoint the directors and entrust them with the stewardship responsibility to exercise transparent and accountable corporate governance mechanisms in maximising the shareholders' wealth.

In discharging their stewardship responsibility, an audit committee consists of majority nonexecutive directors would ensure an internal control system that would lower the inherent and control risks is properly implemented within the company. Such proper system would reduce the audit work, which in turn resulting to a lower statutory audit fee (e.g., Goddard and Masters, 2000). On the other hand, Zaman et al. (2011) revealed that CEO duality enhanced the internal control system within the company and substituted the statutory audit resulting to lower statutory audit fee, which supported the argument of Donaldson and Davis (1991) that shared incumbency of the roles of board chairman and CEO maximised the shareholders' interests. Similarly, the Nomad playing the external governance role appeared to exert stronger monitoring governance mechanism when holding the dual role of NomadBro of AIM companies (Mallin and Ow-Yong, 1998). However, no prior study has been conducted to evaluate the relationship between the role of NomadBro and the statutory audit fee.

CEOs are the stewards who strive to act in the best interests of their stakeholders and they believe that meeting organisational goals would be meeting their personal goals (Donaldson and Davis, 1991). A new CEO might be unfamiliar and has limited knowledge about the internal control system of the company, and might be less likely to detect any irregularities and frauds; therefore, a new CEO is likely to demand for a higher level of audit scope resulting to higher statutory audit fee (Bills, Lisic and Seidel, 2017). On the other hand, a new statutory auditor would be able to provide a fee reduction arising from the economies of scale of audit processes without compromising the audit quality (Bills, Jeter and Stein, 2015). In the stewardship relationship, a company might choose to switch its statutory auditor if the new statutory auditor would provide the similar level of audit quality at a lower cost as compared to its incumbent statutory auditor.

Indisputably, the monitoring mechanisms exercised by the shareholders through the appointment of directors, Nomad, broker, and statutory auditor as well as the presence of good stewardship practices by the directors, Nomad, broker, and statutory auditor, have both substitution and complementary effects on the statutory audit that resulted to statutory audit fee being charged at the lower and higher levels respectively, which are consistent with the dual rationale on the demand and supply rationales of statutory audit services as elaborated in the foregoing section 3.2.2.

3.2.4. Empirical studies

Many previous related studies notably the research of Simunic (1980), Low et al. (1990), Collier and Gregory (1996), O'Sullivan (1999), and Carcello et al. (2002) have provided the crucial understanding in this research area. Majority of the related studies adopted the OLS regression statutory audit fee model of Simunic (1980) with modifications and introduction of new independent variables over time. Few recent studies have employed the system GMM estimator in their statutory audit fee model to control for the dynamic nature of the statutory audit fee, and the presence of the unobserved heterogeneity effects and the endogeneity issues among the independent variables (e.g., Abdallah et al., 2015; Kacer et al., 2018).

Simunic (1980) examined the determinants of statutory audit fee based on the data of 397 quoted companies in the US during 1977 using the OLS regression. Simunic (1980) developed the statutory audit fee model based on the assumptions that both the auditee and auditor were risk neutral and seek to maximise their own expected profits each period, and both parties were jointly and severally liable to financial statement users for losses attributable to defects in the audited financial statements. In order to obtain insights into the possible determinants of loss exposure, Simunic (1980) conducted discussions with Chicago-area representatives of each of the big 8 firms and with representatives of a number of organisations writing professional liability insurance coverage for accountants. Simunic (1980) revealed a positive relationship between statutory audit fee and client size, client complexity, and client risk.

Using the data of 291 quoted companies on the Singapore Stock Exchange during 1986, Low et al. (1990)'s findings supported Simunic (1980)'s conclusions. Chan et al. (1993) also reached the same conclusions, who analysed 280 UK quoted companies based on 1987 data. Hay et al. (2006) conducted a meta-analysis on the determinants of statutory audit fee on research publications over 27 years covering 1977 to 2003 for more than 20 countries. They found that across studies, samples, and countries, statutory audit fee was evidently associated with the measures of client size, client complexity, and client risk. Using total assets, number of subsidiaries, and inventories and receivables were the most common measurements used in the previous studies relating to client size, client complexity, and client risk respectively (Hay et al., 2006).

Clatworthy and Peel (2007) examined 51,429 UK companies, both quoted and unquoted, during 2003 for the first time on a simultaneous basis. They found that quoted and unquoted public limited companies have significant higher statutory audit fee than their private limited counterparts, arranging in the order of higher to lower statutory audit fee were the Main Market, AIM, and Ofex on the LSE, followed by unquoted public companies and private limited companies. Their study also found that there was positive but insignificant relationship between the statutory audit fee and the disclosure of post balance sheet event or contingent liability, which were tested as their new variables in the statutory audit fee model.

Elements of corporate governance, such as board characteristics, existence of audit committee, audit committee characteristics, CEO duality, CEO turnover, and statutory auditor switching, have been tested as independent variables under the statutory audit fee model in the later studies. Under the US context, Carcello et al. (2002) found that there were significant positive relationships between the statutory audit fee and board independence, diligence, and expertise based on 258 companies of Fortune 1,000 that engaged the big 6 audit firms for the fiscal year ended between April 1992 and March 1993. They also found reasonable consistent results by replacing the board variables with the audit committee variables; however, the audit committee variables have no incremental explanatory power with the presence of board variables in the model. Conversely, Abbott et al. (2003) revealed the significant positive associations between the statutory audit fee and audit committee independence and financial expertise with the presence of board variables whilst there was no evidence that the meeting frequency of audit committee affected the statutory audit fee by examining 492 non-regulated, big 5-audited firms that filed proxy statements with the SEC in the period from 5 February 2001 to 30 June 2001. By replicating the studies of Carcello et al. (2002) and Abbott et al. (2003), and incorporating internal audit function as a governance mechanism, Goodwin-Stewart and Kent (2006) tested 401 companies listed on the Australian Stock Exchange in October 2000. They argued that Australian quoted companies committed for strong corporate governance were engaged in higher level of internal audit and demanded higher quality of external audit. Their results indicated that statutory audit fee was positively associated with the existence of audit committee, more frequent audit committee meetings, and increase use of internal audit while the expertise of audit committee members was associated with higher statutory audit fee when meeting frequency and independence were low. On the other hand, Vafeas and Waegelein (2007) revealed that audit committee size, expertise, and independence served as complement to external audit in monitoring directors as they were positively associated to the statutory audit

fee level; conversely, CEO's long-term pay served as a substitution to the external audit in monitoring directors as it was negatively associated to the statutory audit fee level, based on 1,332 sample size on the Fortune 500 firms from the 2001-2003 reporting period.

There are inconclusive and mixed evidence from the UK studies on the relationship between the statutory audit fee and effectiveness of audit committee. Using 315 companies of the Financial Times All Share Index for the year ended in 1991, Collier and Gregory (1996) applied interacting variables to test the presence of an audit committee in improving the audit quality and internal controls. They found significant positive relationship between the size-related audit fee and the presence of audit committee while ambiguous negative relationships were found between the risk-related and complexity-related audit fee and the presence of audit committee. They concluded that the presence of audit committee managed to oversee the role of external audit effectively but there was no conclusive evidence that it enhanced the role of internal control that resulted in reduced statutory audit fee. Such scenario was further examined by Goddard and Masters (2000) on 233 companies in 1994 and 223 companies in 1995 listed on the stock exchange, and included in the Times 1,000 of 1996 but excluding the top 350, to investigate evidence of a transitional period following the introduction of the Cadbury Code. They found that the existence of audit committee was significantly and positively associated with the statutory audit fee in 1994 only. In contrary to the findings of Collier and Gregory (1996), Goddard and Masters (2000) found no evidence of higher size-related audit fee in companies with an audit committee but found evidence of lower complexity-related audit fee in companies with an audit committee; consistently, there was no evidence found between the risk-related audit fee and the existence of audit committee in both years. On the other hand, O'Sullivan (1999) found no evidence that board and audit committee characteristics influenced the statutory audit fee from a comprehensive analysis of the 1995 financial statements of a sample of 146 largest non-financial companies quoted on the LSE. In a more recent study conducted by Zaman et al. (2011) using a panel of 135 companies in five sectors quoted on the UK FTSE-350 covered 2001 to 2004 periods, they found that there was a significant positive association between the statutory audit fee and audit committee effectiveness for larger companies only after controlling for board governance. They used audit committee effectiveness as a proxy for governance quality, which includes audit committee independence, expertise, diligence, and size. The impact of the audit committee expertise on the statutory audit fee was further explored by Ghafran and O'Sullivan (2017) through the examination on 991 firm-year observations of non-financial FTSE 350 firms between the duration 2007 and 2010. They found that the financial expertise relating to non-accounting expertise of audit committee members had significant positive impact on the statutory audit fee and especially important for smaller listed firms under FTSE 250. Recently, Xue and O'Sullivan (2023) examined 453 largest AIM companies for the 2016 financial year and found that higher levels of audit committee disclosures were associated with higher statutory audit fee but there was no evidence that individual audit committee characteristics influence statutory audit fee.

Huang et al. (2014) obtained 13,692 firm-year observations from the Audit Analytics database from 2004 to 2011 to examine the relationship between the CEO turnover and the statutory audit fee. They revealed that companies with forced CEO turnover paid significantly higher statutory audit fee vis-à-vis those companies with either voluntary CEO turnover or no CEO turnover. They also found that there was no difference in the statutory audit fee between companies with voluntary CEO turnover and companies without CEO turnover. On the other hand, Bills et al. (2017) obtained 23,990 firm-year observations from the Audit Analytics database from 2004 to 2013 to examine the relationship between the CEO succession and the statutory audit fee. They found that the statutory audit fee was higher for firms with new CEOs. They further revealed that the statutory audit fee increased to a lesser extent when the new CEO was promoted from within the firm while there was no statutory audit fee adjustment when the new CEO was considered an heir apparent before taking office.

Statutory auditor switching has been investigated in the audit fee model of past studies. Pong and Whittington (1994) conducted empirical study on a panel of 3,349 cross sectional and time series observations for the period 1981 to 1988 on large listed companies in the UK and found that the statutory auditor switching resulted to reduced statutory audit fee in the initial engagement. However, such fee reductions did not persist in the longer term as evidenced by the results conducted by Gregory and Collier (1996) on 399 firms of the Financial Times All Share Index for the years ended in 1987 to 1991. They also found that the initial discount was higher for involuntary switching (as compared to voluntary switching) and upward switching (as compared to lateral switching between the then big 6 firms) in their sampled companies. Butterworth and Houghton (1995) examined 268 Western Australian-headquartered companies listed on the Main Board and Second Board of the Australian Stock Exchange in Perth for the years 1987 and 1988 and found negative but insignificant relationship between the statutory audit fee and the statutory auditor switching. On the other hand, Kalelkar and Khan (2016)

found positive but insignificant relationship between the statutory audit fee and the statutory auditor switching on a sample of 577 observations from 77 US firms between 2004 and 2013.

The empirical studies described in this section are presented in the tabular format under Appendix C showing the key findings on those selected samples for each study.

In summary, a huge academic literature has been developed since the seminal works of Simunic (1980) in providing better understanding and empirical evidence on the drivers of statutory audit fee on larger companies listed on the Main Market of the stock exchanges in the US, UK, and other countries. Previous studies provided robust evidence that client size, client complexity, and client risk were the core drivers of audit billing in various sectors and market status across countries. Larger clients require more audit works; higher complexity of client operations require more audit works; and higher client risk levels require more audit works, which inevitably translated to higher statutory audit fee. In addition, board characteristics in terms of board independence, expertise, and diligence were also found to have high explanatory power on the determination of statutory audit fee in most previous studies. However, the relationships between the audit committee characteristics and the statutory audit fee have somehow been ambiguous among past studies. On the other hand, the influence of new CEO on the statutory audit fee has not attracted much attention with only a handful of researchers examined this variable thus far; while the impact of statutory auditor switching on the level of statutory audit fee has been examined but revealed inconsistent results in the past studies.

3.2.5. Research gaps

Apparently, the roles of audit committee, CEO, and statutory auditor in driving the statutory audit fee need further attention. More studies should be conducted to reconfirm or rebut the existing literature on the complementary and substitution roles of corporate governance to external audit in monitoring as well as motivating directors, and to provide more consistent empirical evidence and possibly some new insights. At the same time, the SMEs, whose corporate governance mechanisms might be different from the larger listed companies, and particularly the SMEs might be more sensitive to the impact of such annual cost vis-à-vis to their total annual costs, would deserve more attention with further empirical results on the drivers of statutory audit fee.

Bearing in mind the identified research gaps and given the scarcity in this research area, this study focuses on the AIM SMEs on the LSE and examine how their corporate governance mechanisms, namely the existence of audit committee, CEO turnover, and statutory auditor switching, would impact their statutory audit fee; and of particular interest is the potential influential role of the NomadBro on the level of statutory audit fee as it is a new variable of the external governance mechanism unique to the AIM companies, which has yet to be tested under the statutory audit fee model.

3.2.6. Hypotheses development

Needless to say, the shareholders, directors, and statutory auditors are the key players of this study, who in turn are also the key players portrayed in the agency theory and stewardship theory; hence, this study designs its hypotheses alongside the agency theory vis-à-vis stewardship theory, demand for audit services vis-à-vis supply of audit services, and complementary vis-à-vis substitution role of corporate governance to audit quality.

From the perspective of agency theory, agents with self-interest would demand for higher level of audit quality that would require more audit hours and audit efforts, which resulting to a higher statutory audit fee. Conversely, from the perspective of stewardship theory, faithful stewards would implement a stronger internal control system within the company that would reduce the audit hours and audit efforts, which resulting to a lower statutory audit fee while maintaining the high level of audit quality. Similarly, the dual rationales between the relationships of corporate governance mechanisms and statutory audit fee as discussed by Collier and Gregory (1996), Carcello et al. (2002), and Goodwin-Stewart and Kent (2006) with regards to the demand for audit services by the client and supply of audit services by the statutory auditor vis-à-vis the complementary and substitution effects have been the cornerstone in the formulation of the related hypotheses (after controlling for the client size, client complexity, and client risk) for this study as follows.

In this study, the proxies for internal governance mechanisms of AIM SMEs are the existence of audit committee and the CEO turnover while the proxies for external governance mechanisms of AIM SMEs are the retention of NomadBro and the statutory auditor switching.

3.2.6.1. Existence of audit committee

Audit committee serves as a communication channel between the board and the statutory auditor. It is essentially responsible for hiring, firing, and compensating the statutory auditor, as well as addressing any disputes with the statutory auditor. In other words, the role of audit committee is as a liaison to ensure high audit quality at reasonable audit price and not to compromise the audit quality for reduced statutory audit fee (Collier and Gregory, 1996).

AIM companies can choose to form an audit committee or otherwise. This phenomenon was tested by Collier and Gregory (1996) and Goddard and Masters (2000) on UK quoted companies on the Main Market of the LSE when the formation of audit committee was voluntary and found mixed results. The existence of audit committee was found to have significant positive influence on the statutory audit fee for one of the two years of samples only as revealed by Goddard and Masters (2000). On the other hand, Collier and Gregory (1996) found that size-related statutory audit fee was higher in companies with an audit committee while Goddard and Masters (2000) found that complexity-related statutory audit fee was lower in companies with audit committee. Nevertheless, both studies found no evidence that the presence of an audit committee has any overall impact on the statutory audit fee. Conversely, Goodwin-Steward and Kent (2006) found that the existence of audit committee was related to higher statutory audit fee for Australian quoted companies. In the recent study conducted by Xue and O'Sullivan (2023), they found that AIM companies with higher levels of audit committee disclosures paid higher statutory audit fee.

Typically, non-executive directors make up the majority members of an audit committee and are expected to demand for higher level of audit works as a monitoring mechanism as well as to protect their reputation and potential liability arising from financial statement misstatements (Carcello et al., 2002), which is in line with the self-interest phenomenon presented in the agency theory; therefore, this study hypothesises that the existence of audit committee and statutory audit complements each other as follows:

H1: There is a positive relationship between the existence of audit committee and the statutory audit fee, ceteris paribus.

3.2.6.2. Chief executive officer ("CEO") turnover

A CEO of a company is responsible to run and implement business decisions on a day-to-day basis. A change of CEO could due to dismissal, resignation, or retirement. There is no specific guideline that requires an AIM companies to disclose the reason for the change of CEO in their annual report. In the absence of data availability, this study focuses on the impact of the change of CEO on the statutory audit fee without distinguishing between forced and voluntary change of CEO.

Huang et al. (2014) found that forced CEO turnover (such as dismissal) posed higher business and audit risk in view of uncertainties surrounding such change and hence was associated with higher statutory audit fee whilst voluntary CEO turnover (such as resignation or retirement) posed lesser business and audit risk in view of a more orderly transition of power, and hence was associated with lower statutory audit fee relative to forced CEO turnover. On the other hand, Bills et al. (2017) revealed that the statutory audit fee was higher for firms with new CEOs as they would demand for higher audit works to compensate their unfamiliarity and lack of knowledge about the internal control system. They also found that when the new CEO was promoted from within the firm, the audit fee increased to a lesser extent while when the new CEO was considered an heir apparent before taking office, there was no statutory audit fee adjustment.

From a different perspective, a new CEO, an agent of the company, might be pressured to improve company performance and more inclines towards short-term profitability in pleasing the stakeholders in general (Harrisons and Fiet, 1999). Therefore, in pursuing his/her own self-interest, a new CEO is expected to implement cost-cutting exercise and would negotiate for a lower statutory audit fee while maintaining the high level of audit quality. It is assumed that AIM SMEs might be more sensitive towards the cost-cutting exercise given their sizes, this study hypothesises that the bargaining power of the new CEO outweighs the higher business and audit risks posed by the new CEO with the following hypothesis:

H2: There is a negative relationship between the CEO turnover and the statutory audit fee, ceteris paribus.

3.2.6.3. Retention of nominated adviser cum broker ("NomadBro")

The unique feature of AIM companies engaging NomadBro or Nomad only in accordance with the LSE rules is tested in this study for the first time using the proposed statutory audit fee model. Mallin and Ow-Yong (1998) revealed that AIM companies which engaged NomadBro were more likely to exhibit stronger corporate governance than Nomad only companies possibly due to the reputational effect as NomadBro firms have more to lose if their AIM client companies collapse; however, such reputational effect did not exist in their later study relating to corporate governance disclosure level by AIM companies (Mallin and Ow-Yong, 2008).

Reputation is the main "asset" of a business and particularly so for a professional firm like the Nomad. In the absence of the past empirical evidence in this area, accordingly, this study adopts the effect of the potential reputational loss put forward by Mallin and Ow-Yong (1998) and expects the NomadBro who is playing the external governance role would exert stronger monitoring governance mechanism, and would advise their clients to demand for higher audit quality that would be translated to higher statutory audit fee. Therefore, this study hypothesises that the retention of NomadBro and the statutory audit complements each other with the following hypothesis:

H3: There is a positive relationship between the retention of NomadBro and statutory audit fee, ceteris paribus.

3.2.6.4. Statutory auditor switching

The statutory auditors are subject to retirement and re-appointment every year during the AGM of their clients. A retained and entrenched statutory auditor could charge higher statutory audit fee; alternatively, a retained statutory auditor could charge lower statutory audit fee with their familiarity benefit in term of prior understanding of the company's business and internal control system. Conversely, a new statutory auditor could charge higher statutory audit fee due to new assignment and lack of prior understanding of the company's internal control system; alternatively, a new statutory auditor could charge lower statutory audit fee due to providing a more efficient service (i.e., a fee reduction), or a new statutory auditor might offer lower

statutory audit fee to secure a new business at an initial engagement, i.e., a potential low-balling (Pong and Whittington, 1994; Butterworth and Houghton, 1995; Gregory and Collier, 1996).

One of the incentives for companies to change their statutory auditors is to obtain a reduced statutory audit fee (Hay et al., 2006); such price-sensitivity might be more prevalent for smaller companies like AIM SMEs. The statutory auditor switching reflects the potential bargaining power of a company. A company might choose to switch its statutory auditor if the new statutory auditor would provide the similar level of audit quality at a lower cost as compared to its incumbent statutory auditor. Bills et al. (2015) argued that a fee discount could arise from the economies of scale from the statutory auditor and passed on to the client without compromising the audit quality. This study hypothesises that the new statutory auditor would provide a high quality and more efficient service that justify the fee reduction with the following hypothesis:

H4: The higher the statutory audit fee, the more likely the occurrence of the statutory auditor switching, ceteris paribus.

3.3. Research methodology and data

This section begins with the illustrations of research philosophy followed by the sample selection and data specific to this study. The model specifications are designed to best suit the research questions together with the variable measurements of this study and are discussed in the subsequent two sub-sections.

3.3.1. Research philosophy

Saunders, Lewis and Thornhill (2019) describe objectivism as an ontological position that incorporates the assumptions of the natural sciences arguing that social reality is external to, and independent of, social actors concerned with their existence. This study applies objectivism based on observable facts available from companies' annual reports, which are independent from the feelings, perceptions, and opinions of board of directors, nominated advisers, and brokers. This is opposed to subjectivism that asserts that social reality is made from the perceptions and consequent actions of social actors (Saunders et al., 2019). Bryman and Bell

(2011) defines positivism as an epistemological position that advocates the application of methods of the natural sciences to the study of social reality and beyond. According to Saunders et al. (2019), epistemology is a branch of philosophy concerned with assumption about knowledge, what constitutes acceptable, valid and legitimate knowledge, and how we can communicate to others. This study relies on acceptable knowledge obtained from existing theories and prior empirical studies that have demonstrated the relationship between the statutory audit fee and the corporate governance mechanisms based on observable facts. Naturally, the existence of reality can be observed using the relevant and reliable data that best reflects the reality, findings of which can create new knowledge that could enrich the existing literature. Positivism assumes the existence of reality is comprehensible scientifically and objectively by testing existing theories via hypotheses and confirming knowledge through verifications of predictions and observations (Guba and Lincoln, 1994). It focuses on hard data rather than opinion, searching for regularities, and formulating hypotheses in order to generalise the outcome from a selected sample of reliable size and accordingly draw inference on intended population (Bryman and Bell, 2011). Therefore, this thesis adopts the quantitative strategy to estimate the developed hypotheses using the appropriate econometric models that are most suitable for the sample data employed to reconfirm or rebut the existing empirical results in a deductive manner. Key variables surrounding this thesis are identified and supported by sensible assumptions for the formation of regression models that would provide good predictive power. Easy access of quantitative data from the publicly available annual reports and other relevant information on the respective company website and databases has made this study feasible without ethical and vulnerability issues.

3.3.2. Sample selection and data

A list of AIM companies existing as of 2nd October 2015 is downloaded from the LSE website, which consists of 1,088 companies in 39 different sectors; this total is reduced to 1,060 after eliminated 28 companies appeared more than once under different types of equity. Consistent with the past studies (e.g., Goddard and Masters, 2000; Hudaib and Cooke, 2005; Zaman, Hudaib and Haniffa, 2011; Khlif and Samaha, 2014; Ghafran and Yasmin, 2018; Cairney and Stewart, 2019), all 149 "financial" sector companies are excluded from the sample due to the

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¹¹ "Financial" sector includes AIM companies involve in bank, equity investment instruments, financial services, non-equity investment instruments, and non-life insurance.

differences in their regulatory environment, which reduced the number to 911 non-financial AIM companies. Next, information on the staff headcount, net turnover, and total assets of these 911 AIM companies are downloaded from Datastream to determine the SME and non-SME categories based on the SME definitions of European Commission (Official Journal of European Union, 2003); any missing information is downloaded from Amadues or extracted from the companies' latest annual reports obtained from their websites. Accordingly, 575 SME non-financial AIM companies are established upon the exclusion of 336 non-SMEs. Out of the 336 non-SMEs, 271 are larger companies while 52 companies did not publicly disclose the staff headcount, and another 13 companies were newly listed and their annual reports after listed have yet to be made available to determine the SME criteria.

Section 382 and Section 465 of the UK Companies Act 2006 provide guidelines for companies qualifying as small and medium-sized respectively; however, these provisions exclude public companies as described under Section 384 and Section 467 of the said Act; accordingly, AIM companies do not meet the provisions of SMEs under the UK Companies Act 2006 (The National Archives, 2006). Therefore, this thesis adopts the SME definitions of European Commission (Official Journal of European Union, 2003), which is based on the staff headcount and financial ceilings. The category of SMEs is made up of enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding 50 million euro, and/or an annual balance sheet total not exceeding 43 million euro (Official Journal of European Union, 2003). Within the SME category, a small enterprise is defined as an enterprise which employs fewer than 50 persons and whose annual turnover and/or annual balance sheet total does not exceed 10 million euro while a microenterprise is defined as an enterprise which employs fewer than 10 persons and whose annual turnover and/or annual balance sheet total does not exceed 2 million euro (Official Journal of European Union, 2003). Table 1.1 summarises the enterprise categories and criteria for each category.

Table 3.1: SMEs – Enterprise categories and criteria for each category

Enterprise categories	Criteria						
	Staff headcount	and	Annual turnover	and/or	Annual balance sheet total		
Microenterprise	< 10 persons		≤2 million euro		≤ 2 million euro		
Small enterprise	< 50 persons		≤ 10 million euro		≤ 10 million euro		
Medium-sized enterprise	< 250 persons		≤ 50 million euro		≤ 43 million euro		

(Source: Official Journal of European Union, 2003)

In facilitating the observation on the longitudinal intracompany variations and dynamics of the dependent and independent variables of individual sampled company over time, another 237 companies listed during or after year 2010 are excluded from the sample. Therefore, the adjusted sample for data collection consists of 338 non-financial AIM SMEs with corporate age of at least six years as of 31st December 2015 on the AIM market. The reconciliation of the sample selection is presented in Table 1.2 as follows. The sample size for each empirical study varies with reference to their respective objectives, model specifications and availability of required data. The details of sample selection and data for each of the empirical studies are illustrated under chapter 3, chapter 4, and chapter 5 respectively.

The sample of this thesis covers the financial years 2010-2015 of AIM SMEs, a period where the formation of an audit committee was voluntary. This is contrary to most past studies (e.g., Vafeas and Waegelein, 2007; Zaman et al., 2011; Sultana et al., 2015; Ghafran and O'Sullivan, 2017; Ghafran and Yasmin, 2018) that investigated the characteristic of audit committee members, where the formation of an audit committee is compulsory for their sample firms as part of their corporate governance mechanisms. However, effective September 2018, all AIM companies are required to follow a corporate governance code in accordance with the updated rules (AIM Rules for Companies, 2018). Upon such change, the formation of an audit committee might not be voluntary anymore depending on the choice of the corporate governance code that AIM companies choose to follow. The sample period chosen in this thesis allows us to examine the effectiveness of the voluntary decision of the firms to form audit committees prior to the 2018 updated rules. The findings of this thesis on the internal governance role of an audit committee that formed voluntarily would assist the policy makers

in designing corporate governance mechanism taking into consideration the cost-minimisation strategy of SMEs. It is vital to acknowledge the benefits of having audit committee in monitoring the audit quality, auditor independence, and reporting timeliness vis-à-vis the costs of having audit committee for SMEs.

All the required data for this thesis are hand-collected from the respective company's annual reports downloaded from their company website due to the restricted availability of data for AIM companies on the databases. Pursuant to Rule 26 under the AIM Rules for Companies (2021), an AIM company must maintain an up-to-date website, free of charge, including detailed information on the company and amongst others are the annual reports. During the data extraction, I have taken every effort to maintain the consistent approach and interpretation in collecting the data to ensure data accuracy and completeness in facilitating the data analysis process.

Table 3.2: Reconciliation of sample selection for this thesis

Total number of AIM companies as of 2 nd October 2015, as downloaded Less: Same companies appeared more than once	1,088 (28)
Total number of AIM companies as of 2 nd October 2015, as reconciled Less: Exclusion of companies under "financial" sector	1,060 (149)
Non-financial AIM companies Less: Exclusion of non-SMEs	911 (336)
SME non-financial AIM companies Less: Exclusion of SME non-financial AIM companies listed during	575
or after year 2010	(237)
Adjusted sample for data collection: SME non-financial AIM companies with corporate age of at least six years as of 31st December 2015	338

As illustrated under the foregoing paragraphs, the adjusted sample for data collection consists of 338 non-financial AIM SMEs with corporate age of at least six years as of 31st December 2015 on the AIM market. For this study, at the end of the data collection process, a further 41 companies are excluded due to missing core data together with another 61 companies due to unavailability of annual reports for some of the financial years. In facilitating the instrumentation under system GMM model as discussed in detail under section 3.3.2, only companies with complete data for at least four consecutive financial years are included herein.

Eventually, the final sample for this study consists of an unbalanced panel data of 1,325 observations for 236 SME non-financial AIM companies (i.e., known as AIM SMEs in this study) with corporate age of at least six years as of 31st December 2015, which contain complete data for four or more consecutive financial years ranging from 2010-2015. The reconciliation of the sample selection is presented in Table 3.3.

This study focuses on 1,325 firm-year observations for the financial periods from 2010 to 2015. All the required data for this study are hand-collected from the respective company's annual reports downloaded from their company website due to the restricted availability of data for AIM companies on the databases. The use of secondary data in this study is consistent with the approach of majority past studies (e.g., Low et al., 1990; Gregory and Collier, 1996; Clatworthy and Peel, 2007; Zaman et al., 2011; Kacer et al., 2018). Alternatively, survey questionnaires can be distributed as a supplementary source of data collection. Only a few past studies used questionnaires: Collier and Gregory (1996) used questionnaire to enquire about the existence of audit committee prior to 1991 for quoted companies on the LSE as such structure was voluntary then while Goodwin-Stewart and Kent (2006) used questionnaire to seek information on the internal audit activities of quoted companies in Australia. As statutory audit fee is not a mandated disclosure on the audited financial statements under US context, Carcello et al. (2002) obtained the amount of statutory audit fee through questionnaire as a supplement to other information gathered from public sources.

Table 3.3: Reconciliation of sample selection for statutory audit fee study

Adjusted sample for data collection: SME non-financial AIM companies with corporate age of at least six years as of 31 st December 2015 Less: Further exclusion of SMEs from the adjusted samples Due to missing core data for the study Due to unavailability of annual reports									
Final sample for this study: SME non-financial AIM companies with corporate age of at least six years as of 31st December 2015, which contain complete data for four or more consecutive financial years 2010-2015 236									
Made up of complete data for the financial years 2010-2015:									
6 consecutive years	185	SMEs	1 110	observations					
5 consecutive years		SMEs	,	observations					
4 consecutive years		SMEs		observations					
Final sample for this study	236	SMEs	1,325	observations					
Represented by:									
Financial year 2010			195	observations					
Financial year 2011			208	observations					
Financial year 2012			236	observations					
Financial year 2013			236	observations					
Financial year 2014			233	observations					
Financial year 2015			217	observations					
As above			1,325	observations					

3.3.3. Model specifications

Majority of the earlier past studies examined cross-sectional data using standard OLS regression (e.g., Simunic, 1980; Goddard and Masters, 2000; Clatworthy and Peel, 2007). While some other studies (e.g., Pong and Whittington, 1994; Oxera, 2006; Vafeas and Waegelein, 2007) and more later studies (e.g., Zaman et al., 2011; Evans and Schwartz, 2014; Abdallah et al., 2015; Kacer et al., 2018) examined panel data using various regression models. Pong and Whittington (1994) and Zaman et al. (2011) applied pooled OLS panel estimator. Vafeas and Waegelein (2007) uncovered significant differences in the determinants of statutory

audit fee between the years examined and to address the endogenous determination of firm characteristics and statutory audit fee; they employed three years of statutory audit fee data as opposed to the cross-sectional data adopted by most of the past studies and performed analysis on the first differences of the variables. On the other hand, Oxera (2006) adopted random effects panel estimator while Evans and Schwartz (2014) used fixed effects panel estimator. Other than the adoption of static statutory audit fee model, some other more recent studies have incorporated the temporal dimension of the statutory audit fee behaviour into the dynamic statutory audit fee model through the adoption of system GMM estimator (e.g., Abdallah et al., 2015; Kacer et al., 2018).

Abdallah et al. (2015) employed the system GMM estimator to tackle the endogeneity issues in their statutory audit fee model. They found that the UK firms that were crosslisted on a foreign stock exchange did not pay premium statutory audit fee, which failed to uphold and corroborate the results of the previous literature that employed mainly static models. This led them to the conclusion that the failure to correct for endogeneity issues can cause wrong inferences in the study. On the other hand, Kacer et al. (2018) employed the system GMM estimator on their statutory audit fee model that included the lagged dependent variable. They found that the big 4 real statutory audit fees were persistent and dynamic due to partly dependent on their previous realisations, which did not support the assumptions of the extant research that the statutory audit fee adjusted immediately in a single period. This led them to the conclusion that the static statutory audit fee model omitted a potentially important temporal dimension of the audit pricing behaviour and called for further research into the dynamic statutory audit fee model.

This study examines an unbalanced panel data for 236 AIM SMEs (i.e., cross-sectional dimension, "N") tracked over four to six financial years (i.e., time-series dimension, "T") of those companies to investigate the variations and dynamics of dependent and independent variables of individual sampled companies over time. The system GMM estimator is chosen over the pooled OLS, fixed effects, and two-stage least squares estimators simply because the system GMM is capable of mitigating the endogenous issues of this "small T, large N" unbalanced and dynamic panel dataset using a set of internal instruments contained within the dataset itself without the need for external instruments that are hard to come by in practice (Wintoki, Linck and Netter, 2012), as described below.

Firstly: Omitted variable bias. It happens when other variables not included in the model have explanatory power on the predicted relationship; such omission would result in the error term being correlated with the explanatory variables. In this study, the supporting audit evidence gathered and the audit working papers compiled during the audit processes are not publicly available, which pose a challenge in assessing the level of audit quality. Inevitably, omitted variables exist in the statutory audit fee model arising from varied proxies applied (Abdallah et al., 2015) to represent the unobservable and not measurable audit processes. Under such situation, the OLS estimator might be biased due to violation on the OLS assumption that there is no omitted variable in the OLS model while the fixed effects estimator would be consistent only in the absence of autocorrelation.

Secondly: Simultaneous endogeneity. It happens when the relationship between the dependent variable and one or more of the explanatory variables is not uni-directional, i.e., they are jointly determined. In this study, it is likely that the knowledge spillover and economies of scale effects between the audit and non-audit services are bi-directional; as such the non-audit fee might be correlated with the error term (e.g., Antle et al., 2006; Chan, Chen, Janakiraman and Radhakrishnan, 2012). On another aspect, it is predicted that the statutory auditor switching could explain the level of statutory audit fee (e.g., Pong and Whittington, 1994; Bills et al., 2017); at the same time, it is also predicted that the level of statutory audit fee could explain the statutory auditor switching (e.g., Hudaib and Cooke, 2005). Under such situation, the OLS estimator and the fixed effects estimator might be biased while the two-stage least squares estimator can be adopted but it requires the identification of external exogenous instruments.

Thirdly: Dynamic endogeneity. It happens when the current dependent variable and one or more independent variables are affected by the past realisation of the dependent variable. When fixing the current year's statutory audit fee, it is reasonably expected that the client and the statutory auditor would refer to the last year's amount that reflected the fundamentals of the client company as a starting point for negotiation on top of the current year's situations for further adjustment (Oxera; 2006; Abdallah et al., 2015; Kacer et al., 2018). In addition, the current year's statutory auditor switching could be triggered by the last year's statutory audit fee. Hence, it would suggest the inclusion of the last year's statutory audit fee as one of the independent variables to reflect the dynamic nature. Such inclusion would cause the presence of autocorrelation among the independent variables. The static model of fixed effects estimator

would not be able to take into account the dynamics of the model and as such it would lead to inconsistent estimations.

Fourthly: A "small T, large N" panel dataset. This study examines a short time dimension (T = 4 to 6) and a larger company dimension (N = 236). If T is large, the fixed effects estimator would work as the dynamic panel bias becomes insignificant while if the N is small, the Arellano-Bond autocorrelation test may be unreliable (Roodman, 2009).

Finally: Unbalanced panel dataset. Some companies in this panel have more observations than others ranging from 4 to 6 observations per company. It is recommended to use system GMM on the unbalanced panel dataset instead of difference GMM as difference GMM could magnify gaps (Roodman, 2009).

The system GMM estimator suggested by Arellano and Bover (1995) and Blundell and Bond (1998) incorporates two equations in a system with a regression in first differences and a regression in levels; variables in differences are instrumented with the lags of their own levels while variables in levels are instrumented with the lags of their own differences. For the instrument matrix, this study applies lags 1 on the predetermined variables while lags 2 and/or longer on endogenous variables. The Arellano-Bond test is used to diagnose the absence of second order autocorrelation (Arellano and Bond, 1991) whereas the Hansen test of overidentifying restrictions is used to examine the overall validity of the instruments. The rule of thumb is to keep the number of instruments less than or equal to the number of groups. The data of this study are analysed using Stata software applying command xtabond2 written by Roodman (2009).

The empirical model for this study involves the estimation of the following dynamic specification which includes a lagged dependent variable among the independent variables:

$$\begin{split} LnSAF_{i,t} &= \alpha + \beta_1 LnSAF_{i,t-1} + \ \beta_2 AC_{i,t-1} + \ \beta_3 NewCEO_{i,t-1} + \ \beta_4 NomadBro_{i,t-1} \\ &+ \beta_5 SAS_{i,t} + \beta_6 AuSize_{i,t} + \ \beta_7 AuLoc_{i,t} + \ \beta_8 BIndpd_{i,t-1} + \ \beta_9 LnTA_{i,t} \\ &+ \beta_{10} Micro_{i,t} + \ \beta_{11} AcTSubsi_{i,t} + \ \beta_{12} LevRatio_{i,t} + \ \beta_{13} LnNAF_{i,t} \\ &+ Year\ dummies + \ + \varepsilon_{i,t} \end{split}$$

where SAF is statutory audit fee, α is the overall intercept term, and the set of governance variables are represented by AC, NewCEO, NomadBro, SAS, and BIndpd while the set of firm-specific and audit-specific control variables are represented by AuSize, AuLoc, LnTA, Micro, AcTSubsi, LevRatio, and Ln NAF, and $\epsilon_{i,t}$ is the unobserved error component that is assumed to be normally distributed with a mean of zero and constant variance.

The governance attributes of interest are the internal governance mechanism of AIM companies identified as existence of audit committee ("AC"), CEO turnover ("NewCEO"), and board independence ("BIndpd") while the external governance mechanism of AIM companies is identified as nominated adviser cum broker ("NomadBro") and statutory auditor switching ("SAS"). All these governance attributes except for statutory auditor switching are lagged by one period as it is predicted that the governance mechanisms once put into place require time to evolve to be effective (e.g., Zahra and Pearce II, 1989; Dalton, Johnson and Ellstrand, 1999; Sultana, Singh and Van der Zahn, 2015); this measurement is different from past studies, which adopted the current period measurement. On the other hand, this study attempts to examine the impact of statutory audit fee by the newly appointed auditor on their initial engagement. The firm-specific control variables are the measurements of client size ("LnTA" and "Micro"), client complexity (AcTSubsi"), and client risk (LevRatio") while the audit-specific control variables are auditor size ("AuSize"), audit location ("AuLoc"), and non-audit services ("LnNAF"). Full details of the measurements of the dependent and independent variables for this study are described in the forthcoming sub-section.

3.3.4. Variable measurements

The audit billing is prevalently determined by the number of hours spent by different level of staff required in a statutory audit (Low et al, 1990). The number of hours spent would depend on the level of audit risks and demand of audit services while the level of staff expertise and skill in turn is mainly determined by the level of client size, client complexity, and client risk attached to each audit. Hence, it is predicted that the statutory audit fee is influenced by various factors concerning the audit client that directly entailed the audit scope.

In accordance with the provision of Section 494 of the UK Companies Act 2006, fees paid or payable for services provided by auditors or associates and related remuneration are required

to be disclosed in the audited financial statements of a company, which include statutory audit fee and non-audit fee (such as tax advisory services, corporate finance consultation, and other assurance services) (The National Archives, 2006). Therefore, there is a statutory requirement for the AIM companies incorporated in the UK to disclose the amount and nature of audit fees in their annual audited financial statements.

Statutory audit fee is the dependent variable of this study, which is defined as fees paid or payable to statutory auditors of the group, i.e., the company and its subsidiaries (thereafter known as the group), for conducting statutory audits and issuing independent audit reports addressed to their respective shareholders expressing their true and fair view on the annual financial statements of the respective companies and the group as a whole, where appropriate (Pong and Whittington, 1994). Past studies used the term audit fee (e.g., Chan, et al., 1993; Pong and Whittington, 1994) and external audit fee (e.g., Goodwin-Stewart and Kent, 2006; Clatworthy and Peel, 2007) to represent the statutory audit fee. The statutory audit fees are transformed using a natural logarithm ("LnSAF") to produce the dependent variable for this study, which is approximately normally distributed (e.g., Goddard and Masters, 2000; Clatworthy and Peel, 2007). Past studies found that untransformed audit fee was not normally distributed, which is a violation of an assumption of multiple regressions that the dependent variable is normally distributed (e.g., Goddard and Masters, 2000; Clatworthy and Peel, 2007).

I consider several independent variables in my model. Table 3.4 exhibits the nature, definitions, measurements, and labels of the independent variables of interest to this study as well as the control variables together with their expected relationships with the statutory audit fee.

Overall, the variables of interest to this study are related to the internal and external governance mechanisms of the AIM SMEs as hypothesised under section 3.2.6, whereby the existence of audit committee and the CEO turnover are the proxies for internal governance mechanisms while the dual role of Nomad and broker, and the statutory auditor switching are the proxies for external governance mechanisms of the AIM SMEs. Two of the variables of interest introduced to this study have not been tested in the UK context; one of them is the CEO turnover labeled NewCEO while another variable is the adviser leadership duality labeled NomadBro, which is a unique feature of AIM companies.

In order to test hypothesis H1, the existence of audit committee ("AC") by the date of the directors' report for the reporting period is coded 1 and otherwise is coded 0 (e.g., Collier and Gregory, 1996; Goddard and Masters, 2000). On the other hand, for hypothesis H2, the CEO turnover upon the appointment and/or resignation of CEO between the dates of the two consecutive directors' report ("NewCEO") is coded 1 and otherwise is coded 0¹² (e.g., Huang et al., 2014; Bills et al., 2017). The retention of Nomad and broker variable is tested under hypothesis H3 whereby the retention of the same firm as the Nomad and broker by the date of the directors' report for the reporting period ("NomadBro") is coded 1 and otherwise is coded 0. Hypothesis H4 examine the impact of statutory auditor switching on the statutory audit fee with the change of the statutory auditor from a firm of auditors to another firm of auditors between the dates of the two consecutive auditors' report ("SAS") is coded 1 and otherwise is coded 0 (e.g., Pong and Whittington, 1994; Butterworth and Houghton, 1995). The AC and NomadBro variables are predicted to have positive relationship with the statutory audit fee while the NewCEO and SAS variables are predicted to have negative relationships with the statutory audit fee.

I also consider a number of control variables in my empirical framework as follows.

Despite the huge literature on the drivers of statutory audit fee, only a handful of studies have examined the impact of last year's statutory audit fee on the current year's statutory audit fee by including the lagged value of the statutory audit fee as one of the explanatory variables (e.g., Oxera 2006; Abdallah et al., 2015; Kacer et al., 2018). This study includes the lag value of the dependent variable to control for dynamic endogeneity. The lag value of the statutory audit fee of the group measured in natural logarithm term ("1.LnSAF") is expected to be positively associated with the statutory audit fee (e.g., Oxera 2006; Abdallah et al., 2015; Kacer et al., 2018). In addition to the variables of interest for this study, it includes another internal governance mechanism as the control variable, i.e., board independence, measured by the percentage of non-executive directors that sit on the board by the date of the directors' report for the reporting period ("BIndpd"); non-executive directors are expected to favour more extensive audit scope in complementing their own monitoring responsibilities, which would

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¹² It is coded 0 for an AIM SME that has no CEO for consecutive financial years; executive chairman is considered as CEO for an AIM SME that has only executive chairman and no CEO.

resulting to higher statutory audit fee (e.g., Carcello et al., 2002; Zaman et al., 2011; Ghafran and O'Sullivan, 2017).

Empirical results of past studies suggested that client size, client complexity, and client risk are the important determinants of statutory audit fee (e.g., Simunic, 1980; Chan et al., 1993); accordingly, they are included as control variables in this study. The client size is measured by total assets and expressed in natural logarithm term ("LnTA"); the larger the client size, the more audit works are required and hence, higher statutory audit fee (e.g., Simunic, 1980; Pong and Whittington, 1994; Zaman et al., 2011). This study also includes a binary variable, i.e., a microenterprise ("Micro") is coded 1 and otherwise (i.e., small enterprise or medium-sized enterprise) is coded 0, to further control for the client size; it is expected that the microenterprises pay lower statutory audit fee than their other counterparts.

Typically, the more complex a company, the more audit efforts and longer hours are required to complete the assignment, which translated to higher statutory audit fee. More subsidiaries involve greater amount of consolidation works in identifying and eliminating intra-group transactions and other consolidation adjustments; such audit complexity is measured by the total number of subsidiaries of the group as at the reporting date (e.g., Chan et al., 1993; O'Sullivan, 1999; Abdallah et al. 2015). Unlike previous studies, this study uses the total number of active subsidiaries of the group as at the reporting date ("AcTSubsi"), which excludes the dormant or not in operation subsidiaries for which the additional audit cost is likely to be minimal.

Client risk is an important factor that determines the audit scope taken into consideration the potential legal liabilities arising from auditors' negligence and the potential loss of reputational goodwill (Pong and Whittington, 1994). The demise of Arthur Anderson from the accounting professional primarily due to legal negligence case involving Enron audit is a good example of the importance for auditor to obtain sufficient appropriate audit evidence to reduce the audit risk to an acceptable level when forming audit opinion. The leverage levels of a company could reflect the potential loss a statutory auditor might be exposed to in the event that the client is not financially viable (Simunic, 1980), which is measured by leverage ratio expressed by long term debts over total assets into percentage ("LevRatio") and is expected to be positively associated with the statutory audit fee (Collier and Gregory, 1996; Zaman et al., 2011).

Based on the independent auditor's report addressed to the members of the company that included in the annual report, a binary variable equals to 1 is assigned if the company is audited by a big 4 audit firm ("AuSize"), and 0 otherwise (e.g., Clatworthy and Peel, 2007; Huang et al., 2014). Past studies reported auditor premium attributable to higher audit quality and reputation that resulted to higher statutory audit fee charged by a big 4 audit firm (e.g., Chan et al., 1993). Another binary variable is included to represent the audit location: it is coded 1 if the audit firm that issued the auditors' report is located in London ("AuLoc"), and otherwise is coded 0; past studies revealed evidence of a London premium (e.g., Chan et al., 1993; Abdallah et al., 2015; Ghafran et al., 2017).

The non-audit fee (such as tax advisory services, corporate finance consultation, and other assurance services) is expressed in natural logarithm term ("LnNAF")¹³; past studies reported positive association between the statutory audit fee and non-audit fee due to the knowledge spillover and economies of scale effects were not passed on to the client in reducing the statutory audit fee (e.g., Hay et al., 2006; Antle et al., 2006; Chan et al., 2012).

¹³ Any zero value for non-audit fee is automatically assigned as zero value during the transformation process.

Table 3.4: Independent variables and their expected relationships with statutory audit fee

	fee		
Nature	Definition and Measurement	Label	Predicted Direction
Dynamic nature	Lag of statutory audit fee: The lag value of the statutory audit fee of the group measured in natural logarithm term	l.LnSAF ^	+
Internal governance mechanism	Existence of audit committee: 1 if an audit committee exists by the date of the directors' report for the reporting period, 0 otherwise	AC ~	+
Internal governance mechanism	CEO turnover: 1 if there was appointment and/or resignation of CEO between the dates of the two consecutive directors' report, 0 otherwise	NewCEO ~	-
Internal governance mechanism	Board independence: The percentage of non-executive directors that sit on the board by the date of the directors' report for the reporting period	BIndpd ^	+
External governance mechanism	Nominated adviser cum broker: 1 if the retention of the same firm as the Nomad and broker by the date of the directors' report for the reporting period, 0 otherwise	NomadBro ~	+
External governance mechanism	Statutory auditor switching: 1 if there was change of statutory auditor from a firm of auditors to another firm of auditors between the dates of the two consecutive auditors' report, 0 otherwise	SAS ~	-
Client size	Total assets: The total assets of the group, measured in natural logarithm term	LnTA ^	+
Client size	Microenterprise: 1 if the company was a microenterprise at the end of the reporting period, 0 otherwise	Micro ^	-
Client complexity	Total active subsidiaries: The total number of active subsidiaries of the group as at the reporting period	AcTSubsi ^	+
Client risk	Leverage ratio: The leverage level of the group expressed by long term debts over total assets	LevRatio ^	+
Auditor's characteristics	Auditor size: 1 if the company is audited by a big 4 audit firms, 0 otherwise	AuSize ^	+
Auditor's characteristics	Audit location: 1 if the audit firm that issued the auditors' report is located in London, 0 otherwise	AuLoc ^	+
Other audit services	Non-audit fee: The non-audit fee of the group measured in natural logarithm term	LnNAF ^	+

Notes: Represents variables of interest; and Represents control variables of this study.

3.4. Data analysis and discussion

This section provides analysis and discussion of the results. It begins with the descriptive statistics followed by the collinearity analysis. The regression results are illustrated, and robustness tests are discussed in the subsequent two sub-sections. The final sub-section summarises the findings of this study including conclusion.

3.4.1. Descriptive statistics

Table 3.5 exhibits the descriptive statistics for all the variables employed in this study, which made up of 1,325 observations for 236 AIM SMEs pooled across the financial periods of 2010-2015. The statutory audit fee has a mean of £49,000 with a median of £41,000 and a large range of £323,000. Similarly, there was a large range of £385,000,000 for the total assets with a mean of £30,805,000 and a median of £13,104,000, and only 20% of the observations were made up of microenterprises. At the same time, the non-audit fee has a mean of £17,000 with a medium of £7,000 and a large range of £757,000 with some of the sampled AIM SMEs did not incur any non-audit fee. The sampled observations displayed a positively skewed distribution for statutory audit fee, total assets and non-audit fee with their respective mean is greater than their median. As such, natural logarithm of statutory audit fee, total assets and non-audit fee is used as a transformation method (e.g., Clatworthy and Peel, 2007; Zaman et al., 2011; Chan et al., 2012).

About 86% of the sampled AIM SMEs have formed audit committee voluntarily in compliance with the good corporate governance practice; this percentage is higher than Collier and Gregory (1996)'s study on companies in the Financial Times All Share Index for the financial year ended in 1991 when the formation of audit committee was voluntary, which was about 42%. Upon the publication of the Cadbury Code in 1992 that recommended for the adoption of audit committee, this percentage has soared as evidenced in the study of Goddard and Masters (2000) where they found that about 89% and 91% of their sampled companies listed in the Times have formed audit committee for the financial year ended in 1994 and 1995 respectively.

About 15% of the total observations changed their CEO during the financial periods 2010-2015. Table 3.6 displays the distribution of CEO turnover by financial period. There was no major

variation in the CEO turnover with the lowest percentage of new CEO happened in the financial period 2011 at 13% and increased to the highest point of 17% in the financial period 2012. On the other hand, only 8% of the total observations changed their statutory auditor during the financial periods 2010-2015. The distribution of the statutory auditor switching as displayed in the Table 3.6 revealed that the highest percentage of switching happened in the financial period 2010 at 11% and decreased to the lowest point of 4% in the financial year 2011. It appears that the statutory auditor switching is not a regular agenda for the AIM SMEs while longer auditor tenure of four years or more appears to be prevalent. Nevertheless, its switching rate is still higher than the average switching rate of bigger listed companies. Oxera (2006) found about 4% and 3% switching rate for the market and the FTSE 350 companies respectively during the periods 1996-2004. On a later investigation, the Competition Commission (2013b)¹⁴ revealed that the annual switching rate among FTSE 350 companies varied between 1.5% and 3.5%, with an average of 2.4% while non-FTSE-350 companies has higher switching rate varied between 2.8% and 8.5% during the periods 2001 and 2010. The higher switching rate for smaller companies might be because they normally engage non-big 4 audit firms as their statutory auditors and hence, they have more choices in their switching decisions. As evidenced from this study under Table 3.5, only 27% of the sampled AIM SMEs were audited by big 4 audit firms while 73% of them engaged the services of mid-tier or smaller local audit firms as their statutory auditors. More than half of the statutory auditors (i.e., about 51%) operated their office from London.

As depicted under Table 3.5, 82% of the total observations engaged the same firm as their Nomad and broker. A cross tabulation shown under Table 3.7 reveals that the AIM SMEs that engaged the same firm as their Nomad and broker were 6% more likely to have formed audit committee and 2% more likely to have changed CEO but there was no difference when came to switching statutory auditor. Table 3.5 also displays, on average, the total active subsidiaries was 5 with some observations have no subsidiaries at all while others with 61 subsidiaries at the most. The average leverage level was 9% with a maximum level of 15%. Whilst on average, the total observations maintained 53% of non-executive directors on their board.

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¹⁴ The Competition Commission has closed on 1st April 2014. Its functions have been transferred to the Competition and Markets Authority.

Table 3.5: Descriptive statistics for statutory audit fee study

				•	J
			Standard		
Variable	Mean	Median	Deviation	Minimum	Maximum
Continuous variables:					
SAF (£'000)	49	41	34.72	4	323
TA (£'000)	30,805	13,104	51,297	51	385,000
AcTSubsi	5	4	5.70	0	61
LevRatio	0.09	0.00	0.59	0.00	14.92
BIndpd	0.53	0.50	0.20	0.00	1.00
NAF (£'000)	17	7	39.61	0	757
Binary variables:					
AC	0.86	1	0.34	0	1
NewCEO	0.15	0	0.36	0	1
NomadBro	0.82	1	0.38	0	1
SAS	0.08	0	0.27	0	1
Micro	0.20	0	0.40	0	1
AuSize	0.27	0	0.44	0	1
AuLoc	0.51	1	0.50	0	1

Note: SAF – Statutory audit fee; TA – Total assets; AcTSubsi – Total active subsidiaries; LevRatio – Leverage ratio; BIndpd – Board independence; NAF – Non-audit fee; AC – Existence of audit committee; NewCEO – CEO turnover; NomadBro – Nominated adviser cum broker; SAS – Statutory auditor switching; Micro – Microenterprise; AuSize – Auditor size: Big 4; AuLoc – Audit location: London.

Table 3.6: Mean for variables of interest by financial period for statutory audit fee study

				V						
	Financial period ended:									
Mean for:	2010	2011	2012	2013	2014	2015	Overall			
Existence of audit										
committee	0.86	0.88	0.85	0.86	0.85	0.88	0.86			
CEO turnover	0.14	0.13	0.17	0.16	0.15	0.15	0.15			
Nominated adviser										
cum broker	0.81	0.80	0.82	0.83	0.83	0.84	0.82			
Statutory auditor										
switching	0.11	0.04	0.07	0.09	0.09	0.06	0.08			
_										

Table 3.7: Cross tabulation for variables of interest for statutory audit fee study

Variable of interest		Existence of				Statutory auditor						
	8	audit c	ommitt	tee	C	CEO turnover			switching			
]	No	Ye	es	No		Ye	S	No		Yes	
Nominated adviser												
only	45	19%	191	81%	205	87%	31	13%	216	92%	20	8%
Nominated adviser												
cum broker	137	13%	952	87%	923	85%	166	15%	1,005	92%	84	8%
Overall	182	14%	1,143	86%	1,128	85%	197	15%	1,221	92%	104	8%

3.4.2. Collinearity analysis

Table 3.8 exhibits the correlation among the variables used in this study under Panel A and their variance inflation factor ("VIF") under Panel B. The results show that the statutory auditors charged higher audit fee on the AIM SMEs that have formed audit committee or engaged the same firm as their Nomad and broker. On the other hand, the AIM SMEs paid lower statutory audit fee in the year with new CEO as well as auditor switching. The highest correlation coefficient among the independent variables was absolute 0.47 between the total assets and the total active subsidiaries whereas the VIF values of all the explanatory variables range from 1.02 to 1.52 with their tolerance value ("1/VIF") of 0.66 at the least. Any correlations below absolute 0.80 should not be too harmful as regards to multicollinearity whereas as a rule of thumb, any variable with VIF value more than 10 or tolerance value of less than 0.10 would indicate high collinearity. Hence, it is concluded that multicollinearity is unlikely to cause potential problem in this study.

Table 3.8: Collinearity analysis for statutory audit fee study

Panel A: Correlation among variables used in this study								
<u>Variable</u>	<u>SAF</u>	<u>ĂC</u>	<u>NewCEO</u>	NomadBro NomadBro	<u>SAS</u>	<u>Micro</u>	BIndpd	
SAF	1.00							
AC	0.14	1.00						
NewCEO	-0.02	0.03	1.00					
NomadBro	0.08	0.07	0.02	1.00				
SAS	-0.05	0.00	0.05	-0.01	1.00			
Micro	-0.35	-0.11	-0.01	-0.14	0.03	1.00		
BIndpd	0.08	0.21	0.02	0.06	0.01	-0.01	1.00	
TA	0.44	0.11	-0.05	-0.02	-0.03	-0.12	0.14	
AcTSubsi	0.46	0.08	-0.03	0.01	-0.02	-0.22	0.10	
LevRatio	-0.02	0.02	-0.01	0.03	0.01	-0.06	-0.04	
AuSize	0.29	0.05	-0.03	0.07	0.01	-0.10	0.05	
AuLoc	0.01	-0.08	0.05	-0.10	0.04	0.13	0.04	
NAF	0.38	0.08	0.01	0.02	-0.03	-0.14	0.01	

Panel A (Cont'd): Correlation among variables used in this study

Variable	<u>TA</u>	<u>AcTSubsi</u>	LevRatio	<u>AuSize</u>	<u>AuLoc</u>	<u>NAF</u>
TA	1.00					
AcTSubsi	0.47	1.00				
LevRatio	-0.03	-0.04	1.00			
Ausize	0.17	0.06	0.06	1.00		
AuLoc	0.08	0.07	-0.07	0.37	1.00	
NAF	0.26	0.07	-0.02	0.21	-0.06	1.00

Panel B: VIF and their tolerance value of the independent variables

<u>Variable</u>	<u>VIF</u>	1/VIF
l.AC	1.08	0.93
1.NewCEO	1.02	0.98
1.NomadBro	1.04	0.96
SAS	1.02	0.98
Micro	1.19	0.84
1.BIndpd	1.09	0.92
LnTA	1.52	0.66
AcTSubsi	1.30	0.77
LevRatio	1.03	0.97
AuSize	1.24	0.81
AuLoc	1.24	0.81
LnNAF	1.07	0.93
Mean	1.29	

Note: SAF – Statutory audit fee; AC – Existence of audit committee; l.AC – Lag of existence of audit committee; NewCEO – CEO turnover; l.NewCEO – Lag of CEO turnover; NomadBro – Nominated adviser cum broker; l.NomadBro – Lag of nominated adviser cum broker; SAS – Statutory auditor switching; Micro – Microenterprise; BIndpd – Board independence; l.BIndpd – Lag of board independence; TA – Total assets; AcTSubsi – Total active subsidiaries; LevRatio – Leverage ratio; AuSize – Auditor size: Big 4; AuLoc – Audit location: London; NAF – Non-audit fee.

3.4.3. Regression analysis

This study adopts the system GMM estimator (i.e., labeled as Model 5 under Table 3.9) as described under model specification. In facilitating comparison with previous studies, the results generated using pooled OLS and fixed effects¹⁵ estimators for both static and dynamic structures are presented alongside herewith under Table 3.9.

For both static and dynamic models of pooled OLS and fixed effects estimators, the adjusted r²s of the pooled OLS estimator are higher than the fixed effects estimator. When incorporating the lagged dependent variable ("1.LnSAF") into the dynamic model¹⁶, the adjusted r² of pooled OLS estimator has increased hugely by 26.5% point to 85.7% whereas the adjusted r² of fixed effects estimator has increased by 3.8% point to 11.0%. The immediate last period of statutory audit fee reveals positive and highly significant (i.e., at 1% level of significance) influences for both pooled OLS estimator and fixed effects estimator explaining 73.6% and 18.6% of the current level of statutory audit fee respectively. These results indicate the importance of lagged statutory audit fee in the estimation models and confirm the presence of dynamic effects, which suggesting dynamic endogeneity, in the statutory audit fee model. Under the system GMM estimator, the lagged statutory audit fee explains 61.4% of the current level of statutory audit fee; such positive and significant impact at 1% level of significance further justifies the inclusion of lagged statutory audit fee in the model specifications to account for its persistency. In addition, the 0.614 coefficient of lagged statutory audit fee under the system GMM estimator is considered a consistent estimate as it lies between the 0.186 and 0.736 coefficient of lagged statutory audit fee under the fixed effects estimator and the pooled OLS estimator respectively (Baum, 2013¹⁷). Hence, it could be concluded that the statutory audit fees are temporally persistent and adjusted partially on the realisation of their past values (Kacer et al., 2018).

¹⁵ The Hausman test was conducted on the panel data, which favoured the adoption of the fixed effects over the random effects estimators for both static and dynamic structures.

¹⁶ The statutory audit fee (i.e., the dependent variable) is included as one of the independent variables with only one period lagged value to reflect its dynamic nature, as the second and third period lagged values revealed insignificant results when three period lagged values are included in the estimation.

¹⁷ According to Baum (2013), given the opposite directions of bias present in the estimates under pooled OLS estimator (i.e., its coefficient biased upward) and fixed effects estimator (i.e., its coefficient biased downward), consistent estimate under system GMM estimator should lie between these values.

Model 5 is developed to test hypotheses, H1, H2, H3, and H4; results of which are summarised in Table 3.9. Model 5 meets the diagnostic tests for the system GMM estimator as illustrated under model specifications. For the internal governance mechanism, the results show that the existence of audit committee in the immediate past year ("l.AC") is significant at 5% level of significance but not in the predicted direction while the CEO turnover in the immediate past year ("l.NewCEO") is insignificant but in the predicted direction. On the other hand, for the external governance mechanism, the results show that the retention of the same firm as nominated adviser and broker in the immediate past year ("l.NomadBro") is insignificant but in the predicted direction while the statutory auditor switching ("SAS") is significant at 1% level of significance and in the predicted direction.

More specifically, this study reveals that an AIM SME that formed audit committee tends to pay lower statutory fee, which is in contrast to the positive association found by Goodwin-Stewart and Kent (2006) and amongst other previous studies as revealed by Model 1 of this study, i.e., the static pooled OLS regression, with a positive significant result at 1% level of significance. Such contrast finding could due to the different requirements imposed as well as the different perceptions applied on the corporate governance mechanisms of AIM companies vis-à-vis the larger listed companies examined in previous studies, or simply due to the dynamic model specification that has already alleviated the endogeneity issues. The negative relationship between the existence of audit committee and statutory audit fee of an AIM SME suggests that the voluntary formation of audit committee consists of majority non-executive directors manages to enhance the internal control system within the company in reducing the inherent and control risks of the company, which in turn reduce the audit works and resulting to a lower statutory audit fee. This finding is consistent with Goddard and Masters (2000), who found that the complexity-related statutory audit fee was lower in companies with audit committee. In short, the existence of audit committee in an AIM SME supports the substitution rationale that stronger internal corporate governance mechanism is associated with lower statutory audit fee. However, Xue and O'Sullivan (2023) revealed that there was positive relationship between the statutory audit fee and audit committee disclosures when they examined 453 largest AIM companies for the 2016 financial year. They found that those companies in the AIM which disclosed the existence and full details of their audit committee as would be expected from fully listed companies paid higher statutory audit fee. This contrasted result highlights that the audit committee of AIM SMEs could be a better steward

that is more focuses on cost-saving amid exercising stronger internal corporate governance mechanism as compared to their larger counterparts.

As predicted, the CEO turnover in an AIM SME is associated with lower statutory audit fee but it is not statistically different from zero under all models. The insignificant result under system GMM estimator is consistent with Bills et al. (2017); they found no statutory audit fee adjustment when the new CEO was considered an apparent heir before taking office, and Huang et al. (2014) found no difference in the statutory audit fee between companies with voluntary CEO turnover and companies without CEO turnover. However, Bills et al. (2017) found that the statutory audit fee was higher for firms with new CEO while Huang et al. (2014) found that the statutory audit fee was higher for companies with forced CEO turnover. The inability to detect a statistically significant association between the CEO turnover and the statutory audit fee in this study might be due to the unavailability of information in distinguishing the reasons of CEO turnover as adopted in the past studies. This CEO turnover variable deserves further investigation given its scarcity in past literature.

An AIM SME engages the same firm as the Nomad and broker appears to be paying higher statutory audit fee than an AIM SME having separate firm as the Nomad and broker, as revealed by the static pooled OLS estimator (i.e., Model 1) at 5% level of significance. This result suggests that the retention of NomadBro complements the statutory audit of AIM SMEs, which could be viewed from the perspective of agency theory that NomadBro as the agent of the company would advise the directors to demand for higher level of audit quality, thus increases the audit efforts and resulting to higher statutory audit fee. Such approach of NomadBro intends to mitigate their potential loss of reputation and goodwill in the event that their AIM client companies fail financially (Mallin and Ow-Yong, 1998). However, the system GMM (i.e., Model 5) reveals insignificant results and indicates that the Nomad of an AIM SME does not play a significant role in driving the level of statutory audit fee. This finding is consistent with the diminishing reputation effect found by Mallin and Ow-Yong (2008) subsequent to their earlier results of Mallin and Ow-Yong (1998). It contributes new evidence to the existing literature as this unique feature, NomadBro, of AIM companies have yet to be tested in the statutory audit fee model of past studies; further investigation is required to reinforce such understanding.

The newly appointed statutory auditor of an AIM SME tends to charge lower statutory audit fee at the initial engagement as consistently revealed under static as well as dynamic models as depicted by Models 1 to 5 with 1% level of significance under all models except for static pooled model with 5% level of significance. Such findings are in line with the price-cutting phenomenon by the new statutory auditor in securing the initial audit engagement and potentially the existence of "low-balling" in the agency relationship (e.g., Pong and Whittington, 1994; Gregory and Collier, 1996). The statutory auditor switching reflects the bargaining power of an AIM SME in choosing the new statutory auditor that is capable of providing the similar level of audit quality at a lower cost as compared to its incumbent statutory auditor.

All models produce very similar results for the control variables including the constant. They are statistically significant at 1% or 5% or 10% level of significance and in their respective predicted direction except for the audit location, board independence, total active subsidiaries, and leverage ratio. The constant for all regression models is positively significant at 1% level of significance, which could be interpreted as the fixed costs of setting up an audit when all the independent variables are zero.

Clearly, the higher the total assets ("LnTA"), the higher the statutory audit fee would be. Similarly, an AIM microenterprise ("Micro") paid lower statutory audit fee as compared to other form of AIM SME; this study could be the first empirical study that evidenced such relationship. Both measurements of client size provide robust results on the positive relationship are rather intuitive since the bigger the company, the higher the total assets will be, the more audit time and work will be required, which accordingly translated to higher statutory audit fee and vice versa. Hay et al. (2006)'s analysis indicated that generally client size would explain 70% of the variations in statutory audit fee but this percentage could be significantly lower in smaller firms as reported by Bell, Knechel and Willingham (1994) (cited in Hay et al., 2006, p.169). This is consistent with the results of this study in which only about 24% (i.e., Micro: 14% and LnTA: 10%) of the variations in statutory audit fee of AIM SMEs are explained by the variations in the client size.

On the auditor's characteristics, it shows that the big 4 audit firms ("AuSize") charge higher statutory audit fee and so are the audit firms located in London ("AuLoc"). The big 4 auditors commanded higher statutory audit fee vis-à-vis their smaller counterparts for their presumably

greater expertise and skills in providing higher quality of audit services. Even though only 27% of the total observations of sampled AIM SMEs in this study engaged the big 4 audit firms, the auditor size explains 23% of the variation in statutory audit fee, which further endorsed the fee premium charged by the big 4 auditors as revealed in most past studies (e.g., Clatworthy and Peel, 2007; Huang et al., 2014). At the same time, the finding of this study also further corroborates the London premium phenomenon in which the statutory auditors operating in London managed to pass on their higher operating cost onto their client as evidenced by Abdallah et al. (2015) and Ghafran et al. (2017), amongst others.

The leverage ratio ("LevRatio") result is consistent with Collier and Gregory (1996) and Zaman et al. (2011), amongst other past studies that revealed positive significant relationship, which reflects the charge of higher statutory audit fee for the exposure of potential risk of client's financial failure. The higher the non-audit fee ("lnNAF"), the higher the statutory audit fee of an AIM SME, as revealed in this study is consistent with majority of past studies (e.g., Antle et al., 2006; Chan et al., 2012). This result indicates that the cost savings arising from the knowledge spillover and economies of scale in providing both audit services to the same client by a statutory auditor have not passed on to the client.

The board independence variable ("l.BIndpd") is insignificant across all regression models but its negative coefficient under system GMM estimator could possibly further support the role of non-executive directors in the audit committee in enhancing the internal control system and reducing the inherent and controls risks, which coincide with the significant negative relationship between the existence of audit committee in the AIM SMEs and their statutory audit fee. Majority of past studies revealed positive significant results but Zaman et al. (2011) also found the negative relationship between board independence and statutory audit that is significant at 5% level of significance when examining larger UK listed companies. On the other hand, all the regression models displayed in Table 3.9 produce significant positive relationship between the number of active subsidiaries ("AcTSubsi") and statutory audit fee other than the system GMM estimator. The inability to detect such a uniform statistically significant positive association is puzzling as most prior studies pointed to such relationship (e.g., O'Sullivan, 1999; Abdallah et al. 2015). A possible explanation for this result could be attributable to the bias results whereby endogeneity issues were not adequately addressed in past studies. Another possible explanation could be the different variable definition adopted in this study that excluded the dormant or not in operation subsidiaries.

Table 3.9: Regression analysis comparing static and dynamic models for statutory audit fee study (Dependent variable = LnSAF)

Variable Model 1 Pooled OLS Fixed effects Model 3 Fixed effects Model 4 Pooled OLS Model 5 System GMM I.LnSAF 0.736*** 0.186*** 0.614*** (0.017) (0.031) (0.060) 1.AC 0.114*** -0.077 0.016 -0.076 -0.210** (0.039) (0.049) (0.023) (0.048) (0.083) 1.NewCEO -0.027 -0.035 -0.009 -0.026 -0.007 (0.038) (0.022) (0.022) (0.022) (0.037) 1.NomadBro 0.078** 0.039 -0.015 0.032 0.068 (0.035) (0.038) (0.021) (0.037) (0.055) SAS -0.116** -0.107*** -0.179*** -0.128*** -0.151*** (0.052) (0.029) (0.031) (0.029) (0.048) AuSize 0.257*** 0.286*** 0.092** 0.266*** 0.230*** (0.033) (0.045) (0.020) (0.044) (0.050) AuLoc		Sta			- Dynamic mod	el	
I.LnSAF					<u>-</u>		
1.AC	Variable	Pooled OLS	Fixed effects	Pooled OLS	Fixed effects	System GMM	
1.AC 0.114*** -0.077 0.016 -0.076 -0.210** (0.039) (0.049) (0.023) (0.048) (0.083) 1.NewCEO -0.027 -0.035 -0.009 -0.026 -0.007 (0.038) (0.022) (0.022) (0.022) (0.037) 1.NomadBro 0.078** 0.039 -0.015 0.032 0.068 (0.035) (0.038) (0.021) (0.037) (0.055) SAS -0.116*** -0.107**** -0.179*** -0.128*** -0.151*** (0.052) (0.029) (0.031) (0.029) (0.048) AuSize 0.257*** 0.286*** 0.092*** 0.266*** 0.230*** (0.033) (0.045) (0.020) (0.044) (0.050) AuLoc 0.124*** -0.008 0.044** 0.005 0.077*** (0.029) (0.047) (0.018) (0.046) (0.030) 1.BIndpd 0.048 0.045 0.026 0.054 -0.019 (0.071) (0.083) (0.042) (0.082) (0.109**	l.LnSAF			0.736***	0.186***	0.614***	
(0.039)				(0.017)	(0.031)	(0.060)	
1.NewCEO -0.027 -0.035 -0.009 -0.026 -0.007 (0.038) (0.022) (0.022) (0.022) (0.037) 1.NomadBro 0.078** 0.039 -0.015 0.032 0.068 (0.035) (0.038) (0.021) (0.037) (0.055) SAS -0.116*** -0.107**** -0.179*** -0.128*** -0.151*** (0.052) (0.029) (0.031) (0.029) (0.048) AuSize 0.257*** 0.286*** 0.092*** 0.266*** 0.230*** (0.033) (0.045) (0.020) (0.044) (0.050) AuLoc 0.124*** -0.008 0.044** 0.005 0.077**** (0.029) (0.047) (0.018) (0.046) (0.030) 1.BIndpd 0.048 0.045 0.026 0.054 -0.019 (0.071) (0.083) (0.042) (0.082) (0.109) LnTA 0.216*** 0.123*** 0.066*** 0.123*** 0.100*** (0.012) (0.017) (0.008) (0.017) (0.039)	l.AC	0.114***	-0.077	0.016	-0.076	-0.210**	
(0.038)		(0.039)	(0.049)	(0.023)	(0.048)	(0.083)	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1.NewCEO	O -0.027	-0.035	-0.009	-0.026	-0.007	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		(0.038)	(0.022)	(0.022)	(0.022)	(0.037)	
SAS	1.NomadE	Bro 0.078**	0.039	-0.015	0.032	0.068	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		(0.035)		(0.021)	(0.037)	(0.055)	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	SAS	-0.116**	-0.107***	-0.179***	-0.128***	-0.151***	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		(0.052)	(0.029)	(0.031)	(0.029)	(0.048)	
AuLoc 0.124*** -0.008 0.044*** 0.005 0.077*** (0.029) (0.047) (0.018) (0.046) (0.030) 1.BIndpd 0.048 0.045 0.026 0.054 -0.019 (0.071) (0.083) (0.042) (0.082) (0.109) LnTA 0.216*** 0.123*** 0.066*** 0.123*** 0.100*** (0.012) (0.017) (0.008) (0.017) (0.030) Micro -0.447*** -0.229*** -0.134*** -0.180*** -0.139*** (0.036) (0.042) (0.023) (0.042) (0.048) AcTSubsi 0.019*** 0.029*** 0.006*** 0.025*** 0.006 (0.003) (0.004) (0.002) (0.004) (0.006) LevRatio 0.031 0.019 0.017 0.012 0.016* (0.021) (0.017) (0.012) (0.017) (0.009) LnNAF 0.021*** 0.016*** 0.005*** 0.013*** 0.013** (0.003) (0.004) (0.002) (0.004) (0.006)	AuSize	0.257***	0.286***	0.092***	0.266***	0.230***	
$\begin{array}{c} (0.029) & (0.047) & (0.018) & (0.046) & (0.030) \\ 1. \text{BIndpd} & 0.048 & 0.045 & 0.026 & 0.054 & -0.019 \\ (0.071) & (0.083) & (0.042) & (0.082) & (0.109) \\ \text{LnTA} & 0.216^{***} & 0.123^{***} & 0.066^{***} & 0.123^{***} & 0.100^{***} \\ (0.012) & (0.017) & (0.008) & (0.017) & (0.030) \\ \text{Micro} & -0.447^{***} & -0.229^{***} & -0.134^{***} & -0.180^{***} & -0.139^{***} \\ (0.036) & (0.042) & (0.023) & (0.042) & (0.048) \\ \text{AcTSubsi} & 0.019^{***} & 0.029^{***} & 0.006^{***} & 0.025^{***} & 0.006 \\ (0.003) & (0.004) & (0.002) & (0.004) & (0.006) \\ \text{LevRatio} & 0.031 & 0.019 & 0.017 & 0.012 & 0.016^{**} \\ (0.021) & (0.017) & (0.012) & (0.017) & (0.009) \\ \text{LnNAF} & 0.021^{***} & 0.016^{***} & 0.005^{***} & 0.013^{***} & 0.013^{***} \\ (0.003) & (0.004) & (0.002) & (0.004) & (0.006) \\ \end{array}$		(0.033)	(0.045)	(0.020)	(0.044)	(0.050)	
1.BIndpd 0.048 0.045 0.026 0.054 -0.019 (0.071) (0.083) (0.042) (0.082) (0.109) LnTA 0.216*** 0.123*** 0.066*** 0.123*** 0.100*** (0.012) (0.017) (0.008) (0.017) (0.030) Micro -0.447*** -0.229*** -0.134*** -0.180*** -0.139*** (0.036) (0.042) (0.023) (0.042) (0.048) AcTSubsi 0.019*** 0.029*** 0.006*** 0.025*** 0.006 (0.003) (0.004) (0.002) (0.004) (0.006) LevRatio 0.031 0.019 0.017 0.012 0.016* (0.021) (0.017) (0.012) (0.017) (0.009) LnNAF 0.021*** 0.016*** 0.005*** 0.013*** 0.013** (0.003) (0.004) (0.002) (0.004) (0.006)	AuLoc	0.124***	-0.008	0.044**	0.005	0.077***	
LnTA		(0.029)	(0.047)	(0.018)	(0.046)	(0.030)	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1.BIndpd	0.048	0.045	0.026	0.054	-0.019	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		(0.071)	(0.083)	(0.042)	(0.082)	(0.109)	
Micro -0.447*** -0.229*** -0.134*** -0.180*** -0.139*** (0.036) (0.042) (0.023) (0.042) (0.048) (0.048) (0.019*** 0.029*** 0.006*** 0.025*** 0.006 (0.003) (0.004) (0.002) (0.004) (0.006) (0.006) (0.021) (0.017) (0.012) (0.017) (0.019) (0.017) (0.019) (0.017) (0.019) (0.018** (0.021*** 0.016*** 0.005*** 0.013*** (0.003) (0.004) (0.002) (0.004) (0.006)	LnTA	0.216***	0.123***	0.066***	0.123***	0.100***	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		(0.012)	(0.017)	(0.008)	(0.017)	(0.030)	
AcTSubsi 0.019*** 0.029*** 0.006*** 0.025*** 0.006 (0.003) (0.004) (0.002) (0.004) (0.006) LevRatio 0.031 0.019 0.017 0.012 0.016* (0.021) (0.017) (0.012) (0.017) (0.009) LnNAF 0.021*** 0.016*** 0.005*** 0.013*** 0.013** (0.003) (0.004) (0.002) (0.004) (0.006)	Micro	-0.447***	-0.229***	-0.134***	-0.180***	-0.139***	
LevRatio (0.003) (0.004) (0.002) (0.004) (0.006) LevRatio 0.031 0.019 0.017 0.012 0.016* (0.021) (0.017) (0.012) (0.017) (0.009) LnNAF 0.021*** 0.016*** 0.005*** 0.013*** 0.013** (0.003) (0.004) (0.002) (0.004) (0.006)		(0.036)	(0.042)	(0.023)	(0.042)	(0.048)	
LevRatio 0.031 0.019 0.017 0.012 0.016* (0.021) (0.017) (0.012) (0.017) (0.009) LnNAF 0.021*** 0.016*** 0.005*** 0.013*** 0.013** (0.003) (0.004) (0.002) (0.004) (0.006)	AcTSubsi	0.019***	0.029***	0.006***	0.025***	0.006	
(0.021) (0.017) (0.012) (0.017) (0.009) LnNAF 0.021*** 0.016*** 0.005*** 0.013*** 0.013** (0.003) (0.004) (0.002) (0.004) (0.006)		(0.003)	(0.004)	(0.002)	(0.004)	(0.006)	
LnNAF 0.021*** 0.016*** 0.005*** 0.013*** 0.013** (0.003) (0.004) (0.002) (0.004) (0.006)	LevRatio	0.031	0.019	0.017	0.012	0.016*	
(0.003) (0.004) (0.002) (0.004) (0.006)		(0.021)		(0.012)	(0.017)		
	LnNAF	0.021***	0.016***	0.005***	0.013***	0.013**	
			(0.004)	(0.002)	(0.004)		
Constant 6.541*** 8.255*** 1.645*** 6.328*** 2.388***	Constant	6.541***	8.255***	1.645***	6.328***	2.388***	
(0.189) (0.289) (0.157) (0.424) (0.693)		(0.189)	(0.289)	(0.157)	(0.424)	` '	
Year dummies Yes Yes Yes Yes Yes	Year dum	mies Yes	Yes	Yes	Yes	Yes	
Adjusted r ² 0.592 0.072 0.857 0.110 NA	Adjusted		0.072	0.857	0.110	NA	
Observations 1,089 1,089 1,089 1,089 1,089						1,089	
Number of instruments (only applicable for system GMM) 132				-			
Number of groups (only applicable for system GMM) 236		• • •		•			
AR(1) showing p-value (only applicable for system GMM) 0.000				-			
AR(2) showing p-value (only applicable for system GMM) 0.213							
Hansen test showing p-value (only applicable for system GMM) 0.518	Hansen te	st showing p-v	alue (only appl	icable for syst	em GMM)	0.518	

Notes

LnSAF – Statutory audit fee in natural logarithm term; l.AC – Lag of existence of audit committee; l.NewCEO – Lag of CEO turnover; l.NomadBro – Lag of nominated adviser cum broker; SAS – Statutory auditor switching; AuSize – Auditor size: Big 4; AuLoc – Audit location: London; l.BIndpd – Lag of board independence; LnTA – Total assets in natural logarithm term; Micro – Microenterprise; AcTSubsi – Total active subsidiaries; LevRatio – Leverage ratio; LnNAF – Non-audit fee in natural logarithm term.

^{2.} Model 5 uses the two-step GMM estimators developed by Blundell and Bond (1998) with Windmeijer (2005) corrected standard error (reported in brackets).

^{3.} All the above regressions also include year dummies (not reported).

^{4.} The symbols ***, **, and * indicate 1%, 5%, and 10% significance level, respectively.

3.4.4. Robustness tests

The results produced using the system GMM estimator has corrected for all sources of endogeneity, namely dynamic endogeneity, simultaneous endogeneity, and omitted variables bias, upon the application of instrument matrix as follows. One-period lagged value is applied on the statutory auditor switching as it is considered to be a predetermined variable. For endogenous variables, two-period lagged value is applied on the existence of audit committee, CEO turnover, NomadBro, and board independence whereas two- and deeper-period lagged value is applied on the lagged statutory audit fee, total assets, total active subsidiaries, leverage ratio, auditor size, and non-audit fee. On the other hand, microenterprise, audit location, and year dummies are considered to be exogenous variables. The Arellano-Bond test estimations on the serial correlation indicate that there is no second order autocorrelation of residuals while the Hansen test on the over-identifying restrictions of instruments is statistically insignificant indicate that the model is correctly specified in terms of appropriate instruments.

In order to ensure the robustness of the model, different lag structures have been estimated under Models 6, 7, and 8 in which their results are depicted in Table 3.10 alongside the chosen Model 5 for this study. The existing Model 5 is modified to apply two- and deeper-period lagged value instead of the existing two-period lagged on the existence of audit committee, CEO turnover, NomadBro, and board independence whilst other information remains unchanged to form Model 6. Next, the existing Model 5 is modified to apply two-period lagged value instead of one-period lagged value on the statutory auditor switching whilst other information remains unchanged to derive at Model 7. Lastly, Model 8 is constructed by applying two- and deeper-period lagged value on all variables except for keeping the microenterprise, audit location, and year dummies as the exogenous variables. Appendix D displays the details of different lag structures for Models 5 to 8 together with the Stata command and diagnostic tests.

Applying different lag structures in the models, apparently, reveal consistent results with the similar direction of variables for almost all variables¹⁸ except that their explanatory power has reduced as compared to Model 5 adopted in this study. All of them also fulfill the diagnostic

¹⁸ The "BIndpn" coefficient reveals insignificant negative relationship in Model 5 and Model 7 but reveals insignificant positive relationship in Model 6 and Model 8.

tests of the model specifications. Such robustness outcomes reasonably support the adoption of Model 5 for this study that applies appropriate number of lags on the independent variables for a set of valid instruments within the model that still has the explanatory power and meeting the model specification tests. Worth noting is that the lagged statutory audit fee is positive and highly significant at 1% level of significance in all the dynamic models, Models 3 to 8, which further warranted its inclusion in the statutory audit fee model.

3.4.5. Summary and conclusion

The findings of this study offer numerous useful insights into the relationships between the corporate governance mechanisms and statutory audit fee of AIM SMEs in the UK. Some of the results corroborate those obtained by other researchers mainly on larger companies, for examples the highly significant negative relationship shown by the statutory auditor switching and the highly significant positive relationship shown by many control variables, namely client size, auditor size, audit location, and non-audit fee; and worth highlighting the high explanatory power of the past value of statutory audit fee in the relationship. Others are not in line either with past studies or this study's expectation, for example the insignificant relationship shown by the total active subsidiaries and the significant negative relationship shown by the existence of audit committee. On the other hand, others add on to the understanding and knowledge of the drivers of statutory audit fee of SMEs in particular and of other company sizes in general.

A particular useful contribution of this study is the emergence of two new variables in the statutory audit fee model of the AIM SMEs. One of them is the dual leadership role shouldered by a firm acting as the Nomad cum broker, a unique external governance mechanism of AIM companies that has yet to be tested under this research area. The AIM SME engages NomadBro appears to be paying higher statutory audit fee than another AIM SME engages separate firm as the Nomad and broker. Nevertheless, the result is insignificant, which reveals that the provision of the Nomad and broker positions by a single firm does not seem to influence the level of statutory audit fee. Another new variable is the microenterprise that unsurprisingly and undoubtedly distinguishing the lower level of statutory audit fee paid by microenterprises as compared to those small enterprises or medium-sized enterprises; this finding could be the first empirical study that confirms this intuitive phenomenon.

It is also important to reflect on those explanatory variables that turned out to be insignificant. Perhaps the most notable one is the CEO turnover. This study reveals that the newly appointed CEO of an AIM SME manages to negotiate for a lower statutory audit fee but the result is not statistically significant. Perhaps the classifications of CEO turnover into forced vis-à-vis voluntary or varied succession arrangements are made possible, this study might be able to provide fruitful insights on this perspective.

Overall, the Model 5 using the system GMM estimator as adopted in this study is specified without the presence of multicollinearity, heteroskedasticity, autocorrelation, and endogeneity issues. Applying different lag structure when conducting the robustness tests, I corroborate that those alternatives do not markedly affect the main conclusions. Hence, the regression results are consistent, robust, and valid for interpretations.

Table 3.10: Regression analysis comparing dynamic models of system GMM for statutory audit fee study (Dependent variable = LnSAF)

Different lag structures								
Variable	Model 5	Model 6	Model 7	Model 8				
1.LnSAF	0.614***	0.599***	0.604***	0.604***				
	(0.060)	(0.053)	(0.061)	(0.054)				
l.AC	-0.210**	-0.128*	-0.170*	-0.113				
	(0.083)	(0.073)	(0.089)	(0.071)				
1.NewCEO	-0.007	-0.018	-0.013	-0.022				
	(0.037)	(0.033)	(0.036)	(0.029)				
1.NomadBro	0.068	0.080	0.044	0.066				
	(0.055)	(0.062)	(0.061)	(0.060)				
SAS	-0.151***	-0.160***	-0.175*	-0.189**				
	(0.048)	(0.048)	(0.100)	(0.088)				
AuSize	0.230***	0.235***	0.229***	0.236***				
	(0.050)	(0.054)	(0.053)	(0.056)				
AuLoc	0.077***	0.087***	0.084***	0.086***				
	(0.030)	(0.030)	(0.030)	(0.029)				
1.BIndpd	-0.019	0.011	-0.015	0.026				
	(0.109)	(0.107)	(0.109)	(0.108)				
LnTA	0.100***	0.105***	0.093***	0.089***				
	(0.030)	(0.029)	(0.031)	(0.027)				
Micro	-0.139***	-0.153***	-0.157***	-0.157***				
	(0.048)	(0.044)	(0.050)	(0.046)				
AcTSubsi	0.006	0.006	0.005	0.006				
	(0.006)	(0.006)	(0.006)	(0.005)				
LevRatio	0.016*	0.013*	0.018*	0.012				
	(0.009)	(0.008)	(0.011)	(0.008)				
LnNAF	0.013***	0.013**	0.016**	0.014**				
	(0.006)	(0.006)	(0.006)	(0.007)				
Constant	2.388***	2.384***	2.594***	2.568***				
	(0.693)	(0.588)	(0.740)	(0.601)				
Year dummies	Yes	Yes	Yes	Yes				
Observations	1,089	1,089	1,089	1,089				
Number of instruments	132	156	131	161				
Number of groups	236	236	236	236				
AR(1) showing p-value	0.000	0.000	0.000	0.000				
AR(2) showing p-value	0.213	0.240	0.224	0.252				
Hansen test showing p-va	alue 0.518	0.426	0.565	0.497				

Notes:

LnSAF – Statutory audit fee in natural logarithm term; l.AC – Lag of existence of audit committee; l.NewCEO – Lag of CEO turnover; l.NomadBro – Lag of nominated adviser cum broker; SAS – Statutory auditor switching; AuSize – Auditor size: Big 4; AuLoc – Audit location: London; l.BIndpd – Lag of board independence; LnTA – Total assets in natural logarithm term; Micro – Microenterprise; AcTSubsi – Total active subsidiaries; LevRatio – Leverage ratio; LnNAF – Non-audit fee in natural logarithm term.

^{2.} Model 5 uses the two-step GMM estimators developed by Blundell and Bond (1998) with Windmeijer (2005) corrected standard error (reported in brackets).

^{3.} All the above regressions also include year dummies (not reported).

^{4.} The symbols ***, **, and * indicate 1%, 5%, and 10% significance level, respectively.

3.5. Conclusions

This section concludes with summaries of key issues together with limitations of this study and recommendations for future research.

The "triangle relationship" among the shareholders, directors, and statutory auditors of a company portrayed in the agency theory and stewardship theory are the cornerstone in driving the statutory audit fee. Their demand for audit services from the perspective of corporate governance and the supply of audit services from the perspective of audit quality could have complementary or substitution impact on the statutory audit processes that resulting to lower or higher level of statutory audit fee. This study reveals that the audit committee of AIM SMEs promotes stronger corporate governance mechanism in maintaining high level of audit quality at lower statutory audit fee representing cost-saving strategy while the AIM SMEs enjoy statutory audit fee reduction from the new statutory auditor at the initial engagement. Nevertheless, this study finds no relationship between the statutory audit fee and CEO turnover as well as NomadBro. In addition, this study also provides further evidence that the last year's statutory audit fee is the starting point for the negotiation of current year's statutory audit fee, which reflecting the existence of dynamic relationship. At the same time, this study also confirms empirically the intuitive phenomenon that an AIM microenterprise pays lower statutory audit fee as compared to an AIM small enterprise and an AIM medium-sized enterprise. This is another empirical study conducted solely on the AIM companies and incorporating the corporate governance mechanisms after Xue and O'Sullivan (2023). More importantly, this study also provides the entirely new evidence on the role of Nomad, the unique advisory feature of AIM companies, and the voluntary formation of audit committee of AIM companies, in driving the level of statutory audit fee. This study contributes to the existing literature and fills the gap for smaller listed companies in a less concentrated audit market that are governed by a lighter touch regulatory regime and follow less rigorous corporate governance mechanisms. This study provides evidence to directors of AIM SMEs that the voluntary formation of audit committee could facilitate an informed fee negotiation process, and could result to cost saving in term of receiving quality audit services at lower price. For the policy makers, this study provides better understanding on the governance roles played by the audit committee and Nomad, and evidence that an audit needs to recognise companies' different sizes and types, which would assist them in refining corporate governance mechanism

that better suit the AIM and smaller listed companies, and in debating the pros and cons of the unique Nomad's regulatory framework in offering appropriate investor protection.

All the data for this study are hand-collected, which are then in turn more accurate and complete as I exercise consistent and careful approach to minimise errors but at the expense of long time period required that restricted the sample size of this study. The use of annual reports in deriving the data for this study would also be prone to the quality of information presented and disclosed within the annual reports; in addition, the non-observable or non-measurable data, such as the reasons of CEO turnover, audit hours spent, and hourly staff rate, are not readily available in the annual reports. These limitations should be borne in mind when interpreting the results, which could also suggest interesting avenues for future research.

Future studies could attempt to examine the influence of the new CEO, classified by dismissal, resignation, or retirement, or varied succession plans, as it has been acknowledged in past studies (e.g., Huang et al., 2014; Bills et al., 2017) that there could be differences in the level of statutory audit fee under different CEO turnover conditions. Such information could be obtained via interviews or questionnaires as they are not readily available from the annual reports. In addition, future studies could also consider conducting interviews with the statutory auditors to obtain a better understanding on the allocations of audit hours, and level of audit staff skills and expertise that mainly form the audit billing structure of audit firms. Finally, the newly introduced variables of NomadBro and microenterprise would require more future evidence to corroborate the validity of the results of this study.

Chapter 4. Triggers of statutory auditor switching

Abstract

This study aims to provide new evidence on the triggers of statutory auditor switching for small and medium-sized companies listed on the AIM, a junior market of the London Stock Exchange. AIM is a lightly regulated market that distinctly requires all AIM companies to always retain a nominated adviser while small and medium-sized AIM companies could be more sensitive to external audit costs relative to larger companies.

Employing the fixed effects with conditional logistic estimator on an unbalanced panel data of 1,325 observations from 236 small and medium-sized AIM companies for the financial periods covering 2010 to 2015, the major findings of this study demonstrate that the corporate governance mechanism, auditor independence, and cost-minimisation strategy are associated with companies' decision to switch their statutory auditors. The new chief executive officer and new nominated adviser once appointed are more likely to recommend the statutory auditor switching in the following year. While the audit committee, when exists, is more likely to recommend for the statutory auditor switching in the following year after the receipt of modified audit report from the incumbent statutory auditor. On the other hand, the higher the statutory audit fee and the higher the ratio of non-audit fee to total fees paid to the statutory auditor, the more likely the occurrence of statutory auditor switching in the following year. This study also reveals that a microenterprise is less likely to switch statutory auditor as compared to small enterprise and medium-sized enterprise.

This study contributes to the existing literature by providing insights into the rather dated studies with more recent data of small and medium-sized companies as well as providing new empirical evidence on the role of nominated adviser and voluntary formation of audit committee in AIM companies when deciding statutory auditor switching under the less rigorous regulatory environment.

4.1. Introduction

This section provides an overview of statutory auditor switching and spells out the motivations together with the objectives as well as highlighting the main findings and contributions.

4.1.1. Overview of statutory auditor switching

Statutory auditor switching represents the change of statutory auditor of a company between the date of the two consecutive auditors' report of that company. This happened when two different firms of auditors issued the auditor's report to the shareholders on the financial statements of the company for each of the two consecutive financial years. A company may choose to change statutory auditor at the AGM or part way through the financial year. Selecting a right statutory auditor is an important decision as statutory audit plays a vital role in a company's corporate governance mechanisms and in providing confidence to stakeholders on the reliability of the financial information.

Why a company switched statutory auditor? The termination of an auditor-client relationship has attracted the attention of investors and regulators pondering what are the triggers of statutory auditor switching: could it be an indication of the financial situation of a company, or could it be a signal of the level of audit quality and auditor independence, or could it be an implication of potential opinion shopping? The underlying reasons for statutory auditor switching are generally unobservable to external stakeholders (such as shareholders, potential investors, and lenders) and it would be difficult for the stakeholders, particularly the shareholders, to evaluate the impact of such switching as it is complex and could be triggered by many variables. The statutory auditor switching is infrequent and when it occurs, it could be due to firm-specific and auditor-specific characteristics, such as: changes of management (e.g., Hudaib and Cooke, 2005); or poor firm performance (e.g., Schwartz and Menon, 1985); or issuance of audit qualification (e.g., Chow and Rice, 1982); or reduction of statutory audit fee (e.g., Beattie and Fearnley, 1995); or provision of non-audit services (e.g., DeBerg, Kaplan and Pany, 1991); or characteristics of corporate governance (e.g., Yanan, Wen and Jinzheng, 2013).

Apparently, there are direct as well as indirect costs incurred by a company in the switching process of statutory auditor (Williams 1988). A company could incur auditor selection cost and start-up costs in re-educating its new statutory auditor while there could also be potential costs of sending a negative signal to the capital market (Oxera, 2006). The statutory auditor switching could signal new information to stakeholders about the financial health of a company and the level of audit quality that can reflect on the company's share price. In the absence of disclosure requirements on the reasons of the statutory auditor switching in the annual report, the real motivation for such switching might only be known to the directors while leaving other stakeholders pondering what triggers the statutory auditor switching of a company.

4.1.2. Motivations for this study

The relationship between listed companies and their statutory auditors have come under closer scrutiny amidst the occurrence of corporate failures and in the wake of accounting scandals around the world (e.g., Enron in the US; Parmalat in the Europe; Carillion in the UK). Many past studies across the developed and developing countries have investigated the various aspects of auditor-client alignment and re-alignment, one of which is the triggers of statutory auditor switching. Majority of them were based on larger companies in the US (e.g., Burton and Roberts, 1967; Chow and Rice, 1982; Schwartz and Menon, 1985; Williams, 1988; DeBerg et al., 1991; Carcello and Neal, 2003; Lee, Mande and Ortman, 2004; Robinson and Owen-Jackson, 2009; Cairney and Stewart, 2019) and surprisingly not many studies were based on the UK evidence let alone on the UK SMEs. In the UK, seven related studies (Beattie and Fearnley, 1995; Beattie and Fearnley, 1998a; Bettie and Fearnley, 1998b; Lennox, 2000; Hudaib and Cooke, 2005; Oxera, 2006; Competition Commission, 2013a) were identified as at to date, which covered a relatively old dataset. These seven UK related studies adopted primary or secondary data, logit or probit estimator, and focused mainly on larger companies. For example, Beattie and Fearnley (1995; 1998a) explored the economic and behavioural factors triggering statutory auditor switching of domestic officially listed and USM¹⁹ companies in the UK and Ireland as of 30th April 1992 using closed-form questionnaires while Beattie and Fearnley (1998b) conducted open-ended questions of semi-structured interview on domestic officially listed and USM companies in the UK and Ireland that conducted a competitive tender,

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¹⁹ Unlisted Securities Market ("USM") was a market place for trading the equity of small companies set up by the LSE, which existed from 1980 to 1996.

changed auditors, or both between 1989 and 1992. They found that changes in key management as well as statutory audit fee were the commonly cited reasons for statutory auditor switching. Lennox (2000) examined the relationship between statutory auditor switching and audit opinion of UK listed companies between 1988 and 1994 but using probit estimator, and revealed that companies switched statutory auditors to avoid modified audit report in the future. On the other hand, Hudaib and Cooke (2005) examined the interactive effect of managing director changes and financial distress on audit qualification and statutory auditor switching of UK listed companies between 1987 and 2001 using logit estimator. They found that change in managing director was more important than financial distress in explaining statutory auditor switching. Commissioned by the Department of Trade and Industry and the FRC, Oxera Consulting Ltd explored the impact of audit market structure and choice mainly on the larger UK listed companies between 1996-2004, and found that statutory auditor switching rate was lower for larger companies (Oxera, 2006). More recently, the Office of Fair Trading made a reference to the Competition Commission²⁰ for an investigation into the supply of statutory audit services to large companies in the UK covering FTSE 100 and FTSE 250 companies between 2001-2010, and their finding corroborated Oxera (2006)'s findings that larger companies have lower statutory auditor switching rate (Competition Commission, 2013a). Such scarcity of past studies motivates this study.

In view of the different economic, legal, and audit environments across the world, the factors triggering the statutory auditor switching in different countries on different company size might not be a representative of UK SMEs. Each country regulates its own accounting profession, which has some influence over the incentive in switching statutory auditor in that country. When considering switching statutory auditor, SMEs might be more likely to adopt cost-minimisation strategy as compared to larger companies in term of cost sensitivity and saving. The institutional setting for this study is AIM listed companies that are dominated by SMEs, a junior market of the LSE that is lightly regulated with distinct corporate governance mechanisms as compared to larger companies on the Main Market of the LSE. For example, the formation of audit committee is a voluntary compliance as AIM companies are not legally bound to comply with the provisions of The UK Corporate Governance Code while retention of Nomad and a broker at all times is a compulsory compliance (LSE: AIM Rules for

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²⁰ The Competition Commission has closed on 1st April 2014. Its functions have been transferred to the Competition and Markets Authority.

Companies, 2021). In addition, AIM companies are not required to adhere to the auditor rotation and tendering regulations imposed on FTSE 350 companies (FRC, 2017) which makes their statutory auditor switching a voluntary rather than a compulsory decision. Thus far, AIM companies have attracted relatively little research attention (e.g., Mallin and Ow-Yong, 1998; Mallin and Ow-Yong, 2008; Farag et al., 2014), particularly on the external audit aspects (e.g., Clatworthy and Peel, 2007; Xue and O'Sullivan, 2023). Mallin and Ow-Yong (1998; 2008) examined the corporate governance aspects of AIM companies while Farag et al. (2014) investigated the inter-relationship between corporate governance, venture capital ownership, and financial performance in AIM companies. On the other hand, Clatworthy and Peel (2007) examined the effect of corporate status on statutory audit fee of UK quoted companies (i.e., companies on Main Market, AIM, and Ofex) and unquoted companies. Most recently, Xue and O'Sullivan (2023) examined the impact of risk, corporate governance and auditor size on the determinants of audit fees of largest AIM companies. The absence of research interest could be due to lack of readily available data on databases that makes the manual data collection from the companies' annual reports a tedious process.

4.1.3. Objectives of this study

Statutory audit plays a vital role in companies' corporate governance mechanisms in providing confidence to stakeholders on the reliability of the financial information. It is crucial to comprehend the reasons why, given the direct and indirect costs involved, companies still choose to switch their statutory auditors. To date, there is only a limited number of studies on triggers of statutory auditor switching under the UK setting, particularly on the SMEs, and not many were based on the characteristics of corporate governance (e.g., Beattie and Fearnley, 1998a; Hudaib and Cooke, 2005). Unlike majority of prior studies that focused on larger companies in the US (e.g., Burton and Roberts, 1967; Chow and Rice, 1982; Schwartz and Menon, 1985; Williams, 1988; DeBerg et al., 1991; Carcello and Neal, 2003; Lee, et al., 2004; Robinson and Owen-Jackson, 2009; Cairney and Stewart, 2019), this study examines the triggers of statutory auditor switching of smaller listed companies in the UK from the perspectives of lightly regulated governance mechanism, cost-minimisation strategy and auditor independence using more recent data.

This study aims to investigate the triggers of statutory auditor switching of the AIM SMEs of the LSE. The research questions for this study are as follows:

Research question 1: What is the relationship between the internal governance mechanism and the statutory auditor switching of AIM SMEs?

Research question 2: What is the relationship between the external governance mechanism and the statutory auditor switching of AIM SMEs?

Research question 3: What is the relationship between the cost-minimisation strategy and the statutory auditor switching of AIM SMEs?

Research question 4: What is the relationship between the auditor independence and the statutory auditor switching of AIM SMEs?

This study incorporates the roles of audit committee and CEO as well as Nomad in making decision on the statutory auditor switching as part of the respective internal as well as external governance mechanisms of AIM SMEs. Both the directors and Nomad are the key participants in the corporate governance mechanism of AIM companies in which the directors, such as audit committee and CEO, set up the internal governance structure with sufficient appropriate procedures, resources and controls, and the Nomad, who must be a firm or a company that practised corporate finance, and must be approved and licensed by the LSE, provides the advisory and monitoring functions under the external governance structure (Mallin and Ow-Yong, 1998). Whilst in relation to cost-minimisation strategy and auditor independence, this study incorporates the impact of statutory audit fee as well as non-audit fee on the AIM SMEs in making switching decision. Hypotheses of this study have been developed to address the above research questions; details of which are discussed under section 4.2 covering the fundamental concepts, theoretical frameworks, empirical studies, and research gaps.

This study would provide the initial empirical evidence to all the interested parties in understanding the reasons why an AIM SME switched its statutory auditor amid the potential direct and indirect switching costs. On the other hand, this study could provide insights to audit firms in knowing the main triggers of statutory auditor switching to enable them to enhance

their professional services in retaining existing clients as well as in securing new clients. In addition, this study could assist regulators in determining whether the disclosure in the annual report about the reasons for the statutory auditor switching is required and whether the principles for auditor rotation should be extended to smaller listed companies like AIM companies.

4.1.4. Main findings of this study

The main findings of this study are as follows.

Firstly, this study reveals that new CEO would like to disassociate themselves from previous relationship and prefer to deal with familiar auditors that they have past favourable experience in order to pursue their self-interest in delivering desirable performance and cultivating a favourable image, which is consistent with the notion of agency-related incentives within the agency theory. Alternatively, the new CEO would wish to seek fresh and valuable ideas from the new auditors in enhancing the quality of audit as well as in satisfying the shareholders' need for assurance, which is consistent with the notion of good steward within the stewardship theory.

Secondly, the new Nomad also prefers to have statutory auditor that they are familiar with in office in view of their external adviser role that depend on the statutory auditor for quality of financial reporting and disclosure, which is consistent with the notion of agency-related incentives within the agency theory and the notion of good steward within the stewardship theory.

Thirdly, smaller companies like AIM SMEs are more cost cautious and would be more inclined to switch statutory auditor if they are able to bargain for a lower statutory audit fee from a new statutory auditor other than their incumbent statutory auditor at the similar level of audit quality.

Fourthly, in addition to the cost saving strategy, an AIM SME that incurred a higher ratio of non-audit fee to total fees paid to the statutory auditor tends to switch statutory auditor in the following year attempting to alleviate the potential impairment of auditor independence arising from the joint provision of audit and non-audit services by the statutory auditor.

Fifthly, the audit committee of an AIM SME, when it exists, is likely to recommend the statutory auditor switching in the following year after the receipt of modified audit report from the incumbent statutory auditor suggesting that the voluntary formation of audit committee by the AIM SMEs could be potentially driven by the desire of management for the sake of appearance rather than financial reporting quality, and the audit committee could be rubber-stamping the decision of management to switch to more compliant auditor in avoiding modified audit report in future. Such audit committee would not be effective in deterring opinion shopping, if it exists.

Finally, an AIM microenterprise could be more prone to switching cost and therefore less likely to switch statutory auditor relative to its other SME counterparts.

4.1.5. Contributions of this study

This study contributes to the existing literature on the triggers of statutory auditor switching as follows.

Firstly, this study provides entirely new empirical evidence on the impact of the voluntary formation of audit committee and the role of Nomad of AIM SMEs relating to the statutory auditor switching decision, which facilitates preliminary understanding on those unique corporate governance features of AIM SMEs from external audit perspective as, to the best of my knowledge, there is no such prior study as at to date. The findings expose the potential ineffectiveness of the audit committee as well as the agency-related incentive practised by the Nomad of AIM SMEs when making decision on the statutory auditor switching. The findings of the study would facilitate better understanding to practitioners as to why an AIM SME switched its statutory auditor amid the potential direct and indirect switching costs.

Secondly, the sample set of AIM companies represents a crucial yet relatively under-researched area. AIM seems attractive to younger companies from the UK and overseas (Farag, et al., 2014), and is one of the five out of eleven second-tier stock markets in existence, which have been launched by the stock exchanges of the four largest European economies, namely Germany, France, Italy, and the UK (Vismara and Paleari, 2012). AIM is the world's leading

growth market and it has already lived through more than two complete economic cycles since its launched in 1995 by the LSE for emerging or smaller companies.

Thirdly, this study also provides new empirical evidence for the triggers of statutory auditor switching for SMEs, an important sector of economies around the world. It has been reported that there were around 1,250 small and mid-sized quoted companies in the UK, representing 93% of all quoted companies, employing approximately 3 million people, representing 11% of private sector employment in the UK, and contributed over £25 billion in annual taxes (Quoted Companies Alliance and UHY Hacker Young Associates, 2020), and there were 99% of UK businesses are SMEs and SMEs accounted for 61% of UK employment and 51% of business turnover as of 1st January 2022 (House of Commons Library, 2022). This study extends the UK evidence on the SMEs with dataset up to year 2015, where previously in Beattie and Fearnley's studies (1995; 1998a; 1998b) on USM dataset were up to year 1992 only. This study could assist the policy makers when deciding whether auditor rotation should be imposed on SMEs.

Finally, this study provides further evidence that SMEs are more cost-sensitive when engaging statutory audit services as compared to larger companies. Beattie and Fearnley (1995) revealed that larger companies were less concerned about the absolute statutory audit fee relative to the smaller companies when considered statutory auditor switching; their study was different from this study as they investigated the reasons for the consideration of auditor change and not the reasons for actual changes.

4.1.6. Structure of this study

The remainder of this chapter is organised as follows. The second section contains the literature review, which is made up of the background to this study, the key concepts and theoretical framework underpinning this study, the analysis of past studies in identifying the research gaps, and the formulation of hypotheses for this study. Research methodology and data are established in the third section. The fourth section critically assesses and discusses the empirical results. Finally, the fifth section concludes with summaries of key issues together with limitations of this study and recommendations for future research.

4.2. Literature review

This section provides background to this study and presents a review of the key concepts and theories together with the related empirical studies, which identify the research gaps, inform the research questions, and facilitate the design of testable hypotheses for this study.

4.2.1. Background to this study

External audit and corporate governance have attracted great attention and emphasis of corporate stakeholders and policy makers on the verge of accounting scandals and corporate failures around the world (e.g., Enron in the US; Parmalat in the Europe; Carillion in the UK), and the global financial crisis. More regulations and acts have been enacted particularly in the developed countries (e.g., SOX, 2002; European Union audit legislation, 2016) over time to mitigate the situations and to prevent further potential accounting scandals and corporate failures that would affect many stakeholders, such as shareholders, directors, employees and auditors, and the global economy. For instance, the collapse of Enron in the corporate world and the demise of Arthur Anderson from the accounting profession have directly triggered the legislation response and consequently the implementation of the SOX by the US SEC in the early 21st century to improve the corporate governance as well as the audit quality, and to restore investors' confidence and faith. On the other hand, the raising concern about the competition and choice in the audit market has resulted to the implementation of new European Union audit legislation (namely Directive 2014/56/EU and Regulation 537/2014/EU) in 2016 with specific requirements regarding statutory audit of public-interest entities (Department for Business, Energy & Industrial Strategy, 2017), including a framework for mandatory rotation and re-tendering of audit engagements, to reduce risks of excessive familiarity between statutory auditor and their clients, and to uphold their professional independence.

4.2.2. Relationship of statutory audit and statutory auditor switching

Statutory audit is a financial statement audit that is conducted in compliance with the law by an independent firm of auditors (i.e., statutory auditor), appointed by the shareholders of a company, on the financial statements prepared by the board, and expressed an opinion therefrom. A company may choose to change statutory auditor at the AGM or part way through the financial year.

Firstly, I focus and explore how the appointment and change of statutory auditor happens. In the UK, the Companies Act 2006 spells out the general provisions for the appointment of auditors of public company and their term of office under Sections 489-491. A public company is required to appoint a statutory auditor at the AGM. A statutory auditor once appointed will hold office till the conclusion of the forthcoming AGM of that company whereby the statutory auditor can express their interest to seek re-appointment or to retire without seeking reappointment. During that AGM, the company can re-appoint the retiring statutory auditor or appoint a new statutory auditor to replace the retiring statutory auditor. Under other circumstances, the change of statutory auditor can happen during the year arising from the removal or resignation of statutory auditor. The appointment or re-appointment of statutory auditor is subject to the approval of the shareholders at the AGM except that the directors may appoint the first statutory auditor or may appoint a statutory auditor to fill a casual vacancy during the year. An AIM company is governed by the abovementioned provisions.

Choosing and appointing a right statutory auditor is a crucial decision for any company simply because a high-quality audit could mitigate the principal-agent's conflict of interest arising from the separation of ownership and management in the companies. The audit committee, when exists, oversees the financial reporting process, and recommends the appointment of statutory auditor to ensure high quality of financial reporting and audit. The recommendation for the appointment of statutory auditor is subject to the approval of the shareholders at the AGM as ultimately the statutory auditor reports to the shareholders. Hence, auditor independence is the important foundation of the auditor-client relationship. The incident of statutory auditor switching is less likely when the audit committee members are more independent, have more financial expertise and more firm-specific knowledge (Robinson and Owens-Jackson, 2009). On the other hand, Beattie and Fearnley (1998a) found that the UK and Ireland companies without an audit committee reported higher incidence of statutory auditor switching.

In theory, the shareholders appoint both agents, the directors as well as the statutory auditor, whom should be independent from each other. However, in practice, the statutory auditor issues the audit engagement letter to the directors and both parties work very closely during the audit

processes. The statutory auditor could encounter role conflict attempting to exercise professionalism in discharging their duties to the shareholders and at the same time considering meeting the directors' demand. Inevitably, the statutory auditor could be removed and replaced resulting from the disagreement with the directors.

Secondly, I explore the evidence on auditor independence: auditor tenure and auditor rotation specifically. On the verge of accounting scandals and corporate failures around the world, and the global financial crisis, auditor independence has come under greater scrutiny over time. Auditor independence is the cornerstone of the auditing profession, which plays a vital role in enhancing stakeholders' confidence on the audit opinion expressed by the statutory auditor. The statutory auditor must be prepared to report any material findings arising from the audit assignments without the influence of their audit clients that would compromise auditor independence. DeAngelo (1981) defined audit quality as the joint probability that an auditor will detect material misstatements in the financial statements and report appropriately on the audit report. To do so the statutory auditor must be technically competent and independent in fact as well as in appearance.

Statutory auditor switching appears to be a rare phenomenon with only a small percentage of companies switching their statutory auditor annually (e.g., Oxera, 2006; Competition Commission, 2013b), which reflects that most companies maintain a long-term relationship with their statutory auditors. There are two schools of thoughts on such long-term relationship: one assumes the familiarity benefit while the other poses familiarity threat. The proponent argues that the auditor's good knowledge about the company's operations would enhance the quality of audit and reduce the audit costs while the opponent argues that the over-familiarity relationship would impair the auditor independence and reduce the quality of audit. In a survey conducted by KPMG (2016) with around 150 audit committee members, it was revealed that 66% of respondents were concerned about the perceived risk of reduced understanding of the business from the new statutory auditor while 87% of respondents were recognising the perceived benefit of fresh insights into the business from the new statutory auditor.

Long auditor tenure has been argued to be one of the key threats to auditor independence. The mandatory auditor rotation has been adopted to address such threat in some countries. In the UK, the mandatory auditor rotation and tendering regulations have been introduced over time. In 2012, the FRC amended The UK Corporate Governance Code to require, on a "comply or

explain" basis, that FTSE 350 companies should put the external audit contract out to tender at least every ten years (Section C3.7: The UK Corporate Governance Code 2012). Later in 2013, the Competition Commission decided that FTSE 350 companies must put their statutory audit engagement out to tender at least every ten years as one aspect of the remedy package in addressing the adverse effect on competition on UK audit market (Competition Commission, 2013a). Most recently, the European Union audit legislation in 2016 (namely Directive 2014/56/EU and Regulation 537/2014/EU) implemented a framework for mandatory rotation and re-tendering of audit engagements to require public-interest entities to put their audit out to tender at least every ten years and change their auditor at least every twenty years (Department for Business, Energy & Industrial Strategy, 2017). The above mandatory auditor rotation and tendering regulations are not applicable to AIM companies; hence, any statutory auditor switching of AIM companies are their voluntary decisions.

Thirdly, I look at the empirical evidence in relating to cost-minimisation strategy. In an audit setting, the statutory auditor switching could be seen as the product of a bargaining process for an acceptable fee that exists in the auditor-client alignment and re-alignment relationships. A company might be motivated to switch statutory auditor as part of its cost-minimisation strategy if the company is not satisfied with the fee structure of the incumbent auditor. The statutory auditor switching has been found to be negatively associated with the statutory audit fee, which reflecting the price-cutting phenomenon by the new statutory auditor in securing the initial audit engagement and potentially the existence of "low-balling" in the agency relationship (e.g., Pong and Whittington, 1994; Gregory and Collier, 1996). When considering switching statutory auditor, SMEs might be willing to adopt cost-minimisation strategy as compared to larger companies in term of cost sensitivity and saving (e.g., Beattie and Fearnley, 1995).

It is common for companies to engage their statutory auditors for the provision of non-audit services relating to tax advisory services, corporate finance consultation, and other assurance services. The joint provision of audit and non-audit services by the statutory auditor is expected to increase the economic bond between the auditor and client. Such economic bond may promote auditor-client dependency that may jeopardise auditor independence. The statutory auditor may be more accommodating or compliant than otherwise, which benefits the client and may result to lower likelihood of switching auditor (DeBerg, et al., 1991). Moreover, the

client may also benefit from knowledge spillover and economies of scale effect arising from the joint provision of services, which may reduce the likelihood of switching auditor.

4.2.3. Theoretical framework

The "triangle relationship" among the shareholders, directors, and statutory auditor in a company portrayed in the agency theory, stewardship theory, and signalling theory are the cornerstone in triggering the statutory auditor switching. These underpinning theories appear to overlap with one another in some contexts and are further illustrated as follows.

The principal-agent relationship exists between the shareholders, who are the principals, and the directors, who are the agents, within the separation of ownership and management of a company (Jensen and Meckling, 1976). In addition, the shareholders appoint another agent, i.e., the statutory auditor, in accordance with the provisions of the company law to perform audit on the financial statements prepared by the directors to ensure that their interests are well protected. Clearly, the directors are responsible for the integrity of corporate governance and audit quality amid the information asymmetries and self-interest tendencies under the monitoring mechanism of such principal-agent relationship.

The agency-related incentives within the agency theory could explain the motivation for the statutory auditor switching. When there is a change in the management, the new management may be motivated to switch to a new and more accommodating statutory auditor, whom they are familiar with and have past favourable experience vis-à-vis the incumbent auditor that has close relationship with the former management, in pursuing their self-interest to deliver desirable performance and to cultivate a favourable image (Williams, 1988). When a company received unfavourable audit opinion, the management image might be tarnished and the share price might be adversely affected; therefore, it could be in the best interest of both directors and shareholders to switch their statutory auditor to avoid modified audit report and the related costs in the future, as they believe that the opinion of the succeeding auditor would be more aligned with their opinion (e.g., Chow and Rice, 1982; Schwartz and Menon, 1985; Craswell, 1988; Lennox, 2000).

Stewardship theory is one of the theoretical foundations of corporate governance that portrays directors as the steward of a company, who are accountable to the shareholders and would always act in the best interest of the shareholders even in the absence of the monitoring mechanism (Donaldson and Davis, 1991). In other word, the shareholders of a company appoint the directors and entrust them with the stewardship responsibility to exercise transparent and accountable corporate governance mechanisms in maximising the shareholders' wealth.

A good steward rationale within the stewardship theory could explain the motivation for the statutory auditor switching. When there is a change in the management, the new management may be motivated to switch to a new and accommodating statutory auditor, who could provide fresh and valuable ideas, in enhancing the quality of audit as well as in satisfying the shareholders' need for assurance (Williams, 1988). On the other hand, an audit committee made up of more independent members with financial expertise and firm-specific knowledge would serve as an effective monitoring system that could prevent frequent statutory auditor switching (Robinson and Owens-Jackson, 2009) arising from opportunistic purposes, such as opinion shopping (e.g., Lennox, 2000).

Statutory auditor switching could be viewed as a double-edged sword simply because a switch of statutory auditor could send positive as well as negative signal depending on the perception of the stakeholders. If the stakeholders perceive positive connotations for the switch and are satisfied with the independence of the new statutory auditor, the confidence in the audited financial statements would be enhanced and could increase the flow of capital in the securities markets, and subsequently reduce the cost of capital (Malek and Saidin, 2014). Conversely, if the stakeholders perceive negative connotations for the switch and start to question the independence of the new statutory auditor, the confidence in the audited financial statement would be diminished and could inhibit the flow of capital in the securities markets, and subsequently increase the cost of capital (Knapp and Elikai, 1988).

4.2.4. Empirical studies, research gaps, and hypotheses development

The client-specific and auditor-specific characteristics have been identified from past studies to be the key triggers of statutory auditor switching while the nature of those triggers could be economic, behavioural, or a mixture of both. Cairney and Stewart (2019) concluded that client, auditor, and engagement characteristics were more important in the auditor change decision as compared to the industry characteristics simply because the decision to change auditor was a firm-level decision that was based on the auditor-client contract, when they examined client industry characteristics and auditor changes for 27,671 company-year observations of US non-financial companies from 2006 to 2014. On the other hand, Beattie and Fearnley (1998a) claimed that the economic factors dominated the behavioural factors in the auditor-client relationships. Recently, using a qualitative descriptive design and library research method, Suryanta and Kuntadi (2022) conducted literature review of 11 past studies on Indonesia companies and revealed that statutory auditor switching was triggered by audit delay, management changes and audit opinion.

The forthcoming sub-sections review the past empirical studies, which facilitate the identification of the research gaps and the formulation of hypotheses for this study.

4.2.4.1. Changes in key management

The appointment of statutory auditor is recommended by the board or by the audit committee where one exists, and is subject to the approval of shareholders in the general meeting, which reflects the management influence on the selection and switching decision of statutory auditor in a company. When there are changes in key management and directors, such as change in Chairman or CEO, the new management may also recommend for the change of statutory auditor.

The agency theory fits the relationship of the shareholders, who are the principals, and the directors, who are the agents, of a company with the existence of the separation of ownership and management (Jensen and Meckling, 1976). In view of the information asymmetries as well as the conflict of interests, the shareholders appoint another agent, i.e., the statutory auditor, to perform audit on the financial statements prepared by the directors to ensure their interests are well protected. When there is a change in the management, the new management may recommend for the change of statutory auditor simply because they prefer to deal with an auditor that they are familiar with and have past favourable experience vis-à-vis the incumbent auditor that has a close relationship with the former management (e.g., Williams, 1988; Beattie

and Fearnley, 1995; Woo and Koh, 2001; Hudaib and Cooke, 2005). Consistent with the agency theory, new management may be motivated to switch statutory auditor in order to pursue their self-interests as new management is normally under pressure to perform; hence, by having a familiar and more accommodating statutory auditor might be one of the strategies for better performance (e.g., Schwartz and Menon, 1985; Williams, 1988).

Stewardship theory is seen to be an alternative to agency theory viewing from the perspective of managerial motivation (Donaldson and Davis, 1991). The shareholders of a company appoint the board and entrust them with the stewardship responsibility to exercise transparent and accountable corporate governance mechanisms in maximising the shareholders' wealth. When there is a change in the management, the new management may recommend for the change of statutory auditor simply because they are not satisfied with the quality rendered by the incumbent auditor, or because they require fresh ideas from new auditor in meeting shareholders' expectations and boosting their confidence (Williams, 1988). Consistent with the stewardship theory, new management is motivated to switch statutory auditor in order to satisfy the shareholders as well as their own interests by engaging a high-quality auditor (Williams, 1998).

Past studies revealed mixed results when included changes in key management as a trigger of statutory auditor switching. Burton and Roberts (1967) examined 83 statutory auditor switching made by Fortune 500 firms between 1952 and 1965 using questionnaire, which revealed changes in management as the most frequently cited principal reason for an auditor change. This finding was also supported by Beattie and Fearnley (1995) when they analysed the closed-form questionnaire responses from 210 companies drawn from the population of domestic officially listed and USM companies in the UK and Ireland as at 30th April 1992. Similarly, Woo and Koh (2001) and Hudaib and Cooke (2005) found evidence that changes in management led to statutory auditor switching. Hudaib and Cooke (2005) examined the interactive effects of managing director changes and financial distress on audit qualification and statutory auditor switching for a sample of 297 UK listed companies between 1987 and 2001. The results of their interactive variables suggested that change in managing director was more important than financial distress in explaining statutory auditor switching; on the other hand, their results suggested that financial distress rather than change in managing director was the driver for audit qualification.

In contrast, Chow and Rice (1982), Schwartz and Menon (1985), and Williams (1988) found no evidence that changes in key management led to statutory auditor switching. Using a matched sample of 186 auditor-change laterally between the then big-8 accounting firms as well as non-auditor-change companies listed on the New York Stock Exchange and the then American Stock Exchange over a 5-year period from 1977 to 1982, Williams (1988) found the auditor's industry specialisation, the longevity of auditor on the engagement, and client received negative media publicity to be the key factors associated with auditor changes while the change of top management and the receipt of qualified audit opinion did not influence auditor changes.

In theory, the shareholders are empowered to appoint the statutory auditor, but in practice, the statutory auditor issues the audit engagement letter to the directors. Beattie and Fearnley (1998b)'s interview recognised the de facto evidence that the directors have the power in the auditor appointment process. Therefore, this study hypothesises as follows:

H1: There is a positive relationship between the CEO turnover and statutory auditor switching, ceteris paribus.

4.2.4.2. Nominated adviser ("Nomad") turnover

In addition to the CEO turnover, this study also looks into the role of Nomad, a unique feature of AIM companies, in influencing the statutory auditor switching. An AIM company must always retain a Nomad and broker since its admission and throughout its lifetime on the AIM market (LSE: AIM Rules for Companies, 2021). A Nomad is a full-time corporate finance adviser approved and licensed by the LSE, who is responsible for advising and guiding an AIM company on its responsibility in relation to admission to the AIM market as well as its continuing obligations once on the market (LSE: AIM Rules for Nominated Advisers, 2019). The Nomad plays multiple roles as gatekeeper, adviser, and regulator of AIM companies; and an AIM company should discuss with its Nomad and seek guidance from its Nomad on which corporate governance guidelines it will seek to follow and implement.

Playing a monitoring role under the external governance mechanism of AIM companies, the Nomad may depend on the statutory auditor for quality of financial reporting and disclosure.

Similar to the motivation of new CEO in switching statutory auditor, the new Nomad may prefer to deal with an auditor that they are familiar with and have past favourable experience vis-à-vis the incumbent auditor that has a close relationship with the former Nomad, or the new Nomad simply requires fresh ideas from new auditor. Therefore, this study attempts to test, for the first time, the following hypothesis:

H2: There is a positive relationship between the Nomad turnover and statutory auditor switching, ceteris paribus.

4.2.4.3. Statutory audit fee

Statutory audit fee is part of the agency costs incurred for remunerating the statutory auditor for services rendered on the audit of the financial statements in accordance with the requirements of the company law, and a monitoring device that the shareholders could rely on. The appointment of statutory auditor to perform audit on the financial statements prepared by the directors could mitigate the potential loss arising from the information asymmetries and conflict of interests between the directors and shareholders as portrayed in the agency theory.

A company might switch its statutory auditor simply because the statutory audit fee is too expensive. Some past studies suggested that higher statutory audit fee was associated with statutory auditor switching (e.g., Beattie and Fearnley, 1995; Woo and Koh, 2001). Beattie and Fearnley (1995, 1998a, 1998b) explored the economic and behavioural factors affecting auditor changes and tendering. Based on closed-form questionnaire responses from 210 companies drawn from the population of domestic officially listed and USM companies in the UK and Ireland as of 30th April 1992, Beattie and Fearnley (1995) investigated the reasons for the consideration of auditor change instead of the reasons for the actual changes. Two thirds of those companies had considered switching their statutory auditors were due mainly to the level of statutory audit fee, dissatisfaction with audit quality, and changes in top management. However, 73% of them did not actually switch due mainly to the fee deduction by the incumbent auditors, and avoidance of disruption and loss of management time. Apparently, the level of statutory audit fee was the key trigger for both statutory auditor changers and non-changers while larger companies were less concerned about the absolute statutory audit fee relative to the smaller companies. Another study conducted by Beattie and Fearnley (1998a)

based on 328 companies drawn from the population of domestic officially listed and USM companies in the UK and Ireland as of 30th April 1992 using closed-form questionnaire instrument also found that the level of statutory audit fee was the most frequently cited reason for changing auditor, but it was significantly less important to actual changers compared to potential changers and it was not a top priority for companies tendered for new statutory auditor during the course of auditor change. Only two companies cited the level of statutory audit fee as one of the contributing factors when Beattie and Fearnley (1998b) conducted open-ended questions of semi-structured interview on twelve UK fully listed and USM companies which had conducted a competitive tender, changed auditors, or both between 1989 and 1992. On the other hand, some past studies did not detect any evidence that the statutory audit fee triggered the statutory auditor switching (e.g., Hudaib and Cooke, 2005; Cairney and Stewart, 2019).

One of the incentives for companies to change their statutory auditors is to obtain a reduced statutory audit fee (Hay et al., 2006). A company might choose to switch its statutory auditor if the new statutory auditor would provide the similar level of audit quality at a lower cost as compared to its incumbent statutory auditor. Beattie and Fearnley (1995) found that statutory audit fee was the principal reason over the sample when considering auditor change but large companies were less concerned about the absolute statutory audit fee as compared to small companies. Smaller companies could be keener to negotiate the statutory audit fee with audit firms and they might be more likely to switch statutory auditor if they were to offer a lower fee at the same level of audit quality from audit firm other than their incumbent statutory auditor. Such price-sensitivity might be more prevalent for smaller companies like AIM SMEs with fee-saving motivation, simply because the statutory audit fee contributed to a large proportion of their operating expenses. Therefore, this study hypothesises as follows:

H3: The higher the statutory audit fee, the more likely the occurrence of statutory auditor switching, ceteris paribus.

4.2.4.4. Non-audit fee

In addition to the statutory audit services, the statutory auditors also provide the non-audit services, such as tax advisory services, corporate finance consultation, and other assurance services, to their clients. When considering auditor choice process, Beattie and Fearnley (1995)

found that the ability to provide non-audit services was one of the key desired audit firm characteristics based on the questionnaire responses from 210 UK listed companies. The provision of non-audit services complements the audit and could lead to economies of scope. There are also some concerns around this from regulators, as they believe that the joint provision of audit and non-audit services would promote auditor-client dependency and would impair the auditor independence. Nevertheless, past studies investigating the statutory audit fee model reported positive association between the statutory audit fee and non-audit fee due to knowledge spillover and economies of scale effect were not passed on to the client in reducing the statutory audit fee (e.g., Hay et al., 2006; Antle, et al., 2006; Chan et al., 2012).

DeBerg et al. (1991) pointed out that audit firms have increasingly turned to non-audit services as a source of revenue amid the increasingly competitive audit market. DeBerg et al. (1991) argued that the joint provision of audit and non-audit services will increase the economic bond between the auditor and the client company because the auditor might become more accommodating or compliant than otherwise in order to retain the client, which could reduce the possibility of statutory auditor switching. Using the matched pairs design, DeBerg et al. (1991) explored companies registered on the NYSE or the AMEX between 1978 and 1982 to determine the association between the decision to change auditor and the relative level of nonaudit services purchased from the auditor. They used non-audit fee measured as the percentage of total statutory and non-audit fees as the dependent variable, and found no significant differences between the level of total, recurring, or non-recurring non-audit services consumed by the 63 companies with statutory auditor switching from those 63 companies without statutory auditor switching. Their findings did not support their argument that companies with high consumption of non-audit services were less likely to switch statutory auditors. Similarly, when using non-audit fee transformed to the natural logarithm as the dependent variable, Barkess and Simnett (1994) revealed no significant relationship between the provision of nonaudit services and statutory auditor switching of 52 switchers and 142 non-switchers drawn from the Top 500 publicly listed companies in Australia for years 1986 through to 1990.

Incorporating the non-audit services as one of the independent variables into the statutory auditor switching model, Abidin, Ishaya and M-Nor (2016) examined 712 non-financial companies listed on the Bursa Malaysia from the period of 2007 to 2011. They reported significant negative association between the statutory auditor switching and non-audit services

when the non-audit fee was higher than the sample mean while there was negative but insignificant association when the non-audit fee was measured as a ratio to the total audit fee.

The joint provision of audit and non-audit services by the statutory auditor is expected to increase the economic bond between the auditor and client, which may impair the auditor independence, especially when the level of non-audit fee is relatively higher than the statutory audit fee. The pressure on companies to address such presumed impairment of auditor independence might trigger the switch of statutory auditor. In addition, follow on the price-sensitivity on statutory audit that might be more prevalent for smaller companies like AIM SMEs, companies seek to reduce statutory audit fee and as such would have the tendency to reduce the non-audit fee as well. Therefore, this study hypothesises as follows:

H4: There is a positive relationship between the non-audit fee and statutory auditor switching, ceteris paribus.

4.2.4.5. Audit committee

An audit committee is a sub-committee within the board that made up majority of non-executive directors. The audit committee serves as a communication channel between the board and the statutory auditor to ensure high quality of financial reporting and audit. DeFond and Jiambalvo (1991) and Dechow et al. (1996) found that firms that manipulated earnings were less likely to have audit committees, which are consistent with the notions that audit committee could constrain opportunistic reporting and is associated with more credible reporting. In contrast, Beasley (1996) found no association between the existence of audit committee and financial statement fraud while Menon and Williams (1994) revealed that companies might form audit committees for their image value and not actually relied on the audit committees for monitoring and enhancement of financial reporting quality.

One of the responsibilities of the audit committee is to advise the board relating to the hiring and firing of statutory auditor (The UK Corporate Governance Code, 2018). AIM companies can choose to form an audit committee or otherwise under the simplified regulatory environment specifically designed for the AIM market. Effective corporate governance structure is expected to discourage statutory auditor switching because of the familiarity benefit

enjoyed with the incumbent auditor. The switching cost will be considerably high as it can take years for the new statutory auditor to gain a full understanding of the company and to deliver a high level of audit quality (Oxera, 2006).

Lee et al. (2004) examined the relationship between audit committee and board independence, and auditor resignations of 190 auditor-initiated switches and 190 matched client-initiated switches of US data during the time period 1996 to 2000. They found that independent audit committees and boards of directors significantly reduced the likelihood of auditor resignation, which suggested their joint effort with the statutory auditor in achieving the financial reporting quality as well as protecting their stewardship reputation. Robinson and Owens-Jackson (2009) also reported that companies with audit committee members that were more independent, had more financial expertise, and more firm-specific knowledge, were less likely to switch statutory auditors.

Using China data, Yanan, et al. (2013) investigated the association between firms' internal corporate governance mechanisms and their auditor switching decisions. They revealed that the presence of audit committee has no impact on the statutory auditor switching, when examined auditor switching in 2010 and corporate governance in 2009 using a total of 109 and 110 A-share listed companies in China which had changed their auditors, and which had not respectively. However, they revealed that proportion of the largest shareholder rate, independent director rate, and board meeting frequency were proportional to auditor switching.

Beattie and Fearnley (1998a) reported higher incidence of statutory auditor switching among 109 domestic officially listed and USM companies in the UK and Ireland as at 30th April 1992 using closed-form questionnaire instrument, when those companies did not have an audit committee. Therefore, this study controls for the negative effect of existence of audit committee on the statutory auditor switching.

4.2.4.6. Modified audit report

In accordance with the requirements of Section 495 of the UK Companies Act 2006, upon completion of the statutory audit process, the statutory auditor is required to express their opinion to the shareholders on the financial statements prepared by the directors through the

issuance of an auditor's report to be included in the annual report. The auditor's report must be either unqualified or qualified, and must include a reference to any matters to which the auditor wishes to draw attention by way of emphasis without qualifying the report (Section 495(4), UK Companies Act 2006). There are five broad types of audit opinion: unmodified opinion (FRC: ISA (UK) 700, 2020)²¹, unqualified opinion with emphasis of matter paragraph (FRC: ISA (UK) 706, 2018)²², qualified opinion (FRC: ISA (UK) 705, 2018), adverse opinion (FRC: ISA 705, (UK) 2018), and disclaimer of opinion (FRC: ISA (UK) 705, 2018)²³. Consistent with prior literature, this study uses the term modified audit report to represent non-standard audit opinion that includes unqualified audit opinion with emphasis of matter paragraph, qualified opinion, adverse opinion, and disclaimer of opinion (e.g., Habib, 2013; Lennox, 2000; Lennox, 2003; Chan, Luo and Mo, 2016).

The receipt of modified audit report might reflect the existence of auditor-client misalignment arising from disagreement and conflict of opinion. Such audit report could tarnish the directors' image and reputation as a good steward as well as the shareholders' wealth because of the market reaction. The directors would be concerned about the potential negative impact that modified audit report can have on the company's lending arrangement, stock prices, and their own compensation package. Consistent with the agency theory, the shareholders and directors will act in their self-interests and hence, it is likely that the company would switch their statutory auditor to avoid modified audit report and the related costs in the future, as they believe that the opinion of the succeeding auditor would be more aligned with their opinion (e.g., Chow and Rice, 1982; Schwartz and Menon, 1985; Craswell, 1988; Lennox, 2000). Alternatively, Carcello and Neal (2003) viewed the switching as a punishment for issuing a going-concern report or due to irreconcilable relationship between the client and auditor.

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²¹ Unmodified opinion is the opinion expressed by the auditor when the auditor concludes that the financial statements are prepared, in all material respects, in accordance with the applicable financial reporting framework (FRC: ISA (UK) 700, 2020).

²² In line with the requirement of Section 495(4) of the UK Companies Act 2006, the ISA (UK) 706 (2018) requires auditor to include an emphasis of matter paragraph in the auditor's report if the auditor considers it necessary to draw users' attention to a matter presented or disclosed in the financial statements that would not be required to modify the opinion in accordance with ISA (UK) 705 (2018).

²³ The ISA (UK) 705 (2018) establishes three types of modified opinions, namely, a qualified opinion, an adverse opinion, and a disclaimer of opinion. The decision regarding which type of modified opinion is appropriate depends upon the materiality and pervasiveness of the effects of the matter on the financial statements.

Past studies revealed mixed results when modified audit report was considered as a trigger of statutory auditor switching. Chow and Rice (1982) applied chi-square test for independence of classification on 9,460 SEC-registrants between the 1973 and 1974 fiscal year-end and found that the test supported the notion that switching auditors is not independent of receiving a qualified audit opinion. They then randomly selected 166 companies to perform conditional logit analysis on the influence of qualified audit opinions and several other variables on statutory auditor switching. Their logit regression results revealed that qualified audit opinion was the only significant variable explaining the statutory auditor switching. They found that firms switched statutory auditors more frequently after receiving qualified audit opinions but there was limited evidence to suggest that those firms received better audit opinions from the succeeding auditors upon switching. Similarly, Craswell (1988) found companies listed on the Sydney Stock Exchange during the period 1950 to 1979 switched statutory auditors more frequently following audit qualification. As opposed to Chow and Rice (1982), Craswell (1988) revealed evidence that those switched firms received improved opinions from the succeeding auditors upon switching while Chow and Rice (1982) showed no such improvement. A recent study conducted by Cairney and Stewart (2019) also found that US non-financial companies that received going concern audit opinion were more likely to change auditors.

On the contrary, Woo and Koh (2001) found that companies received qualified audit opinion were less likely to change auditors, when examining a matched sample of 54 auditor-change as well as non-auditor-change companies listed on the Stock Exchange of Singapore over a 10-year period from 1986 to 1995. While Schwartz and Menon (1985) and Abidin et al. (2016) found no relationship between qualified audit opinion and statutory auditor switching for companies listed on the US and Malaysia stock exchange respectively.

Focusing on the UK data, Lennox (2000) and Hudaib and Cooke (2005) reported that qualified audit opinion was a significant factor in the statutory auditor switching. Lennox (2000) found that auditor changes occurred more often after companies received modified opinion when they examined 5,441 company-year observations of 949 UK listed companies between 1988 and 1994. Lennox (2000) also found that switching auditor increased the probability of a change in audit opinion, which suggested that companies do successfully engage in opinion shopping. Therefore, this study controls for the positive effect of modified audit report on the statutory auditor switching.

4.2.4.7. Audit committee and modified audit report

The existence of audit committee could signal proper implementation of corporate governance mechanism within a company while a receipt of modified audit report could signal poor stewardship of board on the company's affairs and performance. As demonstrated in past studies, audit committee could constrain opportunistic reporting and is associated with more credible reporting (e.g., DeFond and Jiambalvo, 1991; Dechow et al., 1996) but also management dislikes receiving modified audit report and would be more likely to switch statutory auditor to avoid such report in future (e.g., Chow and Rice, 1982; Craswell, 1998; Cairney and Stewart, 2019).

One of the important roles of audit committee is to protect statutory auditor from dismissal following the issuance of an unfavourable report, and to safeguard the independence of the statutory auditor. Carcello and Neal (2003) investigated the impact of interaction of audit committee characteristics and going concern opinion on the likelihood of auditor dismissal of 187 non-financial companies publicly traded in the US in each dismissal and non-dismissal sample between 1988 and 1999. They found that audit committees with greater independence, greater governance expertise, and lower stockholdings were more likely to block a managerial attempt to dismiss an auditor who issued a going-concern opinion, but the financial expertise of audit committee members did not influence the dismissal decision.

Since opinion shopping impairs the integrity of the financial reporting process, it is expected that an effective audit committee should deter opinion shopping (Lennox, 2003) and prevent statutory auditor switching (Carcello and Neal, 2003). Conversely, an ineffective audit committee might be more inclined to switch statutory auditor following the receipt of modified audit report with the intention to receive more favourable audit opinion from the new and more compliant statutory auditor. This alternative explanation is consistent with Lennox (2003)'s suggestion that an inactive audit committee did not participate in the auditor dismissal decision and their presence was limited to rubber-stamping management decisions; and also in line with Menon and Williams (1994)'s suggestion that companies might form audit committees for their image value and not actually relied on the audit committees for monitoring and enhancement of financial reporting quality.

Formation of audit committee is a voluntary process for AIM companies under its lightly regulated environment; therefore, this study focuses on the existence of audit committee instead of the characteristic of audit committee, as not all AIM companies under review have formed audit committee. Obviously, management dislikes modified audit report and may be more inclined to switch their statutory auditor upon the receipt of modified audit report. The AIM companies that formed audit committee voluntarily could be potentially driven by the desire of management for the sake of appearance rather than financial reporting quality, and this study attempts to capture the incentive of audit committee in switching statutory auditor after receiving modified audit report, and therefore hypothesises as follows:

H5: There is a positive relationship between the interaction of existence of audit committee and modified audit report, and statutory auditor switching, ceteris paribus.

4.2.4.8. Client size

As a company size increases, it is likely that the agency conflict also increases resulting in potential higher principal-agent misalignment. Therefore, it is expected that larger company may normally engage a higher quality auditor to mitigate the conflict and misalignment between the directors and shareholders. As such, the larger company is less likely to switch statutory auditor especially in a market with few competing large audit firms (Bagherpour, Monroe and Shailer, 2014).

Beattie and Fearnley (1998a) revealed that the incident of auditor change was significantly higher among smaller companies. Similarly, Hudaib and Cooke (2005) suggested that the propensity to switch statutory auditor was greater for smaller companies and was more likely where companies engaged smaller audit firms. However, Schwartz and Menon (1985) did not find any relationship between the size of failing firms and statutory auditor switching.

Larger companies attract higher analyst scrutiny and press attention in their affairs, which might prevent them from switching statutory auditors as often as smaller companies. Therefore, this study controls for the negative effect of client size on the statutory auditor switching.

4.2.4.9. Financial condition

Companies that are less profitable or incurred losses or are highly geared are deemed to encounter higher business and audit risks. Such financial distressed company might switch statutory auditor attempting for a more favourable audit opinion while the statutory auditor might resign if the perceived audit risk is too high. Schwartz and Menon (1985) examined 132 failing firms and a matched-pair sample of nonfailing firms in the US, and revealed that failing firms have a greater tendency to switch auditors as compared to the healthier firms.

More recent studies found that companies with higher leverage (e.g., Woo and Koh, 2001) or incurred losses (e.g., Brocard, Franke and Voeller, 2018; Cairney and Stewart, 2019) were more likely to switch statutory auditors. In contrast, Bagherpour et al. (2014) failed to establish any relationship between the financial condition and statutory auditor switching.

The financial performance and position of companies have important implications in retaining or switching their statutory auditors, this study controls for the financial condition in the statutory auditor switching model with potential positive or negative effect depending on the variable representation for the financial condition.

4.2.4.10. Board independence

The appointment of non-executive directors is one of the corporate governance mechanisms intended to serve as a monitoring device for shareholders to rely upon. The non-executive directors are expected to place a greater emphasis on the auditor independence in achieving higher level of audit quality. In view of the familiarity benefit provided by the incumbent auditor (Oxera, 2006), it is expected that the non-executive directors would discourage statutory auditor switching when discharging their agency responsibility to the shareholders in protecting their self-interest. Conversely, the non-executive directors would recommend statutory auditor switching for a higher quality auditor or to avoid auditor's familiarity threat (Abidin et al., 2016).

Lee et al. (2004) and Yanan et al. (2013) found that independent boards of directors significantly reduced the likelihood of statutory auditor switching while Abidin et al. (2016)

found that the higher the board independence rate, the more likely a company would switch statutory auditors. Consistent with the concept that an audit committee that made up of majority non-executive directors would discourage statutory auditor switching, this study controls for the negative effect of board independence rate on the statutory auditor switching.

4.2.4.11. Research gaps

A variety of reasons for statutory auditor switching have been revealed in the past studies but they were inconsistent and inconclusive as summarised in Appendix E, which were mainly focused on larger listed companies. Some studies revealed that new management switched their statutory auditors because they would like to disassociate themselves from previous relationship and prefer to deal with familiar auditors, or they wish to seek fresh ideas from new auditors, while some studies revealed no relationship between new management and statutory auditor switching. Similarly, some studies using questionnaires revealed that the level of statutory audit fee was the most frequently cited reason for changing auditor, but significantly less important for larger companies, while some studies revealed no significant relationship. On the other hand, there was limited or no supporting evidence relating to non-audit fee as there was only a handful of studies that incorporated non-audit fee into their statutory auditor switching model.

Considering these deficiencies, the hypotheses of this study are developed to explore the triggers of statutory auditor switching based on agency theory, stewardship theory, signalling theory, and cost-minimisation strategy, where applicable. The inclusions of CEO turnover and statutory audit fee as the variables of interest for this study are meant to provide further evidence on past findings, particularly in the context of SMEs in the UK. This study also introduces new variables, namely Nomad turnover, and role of audit committee²⁴ in addressing modified audit report, which to the best of my knowledge have yet to be tested in the statutory auditor switching model in empirical studies. The appointment of Nomad is a unique external governance mechanism for the AIM companies while the formation of audit committee is on voluntary basis for the AIM companies. On the other hand, there is very limited evidence on the effect of non-audit fee in triggering statutory auditor switching viewing from the auditor independence perspective.

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4.3. Research methodology and data

This section begins with the illustrations of research philosophy followed by the sample selection and data specific to this study. The model specifications are designed to best suit the research questions together with the variable measurements of this study and are discussed in the subsequent two sub-sections.

4.3.1. Research philosophy

Consistent with the research philosophy illustrated under section 3.3.1, this study also focuses on the reality from a positivist standpoint under objectivism. This study collects quantitative data from the annual reports of AIM SMEs, and uses existing theories and prior empirical studies to develop hypotheses, which can be tested using statistical models to examine the association between the statutory auditor switching and the corporate governance mechanisms, and between the statutory auditor switching and the cost-minimisation strategy.

4.3.2. Sample selection and data

As illustrated under the foregoing section 3.3.2, the adjusted sample for data collection consists of 338 non-financial AIM SMEs with corporate age of at least six years as of 31st December 2015 on the AIM market. For this study, at the end of the data collection process, a further 41 companies are excluded due to missing core data together with another 61 companies with unavailability of annual reports for some of the financial years. Eventually, the final sample for this study consists of an unbalanced panel data of 1,325 observations for 236 SME non-financial AIM companies (i.e., known as AIM SMEs in this study) with corporate age of at least six years as of 31st December 2015, which contain complete data for four or more consecutive financial years ranging from 2010-2015. The reconciliation of the sample selection is presented in Table 4.1.

This study focuses on 1,325 firm-year observations for the financial periods from 2010 to 2015. All the required data for this study are hand-collected from the respective company's annual reports downloaded from their company website due to the restricted availability of data for

AIM companies on the databases. The use of secondary data in this study is consistent with the approach of majority of past studies (e.g., Williams, 1988; DeBerg et al., 1991; Hudaib and Cooke, 2005; Yanan et al., 2013; Cairney and Stewart, 2019). Only a few past studies used survey questionnaires and interviews in collecting their primary data. Burton and Roberts (1967) sent questionnaires to the management of companies with statutory auditor switching and the large accounting firms involved in the switching to enquire about the principal reasons for the change. Using closed-form questionnaires, Beattie and Fearnley (1995 and 1998a) investigated the reasons for the consideration of auditor change instead of the reasons for the actual change while Beattie and Fearnley (1998b) conducted open-ended questions of semi-structured interview to enquire about the principal reasons for the change in companies which had conducted a competitive tendering process.

Table 4.1: Reconciliation of sample selection for statutory auditor switching study

Adjusted sample for data collection: SME non-financial AIM companies with corporate age of at least six years as of 31 st December 2015 Less: Further exclusion of SMEs from the adjusted samples Due to missing core data for the study Due to unavailability of annual reports					
Final sample for this study: SME non-financial AIM companies wi six years as of 31st December data for four or more consecut	2015, which o	contain co	omplete	236	
Made up of complete data for the finan	cial years 201	10-2015:			
6 consecutive years	185	SMEs	1.110	observations	
5 consecutive years		SMEs		observations	
4 consecutive years		SMEs		observations	
Final sample for this study	236	SMEs	1,325	observations	
Represented by:					
Financial year 2010			195	observations	
Financial year 2011				observations	
Financial year 2012				observations	
Financial year 2013				observations	
Financial year 2014			233	observations	
Financial year 2015			217	observations	
As above			1,325	observations	

4.3.3. Model specifications

This study examines the hypotheses using logistic regression, which is commonly adopted by past studies (e.g., Williams, 1988; Woo and Koh, 2001; Lee et al., 2004; Hudaib and Cooke, 2005; Oxera, 2006; Cairney and Stewart, 2019). The logistic regression is a regression model tailored for categorical dependent variable while the independent variables that can be either quantitative or categorical. The OLS is not suitable as the dependent variable of this study is a binary variable indicating whether the AIM SME switched its statutory auditor in a given year or not. The logistic regression model estimates its parameters using the maximum likelihood

method whereby the coefficients that make the observations results most "likely" are selected on the basis of an iterative algorithm (Hudaib and Cooke, 2005). The maximum likelihood estimators are consistent, asymptotically efficient, and asymptotically normal (Allison, 2012).

Unlike most past studies that adopted pooled logistic regression, this study adopts the fixed effects with conditional logistic regression (thereafter known as fixed effects logit) to estimate the unbalanced panel data. Some past studies conducted the panel data logistic estimator allowing all samples at all time periods to be treated as stochastically independent observations (e.g., Lennox, 2000; Hudaib and Cooke, 2005; Oxera, 2006) while some past studies matched switching sample with control sample of non-switching and pooled them into a single sample, and conducted a logistic regression (e.g., Williams, 1998; Woo and Koh, 2001). On the other hand, Cassell, Giroux, Myers and Omer (2012) estimated the conditional logistic regression model of the likelihood of a client switching from a big N audit firm to a non-big N audit firm and a matched sample of big N clients that did not switch audit firms.

The fixed effects logit adopted for this study is used to analyse the longitudinal data with repeated measures on both dependent and independent variables. The fixed effects estimator uses only within-individual variation to estimate the regression coefficients and can control for measured and unmeasured stable characteristics by using the subjects as their own controls, which is less vulnerable to omitted variable bias (Allison, 2012). One of the shortcomings of using the fixed effects logit is that subjects that do not have a varying outcome during the sample period are dropped out (Allison, 2012). There is no intercept in the fixed effects logit (Allison, 2012). The year fixed effects dummies are also included in the model to control for unobserved heterogeneity (e.g., Brocard et al., 2018; Cairney and Stewart, 2019).

The empirical model for this study is described as follows:

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\begin{split} SAS_{i,t} &= \beta_1 NewCEO_{i,t-1} + \beta_2 NewNomad_{i,t-1} + \beta_3 LnSAF_{i,t-1} + \beta_4 NAFtotalfees_{i,t-1} \\ &+ \beta_5 AcMar_{i,t-1} + \beta_6 LnTA_{i,t-1} + \beta_7 Micro_{i,t-1} + \beta_8 LevRatio_{i,t-1} \\ &+ \beta_9 LAT_{i,t-1} + \beta_{10} ROApat_{i,t-1} + \beta_{11} BIndpd_{i,t-1} + \beta_{12} AC_{i,t-1} \\ &+ Year\ dummies + + \varepsilon_{i,t} \end{split}
```

where SAS is statutory auditor switching or not, and the set of variables of interest are represented by NewCEO, NewNomad, LnSAF, NAFtotalfees, and AcMar while the set of control variables are represented by LNTA, Micro, LevRatio, LAT, ROApat, BIndpd, and AC, and $\varepsilon_{i,t}$ is the unobserved error component that is assumed to be normally distributed with a mean of zero and constant variance.

The variables of interest are the internal governance mechanism of AIM companies identified as new CEO ("NewCEO"), and the interaction of existence of audit committee and modified audit report ("AcMar") while the external governance mechanism of AIM companies is identified as new Nomad ("NewNomad"). In addition, statutory audit fee ("LnSAF") and nonaudit fee ("NAFtotalfees") are included as the variables of interest to examine the costminimisation strategy and auditor independence. On the other hand, the control variables are represented by firm specific characteristics, namely firm size ("LnTA" and "Micro") and financial condition ("LevRatio", "LAT", and "ROApat"), as well as board independence ("BIndpd" and "AC") as the internal governance mechanism. All the independent variables are lagged by one period (e.g., Oxera, 2006; Mande and Son, 2013; Brocard et al., 2018; Cairney and Stewart, 2019). Specifically, the statutory auditor is subject to re-appointment every year in the AGM. During the re-appointment process, the existing firm and auditor characteristics would be considered as well as some negotiation on price and other conditions might take place. Therefore, decision to retain or to switch the statutory auditor happens after the financial year. Consistent with Oxera (2006) and Cairney and Stewart (2019), all the independent variables in this study are lagged by one period, meaning for example, the statutory auditor switching decision made in 2011 was explained by the independent variables in 2010. Mande and Son (2013) incorporated one period lagged on all independent variables to control for any potential endogeneity with the assumption that the economic determinants were in place before the auditor change was made. Similarly, Brocard et al. (2018) used lagged independent variables in their auditor change model to avoid potential endogeneity. Full details of the measurements of the dependent and independent variables for this study are described in the forthcoming subsections.

4.3.4. Variable measurements

Williams (1988) discussed three concepts, namely changes in client contracting environment, auditor effectiveness, and client reputation, that triggered statutory auditor switching. On the other hand, Cairney and Stewart (2019) concluded that client, auditor, and engagement characteristics were more important in the auditor change decision as compared to the industry characteristics because the decision to change auditor was a firm-level decision that was based on the auditor-client contract. Hence, it is predicted that the statutory auditor switching is influenced by three key characteristics, namely corporate governance, client-specific, and auditor-specific characteristics.

There is no disclosure requirement for an AIM SME to report the actual date and reasons for the change of statutory auditor in the annual report. This study identifies the statutory auditor switching as dependent variable by referring to the auditors' reports for two consecutive financial years of each AIM SME. For example, when the audit firm in the auditors' report of 2010 annual report is different from the audit firm in the auditors' report of 2011 annual report, a statutory auditor switching happened in the financial year 2011. As such, when there are different audit firms in office for the two consecutive financial years, it is classified that there is a statutory auditor switching happened and is coded 1, otherwise is coded 0. As all the independent variables of this study are lagged by one period, the statutory auditor switching covers the financial years 2011-2015, where applicable, of the unbalanced panel data that contains data for four or more consecutive financial years covering 2010-2015.

There are three directions of statutory auditor switching, namely upward switching from non-big 4 audit firm to big 4 audit firm, or downward switching from big 4 audit firm to non-big 4 audit firm, or lateral switching from one non-big 4 audit firm to another non-big 4 audit firm or from one big-4 audit firm to another big 4 audit firm. This study examines the statutory auditor switching in general without attempting to distinguish the switching direction in view of the infrequent occurrence of switching among the sampled AIM SMEs, which once classified into three directions of statutory auditor switching would make up too small sample that would render futile regression results. In addition, this study does not distinguish the termination of auditor-client relationship into retirement, resignation, or removal due to no such disclosure requirements are present on the annual reports of AIM SMEs.

I consider several independent variables in my model. Table 4.2 exhibits the nature, definitions, measurements, and labels of the independent variables of interest to this study as well as the control variables together with their expected relationships with the statutory auditor switching.

Overall, the variables of interest of this study are related to the internal and external governance mechanisms of the AIM SMEs as well as the cost-minimisation strategy as hypothesised under section 4.2.4. The CEO turnover and existence of audit committee are the proxies for internal governance mechanisms while the new Nomad is the proxy for external governance mechanism. The variables for cost-minimisation strategy and auditor independence to be tested in this study are audit and non-audit fee structures.

In order to test hypothesis H1, the CEO turnover ("NewCEO") is coded 1 if there was appointment and/or resignation of CEO between the dates of the two consecutive directors' report and is coded 0²⁵ otherwise (e.g., Williams, 1998; Hudaib and Cooke, 2005). Similarly, the Nomad turnover ("NewNomad") is coded 1 if there was appointment and/or resignation of Nomad between the dates of the two consecutive directors' report and is coded 0 otherwise to test hypothesis H2. Consistent with Mande and Son (2013) and Abidin et al. (2016), the statutory audit fee ("LnSAF") of the group under hypothesis H3 is measured in natural logarithm term; while the non-audit fee ("NAFtotalfees") under hypothesis H4 is measured as the ratio of fees for non-audit services to total fees paid to the statutory auditor, which is calculated as the percentage of non-audit fee of the group over the sum of statutory audit fee and non-audit fee of the group (e.g., DeBerg et al., 1991; Abidin et al., 2016). When conducting robustness check, the non-audit fee is measured as natural logarithm ("LnNAF")²⁶ (e.g., Barkess and Simnett, 1994). Hypothesis H5 examines the interactions of internal governance mechanism and auditor specific characteristic ("AcMar") by assigning 1 to the situation if there was an audit committee that existed by the date of the directors' report for the reporting period and there was issuance of modified audit report by the statutory auditor, and assigning 0 to other situations.

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²⁵ It is coded 0 for an AIM SME that has no CEO for consecutive financial years; executive chairman is considered as CEO for an AIM SME that has only executive chairman and no CEO.

²⁶ Any zero value for non-audit fee is automatically assigned as zero value during the transformation process.

All the variables of interest under hypotheses H1 to H5 are predicted to have positive relationship with the statutory auditor switching. Three of the variables of interest introduced to this study, namely NewNomad, NAFtotalfees, and AcMar, have not been tested in the UK context.

I also consider a number of control variables in my empirical framework. As illustrated in section 4.2.4, this study controls for the client-specific and auditor-specific characteristics which is consistent with past studies.

Firstly, the client size ("LnTA") is measured by total assets and expressed in natural logarithm term and is expected to have negative relationship with statutory auditor switching (e.g., Hudaib and Cooke, 2005; Cairney and Stewart, 2019). This study also includes a binary variable for a microenterprise ("Micro") which is coded 1 and otherwise (i.e., small enterprise or medium-sized enterprise) is coded 0, to further control for the client size; it is expected that the microenterprises are more likely to switch statutory auditor than their other counterparts.

Secondly, the financial condition is represented by the level of leverage, loss incurred, and return of assets. The leverage ratio ("LevRatio") is expressed by long term debts over total assets (e.g., Woo and Koh, 2001; Bagherpour et al., 2014) while 1 is assigned if the group incurred loss after taxation ("LAT") and 0 is assigned if the group achieved profit after taxation (e.g., Mande and Son, 2013; Cairney and Stewart, 2019). Both variables are expected to be positively associated with the statutory auditor switching.

Thirdly, the return on assets expressed as profit after taxation over total assets ("ROApat") (e.g., Bagherpour et al., 2014; Brocard et al., 2018) is included in the main model while the return on assets expressed as profit before taxation over total assets ("ROApbt") is included in the robustness test. Both proxies are expected to be negatively associated with the statutory auditor switching.

Fourthly, and in addition to the variables of interest, this study includes another two internal governance mechanism as the control variable, i.e., board independence ("BIndpd") measured by the percentage of non-executive directors that sit on the board by the date of the directors' report for the reporting period (e.g., Lee et al., 2004; Yanan et al., 2013) and existence of audit committee ("AC") by the date of the directors' report for the reporting period that is coded 1

and 0 otherwise ((e.g., Yanan et al., 2013). Both variables are expected to be negatively associated with the statutory auditor switching.

Lastly, and for the purpose of conducting robustness check, I also consider the issuance of modified audit report by the statutory auditor ("MAR"), that is coded 1 and 0 otherwise (e.g., Woo and Koh, 2001; Cairney and Stewart, 2019), which is expected to have positive relationship with the statutory auditor switching.

Table 4.2: Independent variables and their expected relationships with statutory auditor switching

Nature	Definition and Measurement	Label	Predicted Direction
Internal governance mechanism	Chief executive officer ("CEO") turnover: 1 if there was appointment and/or resignation of CEO between the dates of the two consecutive directors' report, 0 otherwise ²⁷	NewCEO ~	+
External governance mechanism	Nominated adviser ("Nomad") turnover:1 if there was appointment and/or resignation of nominated adviser between the dates of the two consecutive directors' report, 0 otherwise	NewNomad ~	+
Auditor specific: Cost- minimisation strategy	Statutory audit fee: The statutory audit fee of the group measured in natural logarithm term	LnSAF ~	+
Auditor specific: Cost- minimisation strategy as well as auditor independence	Non-audit fee: The percentage of non-audit fee of the group over the sum of statutory audit fee and non-audit fee of the group (i.e., ratio of fees for non-audit services to total fees paid to the statutory auditor)	NAFtotalfees ~	+
Auditor specific: Cost- minimisation strategy as well as auditor independence	Non-audit fee: The non-audit fee of the group measured in natural logarithm term	LnNAF ~	+
Interaction of internal governance mechanism and auditor specific	Existence of audit committee and modified audit report: 1 if there was an audit committee existed by the date of the directors' report for the reporting period and there was issuance of modified audit report by the statutory auditor, 0 otherwise	AcMar ~	+
Firm specific	Total assets: The total assets of the group, measured in natural logarithm term	LnTA ^	-

 $^{^{27}}$ It is coded 0 for an AIM SME that has no CEO for consecutive financial years; executive chairman is considered as CEO for an AIM SME that has only executive chairman and no CEO.

Table 4.2 (Cont'd): Independent variables and their expected relationships with

statutory auditor switching

Nature	Definition and Measurement	Label	Predicted Direction
Firm specific	Microenterprise: 1 if the company was a microenterprise at the end of the reporting period, 0 otherwise (i.e., small enterprise or medium-sized enterprise)	Micro ^	+
Firm specific	Leverage ratio: The leverage level of the group expressed by long term debts over total assets	LevRatio^	+
Firm specific	Loss after taxation: 1 if the group incurred loss after taxation for the financial year, 0 otherwise	LAT^	+
Firm specific	Return on assets: The return on assets of the group expressed by profit after taxation over total assets	ROApat^	-
Firm specific	Return on assets: The return on assets of the group expressed by profit before taxation over total assets	ROApbt^	-
Internal governance mechanism	Board independence: The percentage of non-executive directors that sit on the Board by the date of the directors' report for the reporting period	BIndpd ^	-
Internal governance mechanism	Existence of audit committee: 1 if an audit committee exists by the date of the directors' report for the reporting period, 0 otherwise	AC ^	-
Auditor specific	Issuance of modified audit report by the statutory auditor: 1, 0 otherwise	MAR [^]	+

Notes: ~ Represents variables of interest; and ^ Represents control variables of this study.

4.4. Data analysis and discussion

This section provides analysis and discussion of the results. It begins with the descriptive statistics followed by the collinearity analysis. The regression results are illustrated, and robustness tests are discussed in the subsequent two sub-sections. The final sub-section summarises the findings of this study including conclusion.

4.4.1. Descriptive statistics

Table 4.3 exhibits the descriptive statistics for all the variables employed in this study, which made up of 1,325 observations for 236 AIM SMEs pooled across the financial periods of 2010-2015. About 8% of the total observations switched their statutory auditors during the financial periods 2010-2015. Analysis revealed that the highest percentage of switching happened in the financial period 2010 at 11% and decreased to the lowest point of 4% in the financial period 2011. It appears that the statutory auditor switching is not a regular agenda for the AIM SMEs while longer auditor tenure of four years or more appears to be prevalent. This is evidenced from the dropped of 744 observations of 73 groups concordant panel items (i.e., all positive or all negative outcomes during the sample periods) when applying the fixed effects logit, because there is nothing to examine if there is no variability within a subject (Allison, 2012). This limitation should be noted when interpreting the results. Nevertheless, its switching rate is still higher than the average switching rate of bigger listed companies. Oxera (2006) found about 4% and 3% switching rate for the market and the FTSE 350 companies respectively during the periods 1996-2004. On a later investigation, the Competition Commission (2013b) revealed that the annual switching rate among FTSE 350 companies varied between 1.5% and 3.5% with an average of 2.4% while non-FTSE-350 companies has higher switching rate varied between 2.8% and 8.5% during the periods 2001 and 2010. The higher switching rate for smaller companies might be because they normally engage non-big 4 audit firms as their statutory auditors and hence, they have more choices in their switching decisions. As evidenced from analysis, 73% of the sampled AIM SMEs engaged non-big 4 audit firms while only 27% of them engaged the services of big 4 audit firms as their statutory auditors.

About 15% of the total observations changed their CEO while about 22% of them changed their Nomad. About 86% of them have formed audit committee voluntarily in compliance with

the good corporate governance practice; this percentage is higher than Collier and Gregory (1996)'s study on companies in the Financial Times All Share Index for the financial year ended in 1991 when the formation of audit committee was voluntary, which was about 42%. Upon the publication of the Cadbury Code in 1992 that recommended for the adoption of audit committee, this percentage has soared as evidenced in the study of Goddard and Masters (2000) where they found that about 89% and 91% of their sampled companies listed in the Times have formed audit committee for the financial year ended in 1994 and 1995 respectively.

Table 4.3: Descriptive statistics for statutory auditor switching study

					_ ·
			Standard		
Variable	Mean	Median	Deviation	Minimum	Maximum
Binary variables:					
SAS	0.08	0	0.27	0	1
NewCEO	0.15	0	0.36	0	1
NewNomad	0.22	0	0.41	0	1
AcMar	0.20	1	0.40	0	1
Micro	0.20	0	0.40	0	1
LAT	0.68	1	0.47	0	1
AC	0.86	1	0.34	0	1
Continuous variables:					
SAF (£'000)	49	41	34.72	4	323
NAFtotalfees	0.18	0.15	0.18	0.00	0.91
TA (£'000)	30,805	13,104	51,297	51	385,000
LevRatio	0.09	0.00	0.59	0.00	14.92
ROApat	-0.28	-0.10	0.961	-16.69	7.08
BIndpd	0.53	0.50	0.20	0.00	1.00
_					

Note: SAS – Statutory auditor switching; NewCEO – CEO turnover; NewNomad – Nominated adviser turnover; AcMar – Interaction of existence of audit committee and modified audit report; Micro – Microenterprise; LAT – Loss after taxation; AC – Existence of audit committee; SAF – Statutory audit fee; NAFtotalfees – Non-audit fee over total statutory audit fee and non-audit fee; TA – Total assets; LevRatio – Leverage ratio; ROApat – Return on assets after tax; BIndpd – Board independence.

On average, about 20% of the sampled AIM SMEs that have formed audit committee received modified audit report from their statutory auditors. The statutory audit fee has a mean of £49,000 with a median of £41,000 and a large range of £323,000. Similarly, there was a large range of £385,000,000 for the total assets with a mean of £30,805,000 and a median of £13,104,000, and only 20% of the observations were made up of microenterprises. On the other hand, some of the sampled AIM SMEs did not incur any non-audit fee while some of them incurred as high as 91% of their total fees paid to the statutory auditors were related to non-

audit services, and about 18% as the sample mean. The average leverage level was 9% with a maximum level of 15%. On average, 68% of the sampled AIM SMEs incurred loss after taxation with their mean for return on assets after tax of negative 28%. Whilst on average, the total observations maintained 53% of non-executive directors on their board.

4.4.2. Collinearity analysis

Table 4.4 exhibits the correlation among the variables used in this study under Panel A and their VIF under Panel B. The results show that the statutory auditor switching is positively associated with new CEO, new Nomad, and AIM SMEs that have formed audit committee and received modified audit report, while the statutory auditor switching is negatively associated with the level of statutory audit fee and percentage of non-audit fee over the total fees paid to the statutory auditors. The highest correlation coefficient among the independent variables was absolute 0.52 between the statutory auditor switching and new CEO whereas the VIF values of all the explanatory variables range from 1.01 to 2.12 with their tolerance value ("1/VIF") of 0.99 at the least. Any correlations below absolute 0.80 should not be too harmful as regards to multicollinearity whereas as a rule of thumb, any variable with VIF value more than 10 or tolerance value of less than 0.10 would indicate high collinearity. Hence, it is concluded that multicollinearity is unlikely to cause potential problem in this study.

Table 4.4: Collinearity analysis for statutory auditor switching study

Panel A: Correlation among variables used in this study							
<u>Variable</u>	<u>SAS</u>	<u>NewCEO</u>	NewNomad	<u>SAF</u>	NAFtotalfees	<u>AcMar</u>	<u>TA</u>
SAS	1.00						
NewCEO	0.52	1.00					
NewNomad	0.06	0.03	1.00				
SAF	-0.05	-0.02	-0.03	1.00			
NAFtotalfees	-0.05	-0.02	-0.03	0.11	1.00		
AcMar	0.02	0.04	-0.00	-0.01	-0.09	1.00	
TA	-0.03	-0.05	-0.02	0.44	0.13	-0.01	1.00
Micro	0.03	-0.01	0.01	-0.35	-0.10	0.17	-0.12
LevRatio	0.01	-0.01	0.02	-0.02	-0.04	0.09	-0.03
LAT	0.04	0.14	0.05	-0.04	-0.17	0.22	-0.09
ROApat	-0.01	-0.06	-0.05	0.13	0.04	-0.15	0.12
BIndpd	0.01	0.02	0.01	0.08	-0.09	0.09	0.14
AC	0.00	0.03	0.01	0.14	0.04	0.20	0.11

Table 4.4 (Cont'd): Collinearity analysis for statutory auditor switching study

Panel A	(Cont'd)	: Correlation	among variables	used in this study
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<u>Variable</u>	Micro	LevRatio	<u>LAT</u>	ROApat	<u>BIndpd</u>	<u>AC</u>
Micro	1.00					
LevRatio	-0.06	1.00				
LAT	0.25	0.04	1.00			
ROApat	-0.11	-0.29	-0.29	1.00		
BIndpd	-0.04	-0.02	-0.00	0.00	1.00	
AC	-0.11	0.02	-0.00	0.02	0.21	1.00

Panel B: VIF and their tolerance value of the independent variables

<u>Variable</u>	<u>VIF</u>	<u>1/VIF</u>
1.NewCEO	1.03	0.97
1.NewNomad	1.01	0.99
l.lnSAF	2.12	0.47
1.NAFtotalfees	1.08	0.93
l.AcMar	1.14	0.88
l.LnTA	2.05	0.49
l.Micro	1.39	0.73
1.LevRatio	1.18	0.85
l.LAT	1.25	0.80
1.ROApat	1.40	0.71
l.BIndpd	1.10	0.91
l.AC	1.13	0.89
Mean	1.42	

Note: SAS – Statutory auditor switching; NewCEO – CEO turnover; NewNomad – Nominated adviser turnover; SAF – Statutory audit fee; NAFtotalfees – Non-audit fee over total statutory audit fee and non-audit fee; AcMar – Interaction of existence of audit committee and modified audit report; TA – Total assets; Micro – Microenterprise; LAT – Loss after taxation; LevRatio – Leverage ratio; ROApat – Return on assets after tax; BIndpd – Board independence; AC – Existence of audit committee; l. = Lag value; Ln = Natural logarithm.

4.4.3. Regression analysis

This study adopts the fixed effects logit estimator to estimate the unbalanced panel data as displayed under Model 1 in Table 4.5. In facilitating comparison with previous study, the results generated using pooled logit are presented under Model 2 in Table 4.5. As explained under model specification, the fixed effects logit is looking at the determinants of within-subject variability; if there is no variability within a subject, there is nothing to examine (Allison, 2012). Hence, due to only about 8% of statutory auditor switching in the sampled AIM SMEs of this study, there are lots of concordant panel items with either all positive or all negative outcomes during the sample periods, which have been dropped when applying the

fixed effects logit. Accordingly, a total of 744 observations of 73 groups have been dropped resulting to only 345 observations of 73 groups remain for analysis after losing another 236 observations due to all independent variables are lagged one period. There is no intercept in the fixed effects logit (Allison, 2012) as clearly the intercept is irrelevant under the logit model. However, the pooled logit does generate the intercept, which can be interpreted as an adjustment term to improve the predictability ability of the logit model (Woo and Koh, 2001).

Model 1 is developed to test hypotheses, H1, H2, H3, H4, and H5, results of which are summarised in Table 4.5. All the coefficients of the variables of interest to this study are significantly positively associated with the statutory auditor switching. The CEO turnover ("l.NewCEO"), Nomad turnover ("l.NewNomad"), and interaction of existence of audit committee and modified audit report ("l.AcMar") variables are significant at 10% level of significance and in the predicted direction. On the other hand, the statutory audit fee ("l.LnSAF") variable is significant at 5% level of significance and in the predicted direction while the non-audit fee ("l.NAFtotalfees") variable is significant at 1% level of significance and in the predicted direction.

More specifically, this study reveals that an AIM SME is more likely to switch statutory auditor the following year upon the appointment of a new CEO, which is consistent with past studies (e.g., Woo and Koh, 2001; Hudaib and Cooke, 2005) as shown under pooled logit. This result supports the de facto evidence that the CEO has power in the auditor appointment process (Beattie and Fearnley, 1998b) and the new CEO would prefer to deal with an auditor that they are familiar with and have past favourable experience as well as seeking fresh ideas from new auditor in meeting shareholders' expectation and boosting their confidence (e.g., Williams, 1988; Woo and Koh, 2001; Hudaib and Cooke, 2005). Besides the CEO, the Nomad as an external adviser to AIM company also appears to have influence in the statutory auditor switching process. This study reveals that an AIM SME is more likely to switch statutory auditor the following year upon the appointment of a new Nomad under both fixed effects logit and pooled logit. This result provides the preliminary and entirely new empirical evidence on the role of Nomad in the statutory auditor switching process as this variable is tested for the first time in the statutory auditor switching model. The positively significant result indicates that the Nomad might depend on the statutory auditor for quality of financial reporting and disclosure, and therefore, similarly to the new CEO, would prefer to have auditor that they are familiar with in office.

The fixed effects logit estimator reveals that an AIM SME paying higher statutory audit fee is more likely to switch statutory auditor the following year. This is consistent with the notion that one of the incentives for companies to change their statutory auditors is to obtain a reduced statutory audit fee (Hay et al., 2006). However, the pooled logit estimator does not detect any evidence that the statutory audit fee triggered the statutory auditor switching, which is consistent with the result of Hudaib and Cooke (2005) and Cairney and Stewart (2019). Such insignificant result might be due to large companies were less concerned about the absolute statutory audit fee as compared to small companies (Beattie and Fearnley, 1995). Apparently, smaller companies like AIM SMEs are more price-sensitive and will seek to reduce their operating expenses by switching statutory auditor. Similar outcome is found on the level of non-audit fee whereby the higher the level of non-audit fee, the more likely for an AIM SME to switch statutory auditor the following year as revealed by the fixed effects logit and pooled logit estimators. Such positive and highly significant relationship could be due to the pressure on companies to address the presumed impairment of auditor independence arising from the joint provision of audit and non-audit services by the statutory auditors as well as the fee-saving motivation of AIM SMEs. This result implies that an AIM SME might switch its statutory auditor to enhance their stakeholders' perception of auditor independence while at the same time benefiting from its cost-saving strategy. Nevertheless, this result contrasts with Abidin et al. (2016)'s findings on non-financial companies listed on the Bursa Malaysia, as they found negative but insignificant association when the non-audit fee that was measured as a ratio to the total audit fee during the year of switching while they found significant negative association when the non-audit fee was higher than the sample mean. On the other hand, DeBerg et al. (1991) and Barkess and Simnett (1994) found no significant relationship between the level of non-audit fee and statutory auditor switching in their non-audit fee model. The finding of this study provides new empirical evidence that the level of non-audit fee is one of the triggers for statutory auditor switching as to the best of my knowledge no past UK studies have incorporated this variable in the statutory auditor switching model.

Consistent with Yanan et al. (2013), this study reveals that the existence of audit committee in an AIM SME has no influence in the statutory auditor switching decision. However, the audit committee of an AIM SME appears to be more likely to recommend for the switch of statutory auditor the following year after the receipt of modified audit report from the incumbent statutory auditor as shown in both fixed effects logit and pooled logit estimators. No past

studies have examined the interactive effect of existence of audit committee and modified audit report on statutory auditor switching; instead Carcello and Neal (2003) examined the interactive effect of audit committee characteristics and modified audit report. In contrary, Carcello and Neal (2003) found that audit committees with greater independence, greater governance expertise, and lower stockholdings were more likely to block a managerial attempt to dismiss an auditor who issued a going concern opinion. The positive and significant result shown in this study could potentially suggest that the voluntary formation of audit committee by an AIM SME is limited to rubber-stamping management decisions (Lennox, 2003) and for their image value rather than financial reporting quality (Menon and Williams, 1994), because Lennox (2000) and Hudaib and Cooke (2005) reported that modified audit report was a significant factor in the statutory auditor switching as management dislikes receiving modified audit report and would be more likely to switch statutory auditor in order to avoid such opinion in future (e.g., Chow and Rice, 1982; Craswell, 1998; Cairney and Stewart, 2019).

All the control variables are not statistically significant under both fixed effects logit and pooled logit estimators except for the firm size variables with 10% level of significance. The result under pooled logit estimator reveals that an AIM SME with higher total assets ("l.LnTA") is less likely to switch statutory auditor, which is consistent with past studies that the incident of auditor change was significantly higher among smaller companies. (e.g., Beattie and Fearnley, 1998a; Hudaib and Cooke, 2005; Bagherpour et al., 2014). When further categorised the AIM SMEs into microenterprise, small enterprise or medium-sized enterprise, the result under fixed effects logit reveals that an AIM microenterprise ("1.Micro") is less likely to switch statutory auditor as compared to an AIM small or medium-sized enterprise. This preliminary empirical evidence that has yet to be tested in past studies could imply that microenterprise is more sensitive to the potential direct and indirect costs to be incurred in the switching process and therefore is less likely to switch their statutory auditors as compared to their other counterparts. The financial conditions of an AIM SME measured by leverage ratio ("l.LevRatio"), loss after taxation ("l.LAT"), and return on assets after tax ("l.ROApat") do not affect the statutory auditor switching process (e.g., Bagherpour et al., 2014). Similarly, this study finds no relationship between the board independence ("l.BIndpd") and the statutory auditor switching even though Lee et al. (2004) found that independent board significantly reduced the likelihood of statutory auditor switching while Abidin et al. (2016) found that the higher the board independence rate, the more likely a company would switch statutory auditors.

Table 4.5: Regression analysis showing fixed effect logit and pooled logit for statutory auditor switching study (Dependent variable = SAS)

<u>Variables</u>	Model 1 <u>Fixed effects logit</u>	Model 2 <u>Pooled logit</u>	
1.NewCEO	0.726*	0.538*	
	(0.397)	(0.287)	
1.NewNomad	0.562*	0.601**	
	(0.301)	(0.258)	
l.LnSAF	1.055**	0.156	
	(0.536)	(0.258)	
1.NAFtotalfees	3.943***	1.511**	
	(1.188)	(0.681)	
l.AcMar	1.016*	0.668**	
	(0.544)	(0.288)	
l.LnTA	-0.343	-0.235*	
	(0.352)	(0.124)	
l.Micro	-1.651*	-0.263	
	(0.880)	(0.350)	
l.LevRatio	-0.161	0.017	
	(0.219)	(0.181)	
l.LAT	-0.340	0.373	
	(0.455)	(0.312)	
l.ROApat	-0.396	-0.028	
	(0.305)	(0.115)	
l.BIndpd	-0.060	-0.011	
	(1.484)	(0.620)	
l.AC	-0.0485	-0.339	
	(1.028)	(0.352)	
Constant	NA	-1.567	
	NA	(2.172)	
Year dummies	Yes	Yes	
Number of observations	345	1,089	
SMEs	73	236	

Notes:

- SAS Statutory auditor switching; l.NewCEO Lag of CEO turnover; l.NewNomad Lag of nominated adviser turnover; l.LnSAF Lag of statutory audit fee in natural logarithm term; l.NAFtotalfees Lag of non-audit fee over total statutory audit fee and non-audit fee; l.AcMar Lag of interaction of existence of audit committee and modified audit report; l.LnTA Lag of total assets in natural logarithm term; l.Micro Lag of microenterprise; l.LevRatio Lag of leverage ratio; l.LAT Lag of loss after taxation; l.ROApat Lag of return on assets after tax; l.BIndpd Lag of board independence; l.AC Lag of existence of audit committee.
- 2. Model 1 applying fixed effects logit is the model for this study.
- 3. Model 2 applying pooled logit is meant for comparison to past studies.
- 4. Standard errors in parentheses.
- 5. All the above regressions also include year dummies (not reported).
- 6. The symbols ***, **, and * indicate 1%, 5%, and 10% significance level, respectively.

Table 4.6: Regression analysis with varied independent variables using fixed effects logit for statutory auditor switching study (Dependent variable = SAS)

Variables	Model 1	Model 3	Model 4
1.NewCEO	0.726*	0.785**	0.691*
	(0.397)	(0.366)	(0.400)
l.NewNomad	0.562*	0.548*	0.577*
	(0.301)	(0.297)	(0.302)
l.LnSAF	1.055**	1.245**	1.020*
	(0.536)	(0.496	(0.538)
l.NAFtotalfees	3.943***	3.714***	3.903***
	(1.188)	(1.153)	(1.188)
l.AcMar	1.016*	1.056**	1.816
	(0.544)	(0.492)	(1.331)
l.LnTA	-0.343		-0.332
	(0.352)		(0.356)
l.Micro	-1.651*		-1.650*
	(0.880)		(0.880)
l.LevRatio	-0.161		-0.159
	(0.219)		(0.219)
l.LAT	-0.340		-0.314
	(0.455)		(0.458)
l.ROApat	-0.396		-0.395
-	(0.305)		(0.312)
l.BIndpd	-0.060		-0.204
	(1.484)		(1.504)
l.AC	-0.049		-0.426
	(1.028)		(1.186)
l.MAR			-0.837
			(1.272)
Year dummies	Yes	Yes	Yes
Number of observations	345	345	345
SMEs	73	73	73

Notes:

- 2. Model 1 applying fixed effects logit is the model for this study.
- 3. Model 3 applying fixed effects logit regresses against the variables of interest only.
- 4. Model 4 applying fixed effects logit regresses against all variables of Model 1 plus new variable of modified audit report.
- 5. Model 3 and Model 4 applying fixed effects logits are meant for robustness tests.
- 6. Standard errors in parentheses.
- 7. All the above regressions also include year dummies (not reported).
- 8. The symbols ***, **, and * indicate 1%, 5%, and 10% significance level, respectively.

SAS – Statutory auditor switching; l.NewCEO – Lag of CEO turnover; l.NewNomad – Lag of nominated adviser turnover; l.LnSAF – Lag of statutory audit fee in natural logarithm term; l.NAFtotalfees – Lag of non-audit fee over total statutory audit fee and non-audit fee; l.AcMar – Lag of interaction of existence of audit committee and modified audit report; l.LnTA – Lag of total assets in natural logarithm term; l.Micro – Lag of microenterprise; l.LevRatio – Lag of leverage ratio; l.LAT – Lag of loss after taxation; l.ROApat – Lag of return on assets after tax; l.BIndpd – Lag of board independence; l.AC – Lag of existence of audit committee; l.MAR – Lag of modified audit report.

Table 4.7: Regression analysis with different measurements for independent variables using fixed effects logit for statutory auditor switching study (Dependent variable = SAS)

Variables	Model 1	Model 5	Model 6	Model 7
l.NewCEO	0.726*	0.651*	0.729*	0.656*
	(0.397)	(0.393)	(0.397)	(0.393)
1.NewNomad	0.562*	0.503*	0.560*	0.501*
	(0.301)	(0.297)	(0.301)	(0.297)
l.LnSAF	1.055**	0.818	1.047*	0.808
	(0.536)	(0.525)	(0.536)	(0.525)
l.NAFtotalfees	3.943***		3.931***	
	(1.188)		(1.188)	
l.LnNAF		0.196***		0.196***
		(0.071)		(0.071)
l.AcMar	1.016*	0.994*	1.009*	0.988*
	(0.544)	(0.530)	(0.545)	(0.531)
l.LnTA	-0.343	-0.219	-0.343	-0.214
	(0.352)	(0.371)	(0.352)	(0.373)
l.Micro	-1.651*	-1.870**	-1.649*	-1.876**
	(0.880)	(0.917)	(0.880)	(0.918)
l.LevRatio	-0.161	-0.091	-0.159	-0.093
	(0.219)	(0.225)	(0.218)	(0.224)
l.LAT	-0.340	-0.393	-0.343	-0.398
	(0.455)	(0.449)	(0.455)	(0.449)
1.ROApat	-0.396	-0.401		
	(0.305)	(0.331)		
l.ROApbt			-0.392	-0.409
			(0.297)	(0.326)
l.BIndpd	-0.060	-0.582	-0.073	-0.588
	(1.484)	(1.490)	(1.484)	(1.491)
l.AC	-0.049	0.244	-0.046	0.243
	(1.028)	(1.130)	(1.028)	(1.130)
Year dummies	Yes	Yes	Yes	Yes
Number of observations	345	345	345	345
SMEs	73	73	73	73

Notes:

^{1.} SAS – Statutory auditor switching; l.NewCEO – Lag of CEO turnover; l.NewNomad – Lag of nominated adviser turnover; l.LnSAF – Lag of statutory audit fee in natural logarithm term; l.NAFtotalfees – Lag of non-audit fee over total statutory audit fee and non-audit fee; l.LnNAF – Lag of non-audit fee in natural logarithm term; l.AcMar – Lag of interaction of existence of audit committee and modified audit report; l.LnTA – Lag of total assets in natural logarithm term; l.Micro – Lag of microenterprise; l.LevRatio – Lag of leverage ratio; l.LAT – Lag of loss after taxation; l.ROApat – Lag of return on assets after tax; l.ROApbt – Lag of return on assets before tax; l.BIndpd – Lag of board independence; l.AC – Lag of existence of audit committee.

^{2.} Model 1 applying fixed effects logit is the model for this study.

^{3.} Model 5, Model 6, and Model 7 applying fixed effects logit regress against independent variables with different measurements for non-audit fee and return on assets.

^{4.} Model 5, Model 6, and Model 7 applying fixed effects logit are meant for robustness tests.

^{5.} Standard errors in parentheses.

^{6.} All the above regressions also include year dummies (not reported).

^{7.} The symbols ***, **, and * indicate 1%, 5%, and 10% significance level, respectively.

4.4.4. Robustness tests

Table 4.6 displays the regression analysis with varied independent variables using fixed effects logit estimator. Showing alongside Model 1, which is the model for this study, Model 3 regresses against the variables of interest only while Model 4 regresses against all variables of Model 1 plus new variable of modified audit report ("l.MAR"). As expected, when I include only the variables of interest without the control variables, Model 3 shows similar and consistent results with those of Model 1 but with higher level of significance for CEO turnover and interaction of existence of audit committee and modified audit report variables. When the modified audit report plus all the original control variables are added into Model 4, in general, the variables of interest remain at their statistical level of significance and all the results of control variables are similar and consistent with those of Model 1, and the modified audit report reveals insignificant negative result. The exception is the statutory audit fee that becomes significant at only 10% level of significance from the original 5% level of significance. On the other hand, the interaction of existence of audit committee and modified audit report variable becomes insignificant from the original 10% level of significance. When controlling for the existence of audit committee only, the audit committee of an AIM SME appears to be more likely to recommend for the switch of statutory auditor the following year after the receipt of modified audit report from the incumbent statutory auditor, but it loses significance when modified audit report is also included as a control variable.

Table 4.7 displays the regression analysis with different measurements for independent variables, namely non-audit fee and return on assets using fixed effects logit estimator under Models 5, 6, and 7 alongside Model 1, which is the model for this study. The non-audit fee is measured by non-audit fee over total statutory audit fee and non-audit fee ("l.NAFtotalfees"), or non-audit fee expressed in natural logarithm term ("l.LnNAF"), while the return on assets is measured by profit after taxation over total assets ("l.ROApat") or profit before taxation over total assets ("l.ROApbt"). Substituting the alternative proxies in the models, in general, do not change the results of those revealed by Model 1, except for the statutory audit fee, microenterprise, and existence of audit committee variables. When regressing the non-audit fee in natural logarithm term instead of percentage over total fees paid to the statutory auditor, the non-audit fee variable is still significant at its original 1% level of significance while the microenterprise variable increases its significance to 5% from its original 10% level of

significance. On the other hand, the audit committee variable becomes positive but remains insignificant. However, the different measurements of return on assets have no impact on the results. Overall, the choice of proxy variables does influence the results, but it does not markedly affect the main conclusions.

4.4.5. Summary and conclusion

The findings of this study offer numerous useful insights into the relationships between the corporate governance mechanisms, cost-minimisation strategy, and auditor independence, and statutory audit switching of AIM SMEs in the UK. Some of the results corroborate those obtained by other researchers mainly on larger companies, for examples the significant positive relationship shown by the New CEO and some insignificant results for control variables. The finding implying the higher the statutory audit fee, the more likely an AIM SME would switch its statutory auditor further supports the results of past studies that smaller companies were more concerned about the absolute statutory audit fee relative to the larger companies. However, the result for non-audit fee variable is not in line with the limited number of past studies conducted thus far and hence, provides new evidence to UK studies from SME perspective. Attempting to alleviate the potential impairment of auditor independence arising from the joint provision of audit and non-audit services by the statutory auditor, an AIM SME with a higher ratio of non-audit fee to total fees paid to the statutory auditor tends to switch statutory auditor in the following year, to enhance stakeholder's perception of auditor independence, which simultaneously reducing its operating expenses.

A particular useful contribution of this study is the emergence of three new variables in the statutory audit switching model of the AIM SMEs. One of them is the role of Nomad, a unique external governance mechanism of AIM companies that has yet to be tested under this research area. The new Nomad once appointed is likely to recommend the statutory auditor switching in the following year suggesting that the Nomad as an external adviser to the AIM company would prefer to have auditor that they are familiar with in office to ensure high quality of financial reporting and disclosure. Another new variable is the interaction of existence of audit committee²⁸ and modified audit report. The audit committee of an AIM SME, when exists, is

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²⁸ This study adopts the existence of audit committee as the independent variable instead of the characteristics of audit committee, such as independent and expertise of audit committee members, as adopted in past studies because the formation of audit committee is voluntary for AIM companies.

likely to recommend the statutory auditor switching in the following year after the receipt of modified audit report from the incumbent statutory auditor suggesting that the audit committee could be rubber-stamping the decision of management, who clearly dislikes receiving modified audit report and attempts to look for more compliant auditor. Such audit committee would not be effective in deterring opinion shopping, if it exists. In addition, an AIM microenterprise is less likely to switch statutory auditor relative to its other SME counterparts possibly because a microenterprise is more prone to switching costs.

Overall, the Model 1 using the fixed effects logit estimator as adopted in this study is specified without the presence of multicollinearity, heteroskedasticity and endogeneity issues. Including new variable and substituting alternative proxy variables when conducting the robustness tests, I corroborate that those alternatives do not markedly affect the main conclusions. Hence, the regression results are consistent, robust, and valid for interpretations.

4.5. Conclusions

This section concludes with summaries of key issues together with limitations of this study and recommendations for future research.

The "triangle relationship" among the shareholders, directors, and statutory auditor of a company portrayed in the agency theory, stewardship theory, and signalling theory, and alongside the cost-minimisation strategy and auditor independence are the cornerstone in triggering the statutory auditor switching. This study reveals that an AIM SME is more likely to switch statutory auditor the following year upon the appointment of new CEO and new Nomad, which demonstrated that the new management and new adviser would like to disassociate themselves from previous relationship and prefer to deal with familiar auditors that they have past favourable experience with or alternatively they may simply want to seek fresh and valuable ideas from the new auditor when discharging their internal and external governance roles respectively. On the other hand, this study reveals that an AIM SME that incurred higher statutory audit fee and higher ratio of non-audit fee to total fees paid to the statutory auditor is more likely to switch statutory auditor the following year as part of the cost-minimisation strategy as well as to alleviate the potential impairment of auditor independence arising from the joint provision of audit and non-audit services by the statutory auditor.

Nevertheless, this study suggests that the audit committee of an AIM SME, when exists, is more likely to recommend for the statutory auditor switching in the following year after the receipt of modified audit report from the incumbent statutory auditor, which indicates that the audit committee would not be effective in deterring opinion shopping, if it exists. This study also finds that an AIM microenterprise is less likely to switch statutory auditor relative to its other SME counterparts possibly because a microenterprise is more prone to switching costs. This study contributes to the existing literature by providing insights into the rather dated studies with more recent data of smaller listed companies. More importantly, this study also provides the entirely new evidence on the role of Nomad, the unique advisory feature of AIM companies, and the voluntary formation of audit committee of AIM companies, in triggering the statutory auditor switching. This study contributes to the existing literature and fills the gap for smaller listed companies in a less concentrated audit market that are governed by a lighter touch regulatory regime and follow less rigorous corporate governance mechanisms. For audit firms, this study could provide insights in knowing the main triggers of statutory auditor switching in AIM SMEs and to enable them to enhance their professional services in retaining existing clients as well as in securing new clients. Audit firms will need to be more sensitive with their fee structure to stay competitive in retaining existing clients as AIM SMEs are more likely to switch their statutory auditor when the statutory audit fee and non-audit fee are high. For accounting professional bodies, they should ensure that their members are following a proper procedure in seeking professional clearance from the outgoing statutory auditor before accepting new nomination to act as the findings of this study revealed that AIM SMEs are more likely to switch statutory auditor if they have audit committee and received modified audit report, which could imply potential "opinion shopping". For policy makers, this study could assist them in determining whether the disclosure in the annual report about the reasons for the statutory auditor switching is required and whether the principles for auditor rotation should be extended to smaller listed companies like AIM companies in maintaining auditor independence. Recently, the Audit, Reporting and Governance Authority has been given the power to set minimum requirements for audit committees in relation to the appointment and oversight of auditors in public interest entities in the UK (Department for Business, Energy & Industrial Strategy, May 2022).

All the data for this study are hand-collected, which are then in turn more accurate and complete as I exercise consistent and careful approach to minimise errors but at the expense of long time period required that restricted the sample size of this study. The use of annual reports in

deriving the data for this study would also be prone to the quality of information presented and disclosed within the annual reports; in addition, the non-observable, or non-measurable data, or behavioural factors, such as the nature for the termination of auditor-client relationship and the familiarity of auditor-client relationship, are not readily available in the annual reports. These limitations should be borne in mind when interpreting the results, which could also suggest interesting avenues for future research. Another limitation should be noted for this study is the reduced variability for examination due to only about 8% of the total observations switched their statutory auditors during the sampled period.

Future studies could attempt to distinguish the termination of auditor-client relationship into retirement, resignation, or removal, which could facilitate the examination of specific reasons in triggering the switching decision. Such information could be obtained via interviews or questionnaires as they are not readily available from the annual reports. Furthermore, future studies could consider conducting interviews or distributing questionnaires to identify behavioural factors, such as the chemistry of the relationship between client and senior personnel of audit firm as mentioned by Beattie and Fearnley (1995, 1998a, 1998b). They argued that behavioural factors should also be considered because economic factors can only provide a partial explanation and are not sufficient to explain the statutory auditor switching behaviour. Finally, the newly introduced variables of new Nomad, interaction of existence of audit committee and modified audit report, and microenterprise plus the contrasting and limited evidence of non-audit fee would require more future evidence to corroborate the validity of the results of this study.

Chapter 5. Determinants of audit report lag

Abstract

This study aims to investigate the determinants of audit report lag of small and medium-sized companies listed on the AIM, a junior market of the London Stock Exchange. AIM is a lightly regulated market that distinctly requires all AIM companies to always retain a nominated adviser and is a research area that is mainly not developed.

Employing the fixed effects panel data estimator on an unbalanced panel data of 1,005 observations from 177 small and medium-sized AIM companies for the financial periods covering 2010 to 2015, the major findings of this study demonstrate that the extent of audit report lag for small and medium-sized AIM companies is explained by the level of auditor-client negotiations and not by the corporate governance characteristics. The higher the level of discretionary accruals reflected in the financial statements, the longer the audit report lag; similarly, the issuance of modified audit report requires longer audit report lag. However, the audit committee, CEO, board chairman, nominated adviser and broker play no significant role in enhancing the financial reporting timeliness.

This study contributes to the existing literature by providing empirical evidence to repurpose audit report delay as a measure of probability for auditor-client negotiations occurred during the statutory audit, and by demonstrating the passive role of nominated adviser and audit committee of small and medium-sized AIM companies in determining audit report lag.

5.1. Introduction

This section provides an overview of audit report lag and spells out the motivations together with the objectives as well as highlighting the main findings and contributions.

5.1.1. Overview of audit report lag

Audit report lag is defined as the period between a company's financial year end and the audit report date in many past studies (e.g., Ashton et al., 1987; Knechel and Payne, 2001)²⁹. It has been broadly confirmed in the literature that audit report lag is one of the few externally observable audit output variables that can be used as a proxy to gauge audit efficiency (e.g., Bamber, Bamber & Schoderbek, 1993; Abbott, Parker and Peters, 2012). The directors of a company are solely responsible for the preparation of financial statements that show a true and fair view in all material aspects in accordance with the applicable financial reporting framework. Needless to say, the board would like to provide timely financial information to their shareholders and would prefer making earnings announcement based on the audited results to avoid any unexpected variances between the audited and unaudited results. The audited financial statements in the annual report are the primary reliable source of information available to the shareholders. Hence, the length of time to complete a financial statement audit significantly influences the timing of the publication of annual report of a company (e.g., Givoly and Palmon, 1982; Ashton et al., 1987; Leventis, Weetman and Caramanis, 2005). Financial reporting timeliness with reliable accounting information could bridge the information asymmetry gap and facilitate shareholders' informed investment decisions.

What determines the audit report lag? Past studies (e.g., Abernathy, Barnes, Stefaniak and Weisbarth, 2017; Habib, Bhuiyan, Huang and Miah, 2019; Durand, 2019) revealed that the audit report lag was mainly affected by three key components: audit-related determinants (such as audit firm size, audit opinion, auditor switching); client-specific determinants (such as client size, client risk, client profitability); and corporate governance determinants (such as audit committee characteristics, board duality, board independence). Generally, the external stakeholders would prefer shorter audit report lag as the timely release of annual report containing the auditor's opinion on the financial statements would enhance the credibility of

²⁹ See Appendix F for illustrations.

the financial information in facilitating their investment decision-making (e.g., Habib and Bhuiyan, 2011). If the release of audited financial statements was unduly delayed, companies could experience negative market reactions and higher information asymmetry (e.g., Ashton et al., 1987; Jaggi and Tsui, 1999). Past studies found that longer audit report lag could indicate auditor-client negotiations over financial reporting issues occurred (e.g., Salterio, 2012). The pressure of financial reporting timeliness by having information available to decision-makers in time to be capable of influencing their decisions might affect the reliability of financial information, which is a trade-off that need considerable balancing act from the client as well as the statutory auditor. Obviously, the benefit of providing the information should be justified by the cost of providing and using the information.

5.1.2. Motivations for this study

This study is motivated by the fact that there is only a handful of past studies based on the UK evidence. Recently, Ghafran and Yasmin (2018) examined the relationship between audit committee chair and financial reporting timeliness on the largest 350 companies listed on the LSE, with no reference to any past UK studies in their literature review. Habib et al. (2019) and Durand (2019) conducted a meta-analysis on the determinants of audit report lag across 59 published studies with cut-off date of 31st May 2017 and 46 published studies spanning the period from 1975 to 2017 respectively; surprisingly, there was no single one of those published studies that investigated UK context. Similarly, no UK studies were included in the synthesis examination of the international literature on the determinants of audit report lag conducted by Abernathy et al. (2017) when they reviewed past studies published between 2004 and 2010 covering 97 study-years of companies across the world.

Evidently, there is a scarcity of past empirical studies on UK larger companies listed on the LSE let alone the SMEs. Such scarcity has motivated this study to focus on the smaller listed companies as generalisation of findings from past studies on larger companies might not be appropriate (Ghafran and Yasmin, 2018), and especially in view of the potential distinct corporate governance mechanisms adopted by SMEs. The institutional setting for this study is AIM (formerly known as Alternative Investment Market) listed companies that are dominated by SMEs, a junior market of the LSE that is lightly regulated with distinct corporate governance mechanisms as compared to larger companies on the Main Market of the LSE. For example,

the formation of audit committee is a voluntary compliance as AIM companies are not legally bound to comply with the provisions of The UK Corporate Governance Code while retention of a Nomad and a broker at all times is a compulsory compliance (LSE: AIM Rules for Companies, 2021). Thus far, AIM companies have attracted relatively little research attention (e.g., Mallin and Ow-Yong, 1998; Mallin and Ow-Yong, 2008; Farag et al., 2014), particularly on the external audit aspects (e.g., Clatworthy and Peel, 2007; Xue and O'Sullivan, 2023). Mallin and Ow-Yong (1998; 2008) examined the corporate governance aspects of AIM companies while Farag et al. (2014) investigated the inter-relationship between corporate governance, venture capital ownership, and financial performance in AIM companies. On the other hand, Clatworthy and Peel (2007) examined the effect of corporate status on statutory audit fee of UK quoted companies (i.e., companies on Main Market, AIM, and Ofex) and unquoted companies. Most recently, Xue and O'Sullivan (2023) examined the impact of risk, corporate governance and auditor size on the determinants of audit fees of largest AIM companies. The absence of research interest could be due to lack of readily available data on databases that makes the manual data collection from the companies' annual reports a tedious process.

5.1.3. Objectives of this study

This study aims to investigate the determinants of audit report lag of the AIM SMEs of the LSE. This study focuses on the potential determinants of audit report lag from the perspective of corporate governance mechanism of the AIM SMEs as well as the effect of auditor-client negotiations by the AIM SMEs. The research questions for this study are as follows:

Research question 1: What is the relationship between the internal governance mechanism and the audit report lag of AIM SMEs?

Research question 2: What is the relationship between the external governance mechanism and the audit report lag of AIM SMEs?

Research question 3: What is the relationship between the auditor-client negotiations and the audit report lag of AIM SMEs?

Of particular interests to this study are the existence of audit committee and the CEO duality as the proxies for the internal governance mechanism whilst the retention of Nomad and broker from different firm or the retention of Nomad and broker from the same firm as the proxy for the external governance mechanism of the AIM SMEs. Both the directors and Nomad are the key participants in the corporate governance mechanism of AIM companies in which the directors, such as audit committee and CEO, set up the internal governance structure with sufficient appropriate procedures, resources and controls, and the Nomad, who must be a firm or a company that practised corporate finance, and must be approved and licensed by the LSE, provides the advisory and monitoring functions under the external governance structure (Mallin and Ow-Yong, 1998), and in some cases, the Nomad is also the appointed broker. On the other hand, this study uses the level of discretionary accruals and issuance of modified audit report as the proxies for auditor-client negotiations by AIM SMEs to examine their impact on the audit report lag. This study aims to examine how the smaller listed companies with lesser accounting resources react to the auditor-client negotiation process compared to larger listed companies. Hypotheses of this study have been developed to address the above research questions; details of which are discussed under section 5.2 covering the fundamental concepts, theoretical frameworks, empirical studies, and research gaps.

5.1.4. Main findings of this study

Apparently, the audit report lag of AIM SMEs is explained by the level of auditor-client negotiations and not by the corporate governance characteristics adopted in this study, which implies that the financial reporting timeliness is not under the focal attention of the appointed agents and stewards of AIM SMEs. The main findings of this study are as follows.

Firstly, this study reveals that the existence of audit committee in an AIM SME does not affect the extent of audit report lag, which could potential suggest that the voluntary formation of audit committee by an AIM SME is limited to favorable image value that does not contribute to the monitoring and enhancement of financial reporting quality.

Secondly, an AIM SME with CEO duality reported shorter audit report lag but the result is not statistically significant.

Thirdly, an AIM SME with NomadBro reported shorter audit report lag but the result is not statistically significant.

Fourthly, an AIM SME with higher discretionary accruals experienced longer audit report lag, which could potentially signify that more times are required for auditor-client negotiations during the statutory audit among the statutory auditor and directors attempting to discuss, negotiate, and resolve the differing preferences and disagreements on contentious accounting issues.

Finally, an AIM SME receiving modified audit report experienced longer audit report lag, which could also potentially signify that more times are required for auditor-client negotiations to address their misalignment arising from disagreement and conflict of opinion.

5.1.5. Contributions of this study

This study contributes to the existing literature on the determinants of audit report lag as follows.

Firstly, to the best of my knowledge, this is the first study that focuses on AIM SMEs to determine the extent of audit report lag in addressing financial reporting timeliness of smaller listed companies. The findings expose, from the corporate governance perspective, the passive roles played by the Nomad, the unique feature of AIM companies, and the voluntary formation of audit committee of AIM companies, in enhancing the financial reporting timeliness of AIM SMEs.

Secondly, the sample set of AIM companies represents a crucial yet relatively under-researched area. AIM seems attractive to younger companies from the UK and overseas (Farag et al., 2014), and is one of the five out of eleven second-tier stock markets in existence, which have been launched by the stock exchanges of the four largest European economies, namely Germany, France, Italy, and the UK (Vismara and Paleari, 2012). AIM is the world's leading growth market and it has already lived through more than two complete economic cycles since its launched in 1995 by the LSE for emerging or smaller companies.

Thirdly, this study provides new empirical evidence for the determinants of audit report lag for SMEs, an important sector of economies around the world. It has been reported that there were around 1,250 small and mid-sized quoted companies in the UK, representing 93% of all quoted companies, employing approximately 3 million people, representing 11% of private sector employment in the UK, and contributed over £25 billion in annual taxes (Quoted Companies Alliance and UHY Hacker Young Associates, 2020), and there were 99% of UK businesses are SMEs and SMEs accounted for 61% of UK employment and 51% of business turnover as of 1st January 2022 (House of Commons Library, 2022). This study extends the UK evidence on the audit report lag as evidently there is a scarcity of past empirical studies on UK larger companies listed on the LSE let alone the SME.

Finally, this study provides empirical evidence in supporting Salterio (2012)'s suggestion to repurpose audit report delay as a measure of probability that auditor-client negotiations took place during the statutory audit. The findings indicate to directors of AIM SMEs that they should reduce the application of discretionary accruals to improve the financial reporting timeliness.

5.1.6. Structure of this study

The remainder of this chapter is organised as follows. The second section contains the literature review, which is made up of the background to this study, the key concepts and theoretical framework underpinning this study, the analysis of past studies in identifying the research gaps, and the formulation of hypotheses for this study. Research methodology and data are established in the third section. The fourth section critically assesses and discusses the empirical results. Finally, the fifth section concludes with summaries of key issues together with limitations of this study and recommendations for future research.

5.2. Literature review

This section provides background to this study and presents a review of the key concepts and theories together with the related empirical studies, which identify the research gaps, inform the research questions, and facilitate the design of testable hypotheses for this study.

5.2.1. Background to this study

Financial reporting timeliness has been receiving focal attention from corporate stakeholders and standard setters over time and particularly so upon the exposure of a series of accounting scandals involving earnings manipulation and fraudulent financial reporting (e.g., Enron in the US; Parmalat in the Europe; Carillion in the UK). Corporate stakeholders especially the shareholders have become more cautious and have increasingly demanded for reliable financial information to be made available on a timely manner in reducing information asymmetry and in facilitating informed investment decisions. Delay in financial reporting could be damaging for a company as it might signal to the stakeholders that there is an issue with the financial statements or there is potential bad news from the company, which might affect the firm value. Timeliness is one of the enhancing qualitative characteristics for useful financial information under the Conceptual Framework for Financial Reporting (IASB, 2018)³⁰ while audited financial statements increase the credibility of financial information (FRC: ISA (UK) 200, 2020).

5.2.2. Relationship of statutory audit and audit report lag

Statutory audit is a financial statement audit that is conducted in compliance with the law by an independent firm of auditors (i.e., statutory auditor), appointed by the shareholders of a company, on the financial statements prepared by the board, and expressed an opinion

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³⁰ The conceptual framework sets out a comprehensive set of concepts for financial reporting, standard setting, guidance for preparers in developing consistent accounting policies and assistance to others in their efforts to understand and interpret the standards. The IASB issued the revised Conceptual Framework for Financial Reporting on 29th March 2018. The revised version includes comprehensive changes to the previous versions issued in 1989 and partly revised in 2010. The Conceptual Framework for Financial Reporting (2018) is arranged in eight chapters with the objective of financial reporting and the qualitative characteristics of useful financial information are described under chapter 1 and chapter 2 respectively. There are no fundamental changes for both chapters during the revision, other than clarity on few concepts and workings.

therefrom. As the basis of the auditor's opinion, the provisions of ISA (UK) 200 (FRC, 2020) require the auditor to obtain sufficient appropriate audit evidence in providing reasonable assurance about whether the financial statements as a whole are free from material misstatements, whether due to fraud or error. The date of auditor's report shall be no earlier than the date on which the auditor has obtained sufficient appropriate audit evidence to base the auditor's opinion on the financial statements, including evidence that all components of financial statements have been prepared and of the directors' assertation that they have taken responsibility for those financial statements. (FRC: ISA (UK) 700, 2020).

Firstly, I examine the concepts of financial reporting and financial reporting timeliness. The objective of financial reporting is to provide financial information that is useful to users in making decisions relating to providing resources to the entity (IASB: Conceptual Framework for Financial Reporting, 2018). The users of financial reports need information to help them assess management's stewardship. Financial information must be relevant and must faithfully represent its substance in order to be useful. Relevance and faithful representation are the fundamental qualitative characteristics of useful financial information. In enhancing the usefulness of information, the financial information should contain the four qualitative characteristics of comparability, verifiability, timeliness, and understandability.

Listed companies are required to publish their financial information on a regular basis in addition to the annual report that contained the complete sets of financial statements. The quarterly or half-yearly interim reports published by the listed companies are normally unaudited while the yearly financial statements included in the annual report must be audited by the external auditor and accompanied by the auditor's report issued by the statutory auditor to the shareholders of the company. The financial reporting timeliness for both interim reports and annual report are vital to shareholders in facilitating their informed judgement and decision about their investments over time. In general, timely financial reporting adds value to the financial information content while unduly delayed financial reporting impairs the relevance of financial information content and consequently affects the firm value (Schwartz and Soo, 1996; Whitworth and Lambert, 2014). Therefore, it is the responsibilities of both directors and statutory auditor as the agents of the shareholders to discharge their responsibilities in a reliable and timely manner.

This study focuses on the financial reporting through annual report that contained the audited financial statements and auditor's report. Acknowledging the importance of financial reporting timeliness, regulators have established filing requirements including the mandatory time period for which companies are required to make available the annual reports. In the UK, in accordance with the provisions of Companies Act 2006, all companies must file annual accounts with the Companies House within six months and nine months from the end of a financial year for a public company and a private company respectively. Failure to deliver accounts on time is a criminal offence and the law also imposes a civil penalty for late filing of accounts on the company. Every company must send a copy of its annual accounts for each financial year to its shareholders, and a public company must lay its accounts before its members at an AGM.

In addition to the provisions of Companies Act 2006, AIM companies are also required to comply with the listing rules. The financial reporting rules for AIM companies are set out in the AIM Rules for Companies. All AIM companies are required to publish their half-yearly reports within three months of the period end and their audited accounts within six months of the financial year end (LSE: AIM Rules for Companies, 2021).

Secondly, I focus on the nature, timing, and extent of financial statement audit. In order to form an audit opinion, the statutory auditor would develop an audit plan establishing the nature, timing, and extent of audit procedures through the conduct of compliance and substantive tests to obtain sufficient appropriate audit evidence that would reduce the audit risk, namely inherent risk, control risk, and detection risk, to an acceptable low level (FRC: ISA (UK) 200, 2020). If the client's financial reporting quality is superior, the statutory auditor can place greater reliance on the internal control system and reduce the scope and extent of substantive tests because of the lower level of inherent and control risks, which resulting to shorter audit report lag (e.g., Ghosh and Tang, 2015). In contrast, high audit risk will inevitably lead to increased audit efforts in performing substantive tests as well as devoting more time in auditor-client negotiations, which resulting to longer audit report lag (e.g., Chan et al., 2016). These plausible empirical results inform that factors affecting audit risks are in turn the determinants of audit report lag.

Thirdly, I explore the evidence on auditor-client negotiations. Gibbins, Salterio and Webb (2001) revealed that auditor-client negotiations occur on a regular basis concerning the client's

financial reporting whereby both statutory auditor and client are jointly interested in the client's financial statements and would usually avoid modified audit report. The accounting issues, such as applications of external standards and regulations, and difference in auditor-client preferences, that subject to the auditor-client negotiations were identified from 93 experienced audit partners from the Canadian offices of six international accounting firms through the duly completed questionnaires. 49% of those audit partners responded that those accounting issues were identified by auditors during the statutory audit while 23% of them said that the client identified those accounting issues for negotiations. The negotiation of accounting issues took much time and could end up with agreement somewhere between the original positions (41%), or agreement on auditor's original position (32%), as reported by the sampled audit partners. Consequently, 96% of the clients received an unqualified audit opinion and the statutory auditor was re-appointed 83% of the time.

A company's audited financial statements emerge from the interactions between the client and statutory auditor. Effective two-way communication is important in assisting the auditor and those charged with governance to oversee the financial reporting process in understanding matters related to the audit in context and in developing a constructive working relationship while maintaining the auditor's independence and objectivity (FRC: ISA (UK) 260, 2020). These interactions could involve auditor-client negotiations particularly when client applies aggressive financial reporting. Auditors were alerted by the Auditing Practices Board (2001) about the potential threat that increasing commercial and economic pressures may cause aggressive earnings management, and urged to communicate openly and frankly with those charged with governance. On the other hand, Beattie, Fearnley and Brandt (2004) interviewed audit partners and finance directors of a varied group of six major UK listed companies, who had experienced audit interactions involving significant accounting issues that led to negotiations. They then developed a grounded theory model of auditor-client negotiations that influence the quality of financial reporting outcome.

During the statutory audit, there will be differing preferences and disagreements among the statutory auditor and client on accounting issues that warrant the occurrence of auditor-client negotiations. The outcome of the auditor-client negotiations could end up with mutual agreement or no agreement with their related consequences. Any disagreement could potentially cause to the issuance of modified audit report or the termination of auditor-client relationship through auditor resignation or removal. Needless to say, the auditor-client

negotiations would be time consuming and would delay the finalisation of auditing process and accordingly prolong the audit report lag. Salterio (2012) suggested to repurpose audit report delay construct as a measure of probability that auditor-client negotiations took place during the statutory audit and hence facilitate research in an archival setting.

Fourthly, I examine the timing in dating the auditor's report. An AIM company is required to prepare, publish, and send to shareholders the audited annual accounts within six months after the end of the period to which they relate; such accounts must be prepared in accordance with International Accounting Standards, or certain GAAP, or the accounting and company legislation and regulations that are applicable in its country of incorporation, where appropriate (LSE: A Guide to AIM, 2015). The electronic copy of annual audited accounts must be made available on that AIM company's website pursuant to Rule 26 of the AIM companies and must be sent to the LSE (LSE: AIM Rules for Companies, 2021). The date of auditor's report shall be no earlier than the date on which the auditor has obtained sufficient appropriate audit evidence to base the auditor's opinion on the financial statements, including evidence that all components of financial statements have been prepared and of the directors' assertation that they have taken responsibility for those financial statements. (FRC: ISA (UK) 700, 2020).

The issuance of timely auditor's report could signify the level of audit quality (e.g., Deis and Giroux, 1996; Leventis and Caramanis, 2005). Statutory auditors are expected to obtain reasonable assurance³¹ about whether the financial statements as a whole are free from material misstatement that would reduce the audit risk to an acceptably low level (FRC: ISA (UK) 200, 2020). They are expected to conduct and complete the audit without delays in accordance with the requirements of the applicable laws, standards, and professional codes of ethics. Nevertheless, the levels of financial reporting quality presented by the directors as well as the auditor-client negotiations on contentious accounting issues would determine the extent of audit report lag. The stronger the corporate governance mechanisms of a company, the stronger the internal control systems, which resulting to lower business risk as well as audit risk. Sultana et al. (2015) and Ghafran and Yasmin (2018) provided evidence that effective practice and compliance of audit committee mechanisms improve financial reporting timeliness as well as

³¹ Reasonable assurance is a high level of assurance but not an absolute level of assurance because there are inherent limitations of an audit (FRC: ISA (UK) 200, 2020).

audit report lag. Therefore, shorter audit report lag could signify effective corporate governance mechanisms as well as audit efficiency.

5.2.3. Theoretical framework

The "triangle relationship" among the shareholders, directors, and statutory auditor of a company portrayed in the agency theory, stewardship theory, and signalling theory are the cornerstone in determining the audit report lag. These underpinning theories appear to overlap with one another in some contexts and are further illustrated as follows.

The principal-agent relationship exists between the shareholders, who are the principals, and the directors, who are the agents, within the separation of ownership and management in a company (Jensen and Meckling, 1976). In addition, the shareholders appoint another agent, i.e., the statutory auditor, in accordance with the provisions of the company law to perform audit on the financial statements prepared by the directors to ensure that their interests are well protected. Clearly, the directors are responsible for the integrity of corporate governance and audit quality amid the information asymmetries and self-interest tendencies under the monitoring mechanism of such principal-agent relationship.

The appointment of non-executive directors, the formation of audit committee consists of majority of non-executive directors, and the separate individual holding the position of board chairman and CEO are some of the good mechanisms recognised within the principles of corporate governance. In order to discharge their agency role to the shareholders and at the same time to protect their self-interest, the audit committee members are expected to demand for a timely audit to reduce the information asymmetry between directors and shareholders, and as a monitoring mechanism to protect their reputation. Empirical results found that the existence of audit committee (Afify, 2009) and effective audit committee characteristics (e.g., Sultana et al., 2015; Ghafran and Yasmin, 2018) improved the financial reporting timeliness with shorter audit report lag. On the other hand, the check and balance monitoring structure established through board leadership with two separate head would enhance the internal control system resulting to lower control risk and lower audit risk (e.g., Tsui et al., 2001). Afify (2009) found that CEO cum chairman tended to withhold unfavourable information causing the delay of financial reporting process and increase the audit report lag.

Stewardship theory is one of the theoretical foundations of corporate governance that portrays directors as the steward of a company, who are accountable to the shareholders and would always act in the best interest of the shareholders even in the absence of the monitoring mechanism (Donaldson and Davis, 1991). In other word, the shareholders of a company appoint the directors and entrust them with the stewardship responsibility to exercise transparent and accountable corporate governance mechanisms in maximising the shareholders' wealth.

In discharging their stewardship responsibility, an audit committee consists of majority non-executive directors would ensure an internal control system that would lower the inherent and control risks is properly implemented within the company. Such proper system would reduce the audit work (e.g., Goddard and Masters, 2000) and resulting to a shorter audit report lag (e.g., Ghosh and Tang, 2015). On the other hand, Donaldson and Davis (1991) argued that shared incumbency of the roles of board chairman and CEO maximised the shareholders' interests because CEOs are good stewards who strive to act in the best interests of their stakeholders and they believe that meeting organisational goals would be meeting their personal goals. Hence, CEO duality enhanced the internal control system within the company, which in turn would reduce the audit work (e.g., Zaman et al., 2011) and could shorten the audit report lag. Similarly, the Nomad playing the external governance role appeared to exert stronger monitoring governance mechanism when holding the dual role of Nomad cum broker of AIM companies (Mallin and Ow-Yong, 1998). However, no prior study has been conducted to evaluate the relationship between the role of NomadBro and the audit report lag.

The signalling theory predicts that the directors could minimise information asymmetry arising from the existence of separation of ownership and management in a company by providing relevant information to shareholders on a timely basis. Chambers and Penman (1984) reported that market interpreted firms that missed their expected reporting dates to have bad news. Obviously, financial reporting timeliness could be perceived as a signal of quality information and could prevent suspicion of material information concealment (Asthana, 2014). On the other hand, past studies demonstrated that audit committee could constrain opportunistic reporting and is associated with more credible reporting (e.g., DeFond and Jiambalvo, 1991; Dechow et al., 1996); therefore, the existence of audit committee could signal proper implementation of corporate governance mechanism within a company, resulting in shorter audit report lag (Afify, 2009).

5.2.4. Empirical studies, research gaps, and hypotheses development

The determinants of audit report lag have been well-researched in developed as well as developing countries, such as in the US (Bamber et al., 1993; Schwartz and Soo, 1996; Lee, Mande and Son, 2009), Australia (Sultana et al., 2015), New Zealand (Carslaw and Kaplan, 1991; Knechel, Sharma and Sharma, 2012), UK (Ghafran and Yasmin, 2018), China (Chan et al., 2016; Alkebsee, Habib, Huang and Tian, 2022), Egypt (Afify, 2009; Khlif and Samaha, 2014), Greece (Leventis et al., 2005), Hong Kong (Ng and Tai, 1994), Bangladesh (Imam, Ahmed and Khan, 2001), Malaysia (Kaaroud, Ariffin and Ahmad, 2020), and Vietnam (Lai, Tran, Hoang and Nguyen, 2020). Past studies revealed that there were many variables that can influence the extent of audit report lag, which include the client-specific characteristics, corporate governance characteristics and auditor-specific characteristics.

The forthcoming sub-sections review the past empirical studies, which facilitate the identification of the research gaps and the formulation of hypotheses for this study.

5.2.4.1. Existence of audit committee

An audit committee is a sub-committee within the board that made up majority of non-executive directors. It is essentially responsible for hiring, firing, and compensating the statutory auditor, as well as addressing any disputes with the statutory auditor (The UK Corporate Governance Code, 2018). Undoubtedly, the existence of audit committee could enhance the relevance and faithful representation of financial information. In other words, the audit committee serves as a communication channel between the board and the statutory auditor to ensure high quality of financial reporting and audit.

DeFond and Jiambalvo (1991) and Dechow et al. (1996) found that firms that manipulated earnings were less likely to have audit committees, which are consistent with the notions that audit committee could constrain opportunistic reporting and is associated with more credible reporting. In contrast, Beasley (1996) found no association between the existence of audit committee and financial statement fraud while Menon and Williams (1994) revealed that companies might form audit committees for their image value and not actually relied on the audit committees for monitoring and enhancement of financial reporting quality.

Sultana et al. (2015) examined the relationship between audit committee characteristics and audit report lag using a pooled-sample of 494 firm-year observations of Australian Securities Exchange listed and incorporated firms across the period 1st January 2004 to 31st December 2008. They found that the audit committee of Australian firms were more effective when their audit committee members have financial expertise, prior audit experience, and are independent of management and, in turn, were able to improve the financial reporting timeliness with shorter audit report lag. On the other hand, focusing on the characteristics of audit committee chair, Ghafran and Yasmin (2018) investigated 987 firm observations of UK FTSE350 companies between 2007 and 2010, and suggested that audit committee chairs with experiential and monitoring expertise could shorten the audit report lag through effective governance mechanisms, but they found no evidence that the audit committee chairs with financial expertise impacted the extent of audit report lag. In the more recent study, Alkebsee et al. (2022) examined Chinese listed companies during the period 2010-2018 and revealed on the effectiveness of a gender-diverse audit committee in shortening the audit report lag.

AIM companies can choose to form an audit committee or otherwise under the simplified regulatory environment specifically designed for the AIM market. Formation of audit committee is a voluntary process for AIM companies; therefore, this study focuses on the existence of audit committee instead of the characteristic of audit committee, as not all AIM companies under review have formed audit committee. This phenomenon was tested by Afify (2009) on 85 Egyptian companies listed on the Cairo and Alexandria Stock Exchange for year 2007, which revealed that both board independence and existence of audit committee were associated with shorter audit report lag. Typically, non-executive directors made up the majority members of an audit committee, who have no participation in the internal decisions of the company and they are expected to demand for a timely audit to reduce the information asymmetry between directors and shareholders, and as a monitoring mechanism to protect their reputation. Therefore, this study hypothesises as follows:

H1: There is a negative relationship between the existence of audit committee and audit report lag, ceteris paribus.

5.2.4.2. Chief executive officer ("CEO") duality

CEO duality exists when the role of board chairman and CEO is held by the same director whereas no CEO duality exists when the role of board chairman and CEO is held by two separate directors. The UK Corporate Governance Code (2018) specifies that a clear division of responsibilities should exist whereby the chairman and the CEO should not be the same individual for a check and balance monitoring structure. Tsui et al. (2001) revealed that companies without CEO duality has stronger internal control system and lower control risk. Conversely, Zaman et al. (2011) revealed that CEO duality structure benefitted from unity in command that enhances the internal control system and lower the control risk of companies.

Afify (2009) found that the dominance over the board with CEO duality could encourage opportunistic actions that increase the audit risk and result to a longer audit report lag for Egyptian listed companies. Habib (2015) also revealed such positive association when examining 9,969 firm-year observations from 2003 to 2012 when a new set of Chinese accounting standards introduced in 2007. Nevertheless, Khlif and Samaha (2014) and Sultana et al. (2015) found that CEO duality has no impact on the audit report lag for Egyptian and Australian listed companies respectively. Khlif and Samaha (2014) examined 244 firm-year observations over the 2007-2010 period on Egyptian non-finance firms considering only the number of days between the date when the audit firms begin their audit and the date of the audit report, which more accurately reflected the audit efficiency.

Consistent with the good corporate governance principle in having the board leadership with separate individuals because CEO duality might substantially weaken the effective monitoring structure, this study hypothesises as follows:

H2: There is a positive relationship between the CEO duality and audit report lag, ceteris paribus.

5.2.4.3. Nominated adviser cum broker ("NomadBro")

The retention of Nomad at all times is the unique feature of AIM companies governed by the more flexible regulations (LSE: AIM Rules for Companies, 2021). At the same time, AIM

companies must also always retain a broker; such position can be held by the Nomad or a different party (LSE: AIM Rules for Companies, 2015). A Nomad is a full-time corporate finance adviser approved and licensed by the LSE, who is responsible for advising and guiding an AIM company on its responsibility in relation to admission to the AIM market as well as its continuing obligations once on the market (LSE: AIM Rules for Nominated Advisers, 2019). The Nomad plays multiple roles as gatekeeper, adviser, and regulator of AIM companies; and an AIM company should discuss with its Nomad and seek guidance from its Nomad on which corporate governance guidelines it will seek to follow and implement. Mallin and Ow-Yong (1998) revealed that AIM companies which engaged NomadBro were more likely to exhibit stronger corporate governance than Nomad only companies possibly due to the reputational effect, as NomadBro firms have more to lose if their AIM client companies collapse; however, such reputational effect did not exist in their later study relating to corporate governance disclosure level by AIM companies (Mallin and Ow-Yong, 2008).

Reputation is the main "asset" of a business and particularly so for a professional firm like the Nomad. In the absence of the past empirical evidence in this area, accordingly, this study adopts the effect of the potential reputational loss put forward by Mallin and Ow-Yong (1998) and expects the NomadBro would advise their clients to implement and maintain stronger internal control system that reduces control risk and facilitates timely reporting. The unique feature of AIM companies engaging NomadBro or Nomad only in accordance with the LSE rules is tested in this study for the first time using the proposed audit report lag model with the following hypothesis:

H3: There is a negative relationship between the retention of NomadBro and audit report lag, ceteris paribus.

5.2.4.4. Discretionary accruals

During the audit, the statutory auditor would assess the level of audit risk in order to design the appropriate level of audit tests to achieve a desirable level of overall audit risk (Hogan and Wilkins, 2008). The client's application of discretionary accruals is one of the dimensions of financial reporting quality that would affect audit risk as they are prone to measurement errors, omissions, or managerial biases (Ghosh and Tang, 2015). The existence of discretionary

accruals may reflect opportunistic earnings management or communication of value-relevant information, which would pose higher audit risk and require more audit testing to reduce the audit risk to an acceptable level for the statutory auditor in forming their opinion (Gul, Chen and Tsui, 2003). Inevitably, such accounting approaches and disagreement among the statutory auditor and client would involve lengthier auditor-client negotiations that could prolong the audit report lag (Chan et al., 2016).

Using 22,492 firm-year observations of 5,298 firms, Asthana (2014) presented evidence on the abnormal audit delays, earnings quality, and firm value in the US. Asthana (2014) used a first stage model to explain the determinants of audit delay and thereafter used the unexplained delay from the first stage in the second stage model to test the association with earnings quality. The discretionary accruals were found to be positively associated with the abnormal audit delay while the abnormal audit delay was generally associated with lower earnings quality. On the other hand, Harjoto, Laksmana and Lee (2015) and Habib (2015) found that discretionary accruals significantly increased the extent of audit report lag but it lost its impact when corporate governance variables were included in the model (Habib, 2015).

Ghosh and Tang (2015) suggested that superior reporting quality would lower the audit risk as well as the need for greater audit effort when they examined 1,182 unique non-family firms (6,393 observations) and 600 family firms (2,798 observations) of largest industrial firms in the US over the period 2003 to 2010. They used audit report lag as a proxy for audit effort and found that audit report lag was shorter for family firms; however, they found no significant relationship between discretionary accruals and audit report lag. Similarly, Whitworth and Lambert (2014) and Baatwah, Salleh and Stewart (2019) revealed that the magnitude of discretionary accruals has no impact on the audit report lag.

Not many past studies have examined the relationship between the discretionary accruals and audit report lag. During their respective meta-analysis on the determinants of audit report lag, Habib et al. (2019) examined 59 published studies with cut-off date of 31st May 2017 and did not identify discretionary accruals as the key independent variable while Durand (2019) examined 46 published studies spanning the period from 1975 to 2017 and only identified two analyses using discretionary accruals and one analysis using total accruals as the independent variable. On the other hand, Sultana et al. (2015) called for future research to examine the association between audit report lag and earnings management. In view of client might spend

more time to incorporate discretionary accruals into accounts while the existence of discretionary accruals would increase the audit risk that requires more audit testing and lengthier auditor-client negotiations, the study hypothesises as follows:

H4: There is a positive relationship between the level of discretionary accruals and audit report lag, ceteris paribus.

5.2.4.5. Modified audit report

The output of a financial statement audit is the issuance of an auditor's report by the statutory auditor to the shareholders to be included in the annual report, expressing their opinion on the financial statements prepared by the directors. There are five broad types of audit opinion: unmodified opinion (FRC: ISA (UK) 700, 2020)³², unqualified opinion with emphasis of matter paragraph (FRC: ISA (UK) 706, 2018)³³, qualified opinion (FRC: ISA (UK) 705, 2018), adverse opinion (FRC: ISA 705, (UK) 2018), and disclaimer of opinion (FRC: ISA (UK) 705, 2018)³⁴. Consistent with prior literature, this study uses the term modified audit report to represent non-standard audit opinion that includes unqualified audit opinion with emphasis of matter paragraph, qualified opinion, adverse opinion, and disclaimer of opinion (e.g., Habib, 2013; Lennox, 2000; Lennox, 2003; Chan et al., 2016).

Bamber et al. (1993) examined 972 US observations during 1983-1985 and found that companies received modified audit report tended to have longer audit report lag. Chan et al. (2016) supported such positive association and they further found that firms with long audit report lag were more likely to receive modified audit reports in subsequent periods. In contrast,

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³² Unmodified opinion is the opinion expressed by the auditor when the auditor concludes that the financial statements are prepared, in all material respects, in accordance with the applicable financial reporting framework (FRC: ISA (UK) 700, 2020).

³³ In line with the requirement of Section 495(4) of the UK Companies Act 2006, the ISA (UK) 706 (2018) requires auditor to include an emphasis of matter paragraph in the auditor's report if the auditor considers it necessary to draw users' attention to a matter presented or disclosed in the financial statements that would not be required to modify the opinion in accordance with ISA (UK) 705 (2018).

³⁴ The ISA (UK) 705 (2018) establishes three types of modified opinions, namely, a qualified opinion, an adverse opinion, and a disclaimer of opinion. The decision regarding which type of modified opinion is appropriate depends upon the materiality and pervasiveness of the effects of the matter on the financial statements.

Ashton, Graul and Newton (1989) and Jaggi and Tsui (1999) found negative relationship whereby Jaggi and Tsui (1999) suggested that additional audit tests would not be required when the evidence for a modified audit report is overwhelming. On the other hand, Ng and Tai (1994) and Sultana et al. (2015) found no relationship between the issuance of modified audit report and audit report lag.

The issuance of modified audit report might reflect the existence of auditor-client misalignment arising from disagreement and conflict of opinion. Depending on the severity of auditor-client misalignment, more extensive audit procedures are required as well as more lengthy discussions and negotiations are expected between both parties towards finalising the audit (e.g., Bamber et al., 1993; Salterio, 2012). Therefore, this study hypothesises as follows:

H5: There is a positive relationship between the modified audit report and audit report lag, ceteris paribus.

5.2.4.6. Auditor size

Big 4 accounting firms are expected to employ qualified, experienced, and skilful professionals, who are capable to apply more advanced technologies in completing the audit quicker and thus shorten the audit report lag (Ng and Tai, 1994). On the other hand, Big 4 accounting firms are more independent and have more to lose in litigations (DeAngelo, 1981); hence, they are more likely to conduct more comprehensive audit testing and engage in lengthy negotiation with their clients on conflicting issues, which will increase the audit report lag.

Past studies found that companies audited by larger audit firms have shorter audit report lag (e.g., Leventis et al., 2005; Ghafran and Yasmin, 2018) while Al-Ajmi (2008) and Afify (2009) found no significant relationship. On the contrary, Imam et al. (2001) reported that Bangladeshi listed companies audited by international audit firms experienced longer audit report lag when they examined 115 listed companies on the Dhaka Stock Exchange for the year ended 1998. Given that Big 4 accounting firms have more relevant resources for deployment, this study controls for the negative effect of auditor size on the audit report lag.

5.2.4.7. Statutory auditor switching

A new statutory auditor requires start-up time to gain a better understanding of their clients' operations and internal control systems in the initial year/s of audit engagement and to deliver a high level of audit quality (Oxera, 2006). Schwartz and Soo (1996) examined the association between the timing of statutory auditor switching and audit report lag based on 1,800 US firm-year observations over 1988 to 1983 period, and they found that firms that switched statutory auditor early in the financial year experienced shorter audit report lag while firms that switched statutory auditor late in the financial year experienced longer audit report lag. Some past studies (e.g., Ng and Tai, 1994; Leventis et al., 2005) found no relationship between the statutory auditor switching and audit report lag while Mao and Yu (2015) found negative relationship. Nevertheless, most past studies have revealed fairly consistent evidence that statutory auditor switching increased the audit report lag (e.g., Ettredge, Li and Sun, 2006; Harjoto et al.2015; Chan et al., 2016) Therefore, this study controls for the positive effect of statutory auditor switching on the audit report lag.

5.2.4.8. Statutory audit fee

Statutory audit fee is part of the agency costs incurred for remunerating the statutory auditor for services rendered on the audit of the financial statements in accordance with the requirements of the company law, and as a monitoring device that the shareholders could rely on to mitigate the potential loss arising from the information asymmetries and conflict of interests between the directors and shareholders. The issuance of a timely auditor's report could involve additional audit costs, such as concentrated audit resources and overtime. Such costs could be compensated with higher statutory audit fee for the perceived audit quality through financial reporting timeliness. Leventis et al. (2005) reported negative association between the level of statutory audit fee and the extent of audit report lag based on 171 companies listed on the Athens Stock exchange as of 31st December 2000. On the contrary, Chan et al., (2016) found that higher statutory audit fee was associated with longer audit report lag arising from more complex audit that required more time and effort of the audit team, which supported evidence revealed by Ettredge et al. (2006) and Mao and Yu (2015). This study controls for the positive effect of statutory audit fee on the audit report lag.

5.2.4.9. Non-audit fee

In addition to the statutory audit services, the statutory auditors also provide the non-audit services, such as tax advisory services, corporate finance consultation, and other assurance services, to their clients. The statutory auditor that provides both audit and non-audit services to a client could benefit from knowledge spillover that reduces the audit report lag (Knechel and Payne, 2001). On the other hand, the fee dependence could impair the auditor independence, which made them more likely to meet client's request for a timeliness audit (Knechel et al., 2012).

Using a proprietary database containing 226 audit engagements from an international public accounting firm, Knechel and Payne (2001) found the existence of synergistic relationship between the provision of management advisory services and statutory audit services resulted to shorter audit report lag but the provision of tax services extended the audit report lag, which potentially reflected added complexity with contentious tax issues. Lee et al. (2009) provided evidence that the provision of non-audit services could increase auditor learning resulting to shorter audit report lag when they examined 18,473 firm-year observations from 2000 to 2005 available on Audit Analytics. Similarly, Knechel et al. (2012) revealed the presence of knowledge spillover based on New Zealand data. This study controls for the negative effect of non-audit fee on the audit report lag.

5.2.4.10. Client size

Larger companies are more well established and equipped with resources that could incorporate stronger internal control systems within their rather complex financial statements, which would enable them to finalise their financial statements quicker for audit. Moreover, stronger internal control systems would reduce audit risk and accordingly reduce audit tests. As such, it is expected that larger companies have shorter audit report lag. On the other hand, the larger the company, the higher the potential principal-agent misalignment. A timely issuance of annual report would combat such misalignment.

Ng and Tai (1994) found that larger companies have shorter audit report lag when examined a sample of 292 and 260 listed companies on the Hong Kong Stock exchange for year 1991 and

1990 respectively. Their results were further supported by Schwartz and Soo (1996), Ettredge et al. (2006), and Sultana et al. (2015), among others. On the other hand, some past studies found no relationship between client size and audit report lag (e.g., Bamber et al., 1993; Khlif and Samaha, 2014). Larger companies attract higher analyst scrutiny and press attention in their affairs, which might pressure them to provide a timely publication of annual report as compared to smaller companies. Therefore, this study controls for the negative effect of client size on the audit report lag.

5.2.4.11. Financial condition

Companies that are less profitable, or incurred losses, or highly geared are deemed to encounter higher business and audit risks. Such financial distressed company tended to delay their earnings announcement while statutory auditors tended to undertake greater care and checks in ascertaining the going concern status of those companies, which resulting to longer audit report lag (Carslaw and Kaplan, 1991).

Using 245 and 206 New Zealand public companies for year 1987 and 1988 respectively, Carslaw and Kaplan (1991) found that companies incurred losses have longer audit report lag, which was also evidenced in studies conducted by Schwartz and Soo (1996) and Harjoto et al. (2015), among others, but Leventis et al. (2005) and Ghafran and Yasmin (2018) failed to establish any relationship. Past studies revealed mixed results whereby the high leverage level prolonged the audit report lag (e.g., Mao and Yu, 2015; Ghafran and Yasmin, 2018) while some studies found no relationship (e.g., Owusu-Ansah, 2000; Sultana, et al., 2015) Conversely, Chan et al. (2016) examined 4,025 firm-year observations of companies listed on the Shanghai and Shenzhen Stock Exchanges during 2004 and 2010, and found that high leverage was associated with shorter report lag. They concluded that high leverage companies would attract more monitoring from creditors resulting to lower audit risk.

The financial performance and position of companies have important implications in the extent of audit report lag, this study controls for the financial condition in the audit report lag model with potential positive or negative effect depending on the variable representation for the financial condition.

5.2.4.12. Board independence

The appointment of non-executive directors is one of the corporate governance mechanisms intended to serve as a monitoring device for shareholders to rely upon and hence, mitigating the agency problem. Afify (2009) found that there was a reduction in the extent of audit report lag for companies with a greater percentage of independent board members. On the other hand, some past studies did not detect any evidence that the board independence influenced the audit report lag (e.g., Khlif and Samaha, 2014; Habib, 2015). The non-executive directors are expected to strengthen the corporate governance mechanisms that would potentially associate with lower inherent and control risks, which reduce the overall audit risks and could result to a shorter audit report lag. Therefore, this study controls for the negative effect of board independence on the audit report lag.

5.2.4.13. Research gaps

Past studies have identified various determinants of audit report lag with inconsistent and inconclusive results as summarised in Appendix G. In view of these deficiencies and evident scarcity of past empirical studies on UK companies, this study develops hypotheses to explore the determinants of audit report lag of AIM SMEs in the UK from the perspectives of corporate governance mechanisms and auditor-client negotiations. The roles of audit committee when exists and the CEO duality require further attention due to limited past studies. In addition, this study introduces a new variable, namely NomadBro, to test their potential influential role in determining the audit report lag. The appointment of Nomad is a unique external governance mechanism for the AIM companies, which has yet to be tested under the audit report lag model. On the other hand, this study investigates the occurrence of auditor-client negotiations during the course of statutory audit proxied by the level of discretionary accruals and the issuance of modified audit report. Only a handful of past studies examined the impact of discretionary accruals on the audit report lag while the issuance of modified audit report could further corroborate results of past studies.

5.3. Research methodology and data

This section begins with the illustrations of research philosophy followed by the sample selection and data specific to this study. The model specifications are designed to best suit the research questions together with the variable measurements of this study and are discussed in the subsequent two sub-sections.

5.3.1. Research philosophy

The research philosophy surrounding this study focuses on the reality from a positivist standpoint under objectivism, which is consistent with the research philosophy illustrated under section 3.3.1. This study involves the use of quantitative data collected from the annual reports of AIM SMEs to test the hypotheses developed from existing theories and prior empirical studies using statistical models to investigate the relationship between the audit report lag and the corporate governance mechanisms, and between the audit report lag and the level of auditor-client negotiations.

5.3.2. Sample selection and data

As illustrated under the foregoing section 3.3.2, the adjusted sample for data collection consists of 338 non-financial AIM SMEs with corporate age of at least six years as of 31st December 2015 on the AIM market. For this study, at the end of the data collection process, a further 41 companies are excluded due to missing core data together with another 61 companies with unavailability of annual reports for some of the financial years. In addition, 59 companies are excluded due to insufficient observations needed to generate discretionary accruals. Eventually, the final sample for this study consists of an unbalanced panel data of 1,005 observations for 177 SME non-financial AIM companies (i.e., known as AIM SMEs in this study) with corporate age of at least six years as of 31st December 2015, which contain complete data for four or more consecutive financial years ranging from 2010-2015. The reconciliation of the sample selection is presented in Table 5.1.

This study focuses on 1,005 firm-year observations for the financial periods from 2010 to 2015. All the required data for this study are hand-collected from the respective company's annual

reports downloaded from their company website due to the restricted availability of data for AIM companies on the databases. The use of secondary data available from the companies' published annual reports in this study is consistent with the approach of majority of the past studies (e.g., Ng and Tai, 1994; Ghafran and Yasmin, 2018) with few exceptions using proprietary data (e.g., Ashton et al., 1987; Knechel and Payne, 2001).

Table 5.1: Reconciliation of sample selection for audit report lag study

Adjusted sample for data collection: SME	non-finan	cial AIM	compan	ies	
with corporate age of at least six years as of 31st December 2015					
Less: Further exclusion of SMEs from the	adjusted s	samples			
Due to missing core data for the study					
Due to unavailability of annual reports					
Due to insufficient observations to generate discretionary accruals					
Final sample for the study:					
SME non-financial AIM companies with o	corporate a	age of at l	east		
six years as of 31st December 201	5, which	contain co	omplete		
data for four or more consecutive financial years 2010-2015					
Made up of complete data for the financial	l years 201	10-2015:			
6 consecutive years	143	SMEs	858	observations	
5 consecutive years	11	SMEs	55	observations	
4 consecutive years	23	SMEs	92	observations	
Final sample for the study	177	SMEs	1,005	observations	
Represented by:					
Financial year 2010			150	observations	
Financial year 2011			160	observations	
Financial year 2012			177	observations	
Financial year 2013			177	observations	
Financial year 2014			176	observations	
Financial year 2015			165	observations	
As above			1,005	observations	

5.3.3. Model specifications

This study adopts fixed effects estimator to analyse the panel data with repeated measures on both dependent and independent variables, which is consistent with some past studies (e.g., Al-Ajmi, 2008; Henderson and Kaplan, 2000; Xu et al., 2013; Khlif and Samaha, 2014). The Hausman test has been conducted on the panel data, which favoured the adoption of fixed

effects over the random effects estimator. The fixed effects estimator includes an intercept for each firm to capture firm-specific effects, and coefficient estimates reflect within-firm variation, and it could alleviate estimation bias from omitted variables and heterogeneity (Henderson and Kaplan, 2000). The year fixed effects dummies are included in the model to control for unobserved heterogeneity while the standard errors are clustered by client-firm to provide a more robust standard error estimation (e.g., Xu et al., 2013; Habib, 2015).

The empirical model for this study is described as follows:

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\begin{split} ARL_{i,t} &= \alpha + \beta_1 AC_{i,t-1} + \beta_2 CEO duality_{i,t-1} + \beta_3 NomadBro_{i,t-1} + \beta_4 DAcc_{i,t} \\ &+ \beta_5 MAR_{i,t} + \beta_6 AuSize_{i,t} + \beta_7 SAS_{i,t} + \beta_8 LnSAF_{i,t} + \beta_9 LnNAF_{i,t} \\ &+ \beta_{10} LnTA_{i,t} + \beta_{11} Micro_{i,t} + \beta_{12} ROApat_{i,t} + \beta_{13} LAT_{i,t} + \beta_{14} LevRatio_{i,t} \\ &+ \beta_{15} BIndpd_{i,t-1} + Year\ dummies + + \varepsilon_{i,t} \end{split}
```

where ARL represents audit report lag, and the set of variables of interest are represented by AC, CEOduality, NomadBro, DAcc, and MAR while the set of control variables are represented by AuSize, SAS, LnSAF, LnNAF, LnTA, Micro, ROApat, LAT, LevRatio, and BIndpd, and ϵ_{it} is the unobserved error component (assumed to be normally distributed with a mean of zero and constant variance)

The variables of interest are the internal governance mechanism of AIM companies identified as existence of audit committee ("AC") and CEO duality ("CEOduality") while the external governance mechanism of AIM companies is identified as nominated adviser cum broker ("NomadBro"). In addition, level of discretionary accruals ("DAcc") and issuance of modified audit report ("MAR") are included as the variables of interest to examine the extent of auditor-client negotiations. On the other hand, the control variables are represented by auditor specific characteristics, namely auditor size ("AuSize"), statutory auditor switching ("SAS"), statutory audit fee ("LnSAF"), and non-audit fee ("LnNAF"); firm specific characteristics, namely firm size ("LnTA" and "Micro") and financial condition ("ROApat", "LAT", and "LevRatio"); as well as board independence ("BIndpd") as the internal governance mechanism. All the governance attributes are lagged by one period as it is predicted that the governance mechanisms once put into place require time to evolve to be effective (e.g., Zahra and Pearce II, 1989; Dalton et al., 1999; Sultana et al., 2015); this measurement is consistent with that of

Sultana et al. (2015). Full details of the measurements of the dependent and independent variable for this study are described in the forthcoming sub-section.

The discretionary accruals are estimated, as the residuals from regression of total accruals on non-discretionary accruals, applying the performance-adjusted modified-Jones model (Kothari, Leone and Wasley, 2005) or modified-Jones model (Dechow, Sloan and Sweeney, 1995). These two models are distinguished from each other through the inclusion of lagged return on assets in the performance-adjusted modified-Jones model. This study adopts cross-sectional version with at least nine firm-year observations per sector (e.g., Dechow et al., 1995: ten firm-year observations per industry; Kothari et al., 2005: ten firm-year observations per industry; Krishnan and Yang, 2009: six firm-year observations per industry; Knechel et al., 2012: five firm-year observations per industry). Following Kohtari et al. (2005) and Cassell et al. (2012), this study includes a constant in the model to provide an additional control for heteroskedasticity not alleviated by using assets as the deflator, and to mitigate problems stemming from an omitted size variable. At the same time, this study also estimates without constant model typically adopted in earlier past studies (e.g., Dechow et al., 1995; Krishnan and Yang, 2009) for comparison and robustness check.

Following Kothari et al. (2005), the discretionary accruals estimated as the residuals from performance-adjusted modified-Jones model are as follows:

$$\frac{TAcc_{t}}{TA_{t-1}} = \beta + \alpha_{1} \frac{1}{TA_{t-1}} + \alpha_{2} \frac{(\Delta REV_{t} - \Delta TR_{t})}{TA_{t-1}} + \alpha_{3} \frac{PPE_{t}}{TA_{t-1}} + \alpha_{4} \frac{l.ROA_{t}}{TA_{t-1}} + \varepsilon_{t}$$

where:

TAcc = Total accruals $TAcc_t = \Delta CA_t - \Delta Cash_t - \Delta CL_t + \Delta STD_t - Dep_t$ CA = Current assets Cash = Cash and cash equivalents CL = Current liabilities STD = Short term debts Dep = Depreciation TA = Total assets REV = Total revenue TR = Trade receivable

PPE = Property, plant and equipment

1.ROA = Lagged of return on assets

 ε_t = Discretionary accruals

 Δ = Changes

Following Dechow et al. (1995), the discretionary accruals estimated as the residual from modified-Jones model is as follows:

$$\frac{TAcc_t}{TA_{t-1}} = \beta + \alpha_1 \frac{1}{TA_{t-1}} + \ \alpha_2 \frac{(\Delta REV_t - \Delta TR_t)}{TA_{t-1}} + \ \alpha_3 \frac{PPE_t}{TA_{t-1}} + \varepsilon_t$$

where:

TAcc = Total accruals

 $TAcc_t = \Delta CA_t - \Delta Cash_t - \Delta CL_t + \Delta STD_t - Dep_t$

CA = Current assets

Cash = Cash and cash equivalents

CL = Current liabilities STD = Short term debts Dep = Depreciation

TA = Total assets

REV = Total revenue

TR = Trade receivable

PPE = Property, plant and equipment

 ε_t = Discretionary accruals

 Δ = Changes

5.3.4. Variable measurements

Previous studies have identified that audit report lag was mainly affected by three key components, namely client-specific characteristics, corporate governance characteristics, and auditor-specific characteristics (Habib et al., 2019; Durand, 2019).

Dependent variable is audit report lag, defined as the number of days between a company's financial year end and the audit report date, and it has been used in past studies (e.g., Ashton

et al., 1987; Knechel and Payne, 2001). Following from that, this study transforms the days of audit report lag using a natural logarithm ("LnARL") to produce the dependent variable that normalises the distribution and linearises the model (e.g., Jaggi and Tsui, 1999; Krishnan and Yang, 2009; Harjoto et al., 2015; Chan et al., 2016).

I consider a number of independent variables in my model. Table 5.2 exhibits the nature, definitions, measurements, and labels of the independent variables of interest to this study as well as the control variables together with their expected relationships with the audit report lag.

Overall, the variables of interest for this study are related to the internal and external governance mechanisms of the AIM SMEs as well as the effect of auditor-client negotiations by the AIM SMEs as hypothesised under section 5.2.4. The existence of audit committee and CEO duality are the proxies for internal governance mechanisms while NomadBro is the proxy for external governance mechanism. The variables for occurrence of auditor-client negotiations to be tested in this study is the level of discretionary accruals and the issuance of modified audit report.

In order to test hypothesis H1, the existence of audit committee ("AC") by the date of the directors' report for the reporting period is coded 1 and otherwise is coded 0 (e.g., Afify, 2009). On the other hand, for hypothesis H2, the CEO duality is coded 1 when the same director is the chairman as well as CEO of the company ("CEOduality") and otherwise is coded 0³⁵ (e.g., Afify, 2009; Habib, 2015). The retention of Nomad and broker variable is tested under hypothesis H3 whereby the retention of the same firm as the Nomad and broker by the date of the directors' report for the reporting period ("NomadBro") is coded 1 and otherwise is coded 0. Hypothesis H4 examines the impact of discretionary accruals ("DAcc") on the audit report lag, which is measured by the performance-adjusted cross-sectional modified-Jones (Kothari, Leone and Wasley, 2005) with constant model. While the issuance of modified audit report by the statutory auditor ("MAR") is coded 1 and otherwise is coded 0 (e.g., Sultana et al., 2015; Chan et al., 2016) to test hypothesis H5. The AC and NomadBro variables are predicted to have negative relationship with the audit report lag while the CEOduality, DAcc, and MAR variables

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³⁵ It is coded 0 for an AIM SME that has no CEO for consecutive financial years; executive chairman is considered as CEO for an AIM SME that has only executive chairman and no CEO.

are predicted to have positive relationships with the audit report lag. All of these variables of interest introduced in this study have not been tested under the UK context.

I also consider a number of control variables in my empirical framework.

Firstly, I control for the auditor-specific characteristics. Based on the independent auditor's report addressed to the members of the company that included in the annual report, the following two variables are identified and coded accordingly. The binary variable equals to 1 is assigned if the company is audited by a big 4 audit firm ("AuSize"), and 0 otherwise (e.g., Leventis et al., 2005; Ghafran and Yasmin, 2018) while statutory auditor switching ("SAS") is coded 1 when there is a change of the statutory auditor between the dates of the two consecutive auditor's report and otherwise is coded 0 (e.g., Ettredge et al., 2006; Chan et al., 2016). On the other hand, the statutory audit fee ("LnSAF") (e.g., Habib, 2015; Chan et al., 2016) and non-audit fee ("LnNAF") (e.g., Lee et al., 2009; Knechel et al., 2012) of the group are measured in natural logarithm term. The AuSize and LnNAF are expected to be negatively associated with the audit report lag while the LnSAF and SAS are expected to be positively associated with the audit report lag.

Secondly, I control for the client-specific characteristics. The client size ("LnTA") is measured by total assets and expressed in natural logarithm term (e.g., Bamber at al., 1993; Ettredge et al., 2006) and is expected to be negatively associated with the audit report lag. This study also includes a binary variable for a microenterprise ("Micro") which is coded 1 and otherwise (i.e., small enterprise or medium-sized enterprise) is coded 0, to further control for the client size; it is expected that the microenterprises are more likely to experience longer audit report lag than their other counterparts. The financial condition is represented by the return on assets, loss incurred, and the level of leverage. The return on assets is expressed as profit after taxation over total assets ("ROApat") (e.g., Afify, 2009; Ettredge et al., 2006) while 1 is assigned if the group incurred loss after taxation ("LAT") and 0 is assigned if the group achieved profit after taxation (e.g., Carslaw and Kaplan, 1991; Harjoto et al., 2015), which is expected to be negatively and positively associated with the audit report lag respectively. On the other hand, the leverage ratio ("LevRatio") is expressed by long term debts over total assets (e.g., Owusu-Ansah, 2000; Ghafran and Yasmin, 2018) and is expected to be positively associated with the audit report lag.

Lastly, and in addition to the variable of interests, this study includes another internal governance mechanism as the control variable, i.e., board independence ("BIndpd") measured by the percentage of non-executive directors that sit on the board by the date of the directors' report for the reporting period (e.g., Khlif and Samaha, 2014; Habib, 2015), and is expected to be negatively associated with the audit report lag.

Table 5.2: Independent variables and their expected relationships with audit report lag

Nature	Definition and Measurement	Label	Predicted Direction
Internal governance mechanism	Existence of audit committee: 1 if an audit committee exists by the date of the directors' report for the reporting period, 0 otherwise	AC ~	-
Internal governance mechanism	CEO duality: 1 if the same director is the board chairman as well as CEO by the date of the directors' report for the reporting period, 0 otherwise	CEOduality ~	+
External governance mechanism	Nominated adviser cum broker: 1 if the retention of the same firm as the Nomad and broker by the date of the directors' report for the reporting period, 0 otherwise	NomadBro ~	-
Auditor-client negotiations	Discretionary accruals: The total discretionary accruals of the group using performance-adjusted cross-sectional modified-Jones (Kothari, Leone and Wasley, 2005) with constant model	DAcc ~	+
Auditor-client negotiations	Discretionary accruals: The total discretionary accruals of the group using performance-adjusted cross-sectional modified-Jones (Kothari, Leone and Wasley, 2005) without constant model	DAcc2~	+
Auditor-client negotiations	Discretionary accruals: The total discretionary accruals of the group using cross-sectional modified-Jones (Dechow, Sloan and Sweeney, 1995) with constant model	DAcc3~	+
Auditor-client negotiations	Discretionary accruals: The total discretionary accruals of the group using cross-sectional modified-Jones (Dechow, Sloan and Sweeney, 1995) without constant model	DAcc4 ~	+
Auditor-client negotiations	Issuance of modified audit report by the statutory auditor: 1, 0 otherwise	MAR ~	+

Table 5.2 (Cont'd): Independent variables and their expected relationships with audit report lag

	report lag		
Nature	Definition and Measurement	Label	Predicted Direction
Auditor specific	Auditor size: 1 if the company is audited by a big 4 audit firms, 0 otherwise	AuSize ^	-
Auditor specific	Statutory auditor switching: 1 if there was change of statutory auditor between the dates of the two consecutive auditors' report, 0 otherwise	SAS ^	+
Auditor specific	Statutory audit fee: The statutory audit fee of the group measured in natural logarithm term	LnSAF ^	+
Auditor specific	Non-audit fee: The non-audit fee of the group measured in natural logarithm term	LnNAF ^	-
Firm specific	Total assets: The total assets of the group, measured in natural logarithm term	LnTA ^	-
Firm specific	Microenterprise: 1 if the company was a microenterprise at the end of the reporting period, 0 otherwise (i.e., small enterprise or medium-sized enterprise)	Micro ^	+
Firm specific	Return on assets: The return on assets of the group expressed by profit after taxation over total assets	ROApat^	-
Firm specific	Loss after taxation: 1 if the group incurred loss after taxation for the financial year, 0 otherwise	LAT^	+
Firm specific	Leverage ratio: The leverage level of the group expressed by long term debts over total assets	LevRatio^	+
Internal governance mechanism	Board independence: The percentage of non-executive directors sit on the board by the date of the directors' report for the reporting period	BIndpd ^	-

Notes: ~ Represents variables of interest; and ^ Represents control variables of this study.

5.4. Data analysis and discussion

This section provides analysis and discussion of the results. It begins with the descriptive statistics followed by the collinearity analysis. The regression results are illustrated, and robustness tests are discussed in the subsequent two sub-sections. The final sub-section summarises the findings of this study including conclusion.

5.4.1. Descriptive statistics

Table 5.3 exhibits the descriptive statistics for all the variables employed in this study, which made up of 1,005 observations for 177 AIM SMEs pooled across the financial periods of 2010-2015. The audit report lag ranges from 23 to 263 days with a mean of 122 days and a median of 127 days. Such length of audit report lag experienced by AIM SMEs is significantly higher than FTSE350 companies with a mean of 64 days and a median of 62 days between 2007 and 2010 as reported by Ghafran and Yasmin (2018). However, all the AIM SMEs of this study met the filing requirements of six months after the end of the financial period (LSE: A Guide to AIM, 2015) except 0.9% of them that have audit report lag of more than 183 days.

About 88% of the sampled AIM SMEs have formed audit committee voluntarily in compliance with the good corporate governance practice; this percentage is higher than Collier and Gregory (1996)'s study on companies in the Financial Times All Share Index for the financial year ended in 1991 when the formation of audit committee was voluntary, which was about 42%. Upon the publication of the Cadbury Code in 1992 that recommended for the adoption of audit committee, this percentage has soared as evidenced in the study of Goddard and Masters (2000) where they found that about 89% and 91% of their sampled companies listed in the Times have formed audit committee for the financial year ended in 1994 and 1995 respectively. On the other hand, about 27% of the total observations has CEO duality while about 80% of the total observations engaged the same firm as their Nomad and broker. The discretionary accruals range from -1.28 to 2.87 with a mean of 0 and a median of -0.01 while 26% of the total observations received modified audit report.

The statutory audit fee has a mean of £50,000 with a median of £42,000 and a large range of £323,000 while the non-audit fee has a mean of £18,000 with a medium of £6,000 and a large

range of £757,000 with some of the sampled AIM SMEs did not incur any non-audit fee. Similarly, there was a large range of £385,000,000 for the total assets with a mean of £34,103,000 and with a median of £13,646,000, and only 22% of the observations were made up of microenterprises.

Only 26% of the sampled AIM SMEs were audited by big 4 audit firms while 74% of them engaged the services of mid-tier or smaller local audit firms as their statutory auditors. On the other hand, only 8% of the total observations changed their statutory auditor during the financial periods 2010-2015. The average leverage level was 5% while on average, 69% of the sampled AIM SMEs incurred loss after taxation with their mean for return on assets after tax of negative 26%. Whilst on average, the total observations maintained 52% of non-executive directors on their board of directors.

5.4.2. Collinearity analysis

Table 5.4 exhibits the correlation among the variables used in this study under Panel A and their VIF under Panel B. The results show that the audit report lag is negatively associated with the existence of audit committee and NomadBro while the audit report lag is positively associated with the CEO duality and level of discretionary accruals. The highest correlation coefficient among the independent variables was absolute 0.45 between the total assets and statutory audit fee whereas the VIF values of all the explanatory variables range from 1.02 to 2.49 with their tolerance value ("1/VIF") of 0.98 at the least. Any correlations below absolute 0.80 should not be too harmful as regards to multicollinearity whereas as a rule of thumb, any variable with VIF value more than 10 or tolerance value of less than 0.10 would indicate high collinearity. Hence, it is concluded that multicollinearity is unlikely to cause potential problem in this study.

Table 5.3: Descriptive statistics for audit report lag study

			Standard		
Variable	Mean	Median	Deviation	Minimum	Maximum
Continuous variables	3:				
ARL (days)	122	127	37.12	23	263
DAcc	0	-0.01	0.23	-1.28	2.87
SAF (£'000)	50	42	36.58	4	323
NAF (£'000)	18	6	42.16	0	757
TA (£'000)	34,103	13,646	56,876	66	385,000
ROApat	-0.26	-0.09	0.976	-16.69	7.08
LevRatio	0.05	0.00	0.14	0.00	2.62
BIndpd	0.52	0.50	0.20	0.00	1.00
Binary variables:					
AC	0.88	1	0.33	0	1
CEOduality	0.27	0	0.44	0	1
NomadBro	0.80	1	0.40	0	1
MAR	0.26	0	0.44	0	1
AuSize	0.26	0	0.44	0	1
SAS	0.08	0	0.27	0	1
Micro	0.22	0	0.42	0	1
LAT	0.69	1	0.47	0	1

Note: ARL – Audit report lag; DAcc - Discretionary accruals; SAF – Statutory audit fee; NAF – Non-audit fee; TA – Total assets; ROApat – Return on assets after tax; LevRatio – Leverage ratio; BIndpd – Board independence; AC – Existence of audit committee; CEOduality – CEO duality; NomadBro – Nominated adviser cum broker; MAR – Modified audit report; AuSize – Auditor size: Big 4; SAS – Statutory auditor switching; Micro – Microenterprise; LAT – Loss after taxation.

Table 5.4: Collinearity analysis for audit report lag study

Panel A: Corr	elation a	mong va	riables used in	this study				
<u>Variable</u>	<u>ARL</u>	AC	CEOduality	<u>NomadBro</u>	<u>DAcc</u>	MAR	AuSize	<u>SAS</u>
ARL	1.00		_					
AC	-0.12	1.00						
CEOduality	0.19	-0.11	1.00					
NomadBro	-0.19	0.09	-0.11	1.00				
DAcc	0.01	0.02	-0.00	0.02	1.00			
MAR	0.03	-0.05	0.11	-0.16	-0.08	1.00		
AuSize	0.10	0.02	-0.03	0.01	0.04	0.11	1.00	
SAS	0.06	-0.00	0.07	-0.01	0.00	-0.00	0.01	1.00
SAF	-0.03	0.11	-0.02	0.09	0.00	-0.04	0.31	-0.04
NAF	-0.11	0.07	-0.07	0.01	0.03	-0.08	0.21	-0.04
TA	-0.07	0.09	-0.02	0.03	0.04	-0.06	0.22	-0.04
Micro	0.22	-0.07	0.20	-0.16	0.02	0.25	-0.05	0.02
ROApat	-0.16	0.01	-0.03	0.08	0.15	-0.17	0.03	0.00
LAT	0.35	-0.01	0.06	-0.20	-0.01	0.29	0.02	0.04
LevRatio	0.04	-0.04	-0.06	-0.01	-0.07	0.04	0.01	-0.01
BIndpd	-0.06	0.25	0.00	0.06	0.02	0.01	0.01	0.01
Panel A (Con	t'd): Cor	relation a	among variable	es used in this	s study			
<u>Variable</u>	<u>SAF</u>	<u>NAF</u>	<u>TA</u>	<u>Micro</u>	ROApat	<u>LAT</u> L	evRatio	<u>BIndpd</u>
SAF	1.00							
NAF	0.38	1.00						
TA	0.45	0.24	1.00					
Micro	-0.36	-0.14	-0.13	1.00				
ROApat	0.12	0.05	0.11	-0.10	1.00			
LAT	-0.04	-0.10	-0.08	0.26	-0.28	1.00		

Note: ARL – Audit report lag; AC – Existence of audit committee; CEOduality – CEO duality; NomadBro – Nominated adviser cum broker; DAcc - Discretionary accruals; MAR – Modified audit report; AuSize – Auditor size: Big 4; SAS – Statutory auditor switching; SAF – Statutory audit fee; NAF – Non-audit fee; TA – Total assets; Micro – Microenterprise; ROApat – Return on assets after tax; LAT – Loss after taxation; LevRatio – Leverage ratio; BIndpd – Board independence.

-0.10

-0.02

-0.36

-0.05

-0.28

0.09

1.00

1.00

-0.01

0.04

0.16

LevRatio

BIndpd

0.07

0.11

0.02

0.02

Table 5.4 (Cont'd): Collinearity analysis for audit report lag study

Panel B: VIF and their tolerance value of the independent variables

<u>Variable</u>	<u>VIF</u>	<u>1/VIF</u>
1.AC	1.10	0.91
1.CEOduality	1.08	0.93
1.NomadBro	1.10	0.91
DAcc	1.04	0.96
MAR	1.21	0.83
AuSize	1.15	0.87
SAS	1.02	0.98
LnSAF	2.49	0.40
LnNAF	1.14	0.88
LnTA	2.21	0.45
Micro	1.49	0.67
ROApat	1.51	0.66
LAT	1.28	0.78
LevRatio	1.23	0.81
l.BIndpd	1.17	0.86
Mean	1.35	

Note: ARL – Audit report lag; AC – Existence of audit committee; CEOduality – CEO duality; NomadBro – Nominated adviser cum broker; DAcc - Discretionary accruals; MAR – Modified audit report; AuSize – Auditor size: Big 4; SAS – Statutory auditor switching; SAF – Statutory audit fee; NAF – Non-audit fee; TA – Total assets; Micro – Microenterprise; ROApat – Return on assets after tax; LAT – Loss after taxation; LevRatio – Leverage ratio; BIndpd – Board independence; l. = Lag value; Ln = Natural logarithm.

5.4.3. Regression analysis

This study adopts the fixed effects estimator to analyse the unbalanced panel data using hypotheses, H1, H2, H3, H4, and H5; results of which are summarised under Model 1 in Table 5.5. The dependent variable under Model 1 is audit report lag expressed in natural logarithm term (e.g., Jaggi and Tsui, 1999; Krishnan and Yang, 2009; Harjoto et al., 2015; Chan et al., 2016). However, it is also a common practice to express the audit report lag in days for many past studies (e.g., Schwartz and Soo, 1996; Afify, 2009; Sultana et al., 2015; Ghafran and Yasmin, 2018); hence, this study employs the number of days measure under Model 2 in Table 5.5 for comparison purposes. The sign and significance of coefficients remain the same under both models except that the significance level for discretionary accruals is at 5% under Model 1, which is higher than Model 2 of 10%; whereas the significance level for modified audit report is at 10% under Model 1 but is not significant under Model 2. The adjusted r² for both models are about 76% indicating that the models have good explanatory power, which is consistent with that of Khlif and Samaha (2014) of 80% but is higher than that of Bamber et al.

(1993) of 43%, Sultana et al. (2015) of 49%, and Ghafran and Yasmin (2018) of 18%. The constant for the regression model is positively significant at 1% level of significance, which could be interpreted as the number of days required by the statutory auditor to sign off the audit report after the end of the financial year of an AIM SME when all the independent variables are zero.

Focusing on Model 1, the results show that the extent of audit report lag for AIM SMEs are explained by the level of auditor-client negotiations and not by the corporate governance characteristics. For the internal governance mechanism, the existence of audit committee in the immediate past year ("l.AC") is insignificant and not in the predicted direction; similarly, the result for CEO duality in the immediate past year ("l.CEOduality") is insignificant and not in the predicted direction. While for the external governance mechanism, the results show that the retention of the same firm as Nomad and broker in the immediate past year ("l.NomadBro") is insignificant but in the predicted direction. On the other hand, the level of auditor-client negotiations represented by discretionary accruals ("DAcc") is positively associated in the predicted direction at 5% level of significance as well as modified audit report ("MAR") which is also positively associated with audit report lag in the predicted direction at 10% level of significance.

More specifically, this study reveals that an AIM SME that formed audit committee has longer audit report lag instead of the predicted shorter audit report lag, but it is not statistically different from zero. This insignificant result is inconsistent with Afify (2009) that revealed shorter audit report lag with the existence of audit committee. The inability to detect a statistically significant association between the existence of audit committee and the audit report lag in this study could potentially suggest that the voluntary formation of audit committee by an AIM SME is limited to favourable image value that does not contribute to the monitoring and enhancement of financial reporting quality (Menon and Williams, 1994).

The dual role of CEO as well as Nomad respectively in the AIM SMEs also found to have no influence on the extent of the audit report lag. An AIM SME with CEO duality has shorter audit report lag instead of the predicted longer audit report lag but it is not statistically different from zero. Such insignificant result is consistent with Khlif and Samaha (2014) and Sultana et al. (2015) but inconsistent with the significant positive results revealed by Afify (2009) and Habib (2015). On the other hand, an AIM SME with NomadBro has shorter audit report lag as

predicted but it is not statistically different from zero. The inability to detect statistically significant associations between the CEO duality and the audit report lag as well as the NomadBro and the audit report lag in this study could potentially suggest that the board chairman, CEO, Nomad, and broker of AIM SMEs do not emphasise that much on financial reporting timeliness as on average, an AIM SME has audit report lag of 122 days as compared to 64 days experienced by FTSE350 companies as reported by Ghafran and Yasmin (2018). The findings on the influential role of Nomad on the extent of audit report lag contributes new evidence to the existing literature as this unique feature, NomadBro, of AIM companies have not been investigated in the audit report lag model of past studies; further investigation is required to reinforce such understanding.

The process of auditor-client negotiations has found to significantly impact the extent of audit report lag of AIM SMEs. The higher the level of discretionary accruals reflected in the financial statements of AIM SMEs, the longer the audit report lag; similarly, the issuance of modified audit report requires longer audit report lag. The positive association between the level of discretionary accruals and the extent of audit report lag supports the occurrence of auditor-client negotiations among the statutory auditor and directors of AIM SMEs attempting to discuss, negotiate, and resolve the differing preferences and disagreements on contentious accounting issues arising during the statutory audit (Gibbins et al., 2001; Beattie, et al., 2004; Salterio, 2012). This finding is consistent with Harjoto et al. (2015) and Habib (2015); similarly, Asthana (2014) revealed that abnormal audit delay was generally associated with lower earnings quality. The outcome of the auditor-client negotiations could end up with mutual agreement or no agreement resulted to the issuance of modified audit report as one of the consequences. Inevitably, such auditor-client misalignment arising from disagreement and conflict of opinion increases the audit report lag of AIM SMEs, which corroborates the positive association revealed in past studies (e.g., Bamber et al., 1993; Chan et al., 2016).

All the control variables are not statistically significant except for the return on assets ("ROApat") variable at 1% level of significance. In line with the results revealed by Khlif and Samaha (2014), Harjoto et al. (2015) and Chan et al. (2016), the financial condition of AIM SMEs measured by the return on assets would significantly reduce the extent of audit report lag, which could imply that companies are happy to share good news with investors and potential investors on a quicker manner. However, the financial condition of AIM SMEs measured by the loss after taxation ("LAT") (e.g., Leventis et al., 2005; Ghafran and Yasmin,

2018) and leverage ratio ("LevRatio") (e.g., Leventis at al., 2005; Sultana, et al., 2015) do not affect the extent of audit report lag. Similarly, the client size measured by total assets ("LnTA") and type of enterprise ("Micro") has no relationship with the extent of audit report lag of AIM SMEs (e.g., Bamber et al., 1993; Khlif and Samaha, 2014) and so is the board independence ("l.BIndpd") (e.g., Khlif and Samaha, 2014; Habib, 2015). This study also reveals insignificant relationship between auditor specific characteristics proxied by auditor size ("AuSize") (e.g., Al-Ajmi, 2008; Afify. 2009), statutory auditor switching ("SAS") (e.g., Ng and Tai, 1994; Leventis et al., 2005), statutory audit fee ("LnSAF"), and non-audit fee ("LnNAF), and the extent of audit report lag, which are consistent with some past studies.

Table 5.5: Regression analysis comparing dependent variable with different measurement for audit report lag study (Dependent variable = ARL in natural logarithm term or in days)

Model 1: Model 2:						
	Predicted	Fixed effect model with	Fixed effect model with			
<u>Variables</u>	<u>sign</u>	$\underline{\mathbf{dependent}\ \mathbf{variable} = \mathbf{LnARL}}$	$\underline{\mathbf{dependent}\ \mathbf{variable} = \mathbf{ARLdays}}$			
1 4 0		0.070	0.200			
l.AC	-	0.070	8.398			
1.050.1.11		(0.049)	(5.378)			
1.CEOdualit	y +	-0.041	-5.568			
		(0.033)	(4.329)			
1.NomadBro) -	-0.014	-1.351			
		(0.026)	(3.086)			
DAcc	+	0.058**	5.483*			
		(0.027)	(3.206)			
MAR	+	0.049*	5.109			
		(0.025)	(3.247)			
AuSize	-	0.037	1.528			
		(0.044)	(4.795)			
SAS	+	0.034	3.474			
		(0.030)	(3.131)			
LnSAF	+	0.017	2.497			
		(0.044)	(4.202)			
LnNAF	-	-0.003	-0.352			
		(0.003)	(0.347)			
LnTA	-	-0.015	-1.926			
		(0.026)	(2.782)			
Micro	+	0.063	8.351			
		(0.040)	(5.157)			
ROApat	_	-0.038***	-5.075***			
1		(0.012)	(1.222)			
LAT	+	0.034	3.581			
		(0.021)	(2.592)			
LevRatio	+	0.033	0.447			
20,110010	·	(0.075)	(8.355)			
1.BIndpd	_	0.026	4.080			
		(0.081)	(10.020)			
Constant		4.715***	114.800***			
Constant		(0.457)	(49.920)			
Year dumm	ies	Yes	Yes			
Adjusted r ²		0.767	0.754			
Number of	hearvotion		828			
number of (oosei valioi	15 020	020			

Notes:

LnARL – Audit report lag in natural logarithm term; ARLdays – Audit report lag in days; l.AC – Lag of Existence of audit committee; l.CEOduality – Lag of CEO duality; l.NomadBro – Lag of Nominated adviser cum broker; DAcc - Discretionary accruals measured by the performance-adjusted cross-sectional modified-Jones (Kothari, Leone and Wasley, 2005) with constant model; MAR – Modified audit report; AuSize – Auditor size: Big 4; SAS – Statutory auditor switching; LnSAF – Statutory audit fee in natural logarithm term; LnNAF – Non-audit fee in natural logarithm term; LnTA – Total assets in natural logarithm term; Micro –

Microenterprise; ROApat – Return on assets after tax; LAT – Loss after taxation; LevRatio – Leverage ratio; l.BIndpd – Lag of board independence.

- 2. Model 1 is the model for this study.
- 3. Model 2 is meant for comparison to past studies.
- 4. Robust standard errors shown in parentheses are clustered by client.
- 5. All the above regressions also include year dummies (not reported).
- 6. The symbols ***, **, and * indicate 1%, 5%, and 10% significance level, respectively.

5.4.4. Robustness tests

In addition to the robustness test performed under Model 2 using the audit report lag days as the dependent variable, further robustness checks are performed with different measurements for the discretionary accruals under Model 3, Model 4, and Model 5 alongside Model 1, which is the model for this study, as displayed in Table 5.6. The discretionary accruals under Model 1 (DAcc) and Model 3 (DAcc2) are applying the performance-adjusted cross-sectional modified Jones model as defined by Kothari et al. (2005) with constant and without constant respectively. Whilst the discretionary accruals under Model 4 (DAcc3) and Model 5 (DAcc4) are applying the cross-sectional modified Jones model as defined by Dechow et al. (1995) with constant and without constant respectively. Substituting the different measurements for the discretionary accruals in the models do not change the results of those revealed by Model 1 at all except that the DAcc2 has higher significance level at 1% as compared to DAcc, DAcc3 and DAcc4 under other models with 5% level of significance. Overall, the results remain robust under all models with similar conclusions.

Model 6 is a two-stage least-squares (2SLS) regression analysis that is conducted to control for the possible endogeneity among the independent variables. In the first-stage, I run the statutory audit fee (LnSAF) against the other independent variables and extract the residuals to replace LnSAF in the main model. Stage two of the 2SLS, displayed under Model 6 in Table 5.6, shows that the results are essentially the same. The coefficient of discretionary accruals (DAcc) is significant at 10% and the coefficient of modified audit report (MAR) is significant at 10% while both coefficients are of the same sign with all the other models.

Table 5.6: Regression analysis with varied discretionary accruals model for audit report lag study (Dependent variable = LnARL)

	Fixed effect model				
<u>Variables</u>	<u>Model 1</u>	Model 3	Model 4	Model 5	Model 6
T WI WOOD	1710461 1	11104010	1110401	1104010	1,10401 0
l.AC	0.070	0.069	0.069	0.069	0.069
	(0.049)	(0.049)	(0.049)	(0.049)	(0.048)
1.CEOduality	-0.041	-0.041	-0.040	-0.040	-0.039
•	(0.033)	(0.033)	(0.033)	(0.033)	(0.033)
1.NomadBro	-0.014	-0.014	-0.016	-0.016	-0.014
	(0.026)	(0.026)	(0.026)	(0.026)	(0.026)
DAcc	0.058**				0.041*
	(0.027)				(0.021)
DAcc2		0.057***			
		(0.022)			
DAcc3			0.038**		
			(0.019)		
DAcc4				0.038**	
				(0.017)	
MAR	0.049*	0.048*	0.049*	0.049*	0.049*
	(0.025)	(0.025)	(0.026)	(0.026)	(0.025)
AuSize	0.037	0.034	0.037	0.035	0.044
	(0.044)	(0.044)	(0.044)	(0.044)	(0.041)
SAS	0.034	0.035	0.033	0.034	0.031
	(0.030)	(0.030)	(0.030)	(0.030)	(0.032)
LnSAF	0.017	0.017	0.018	0.018	0.017
	(0.044)	(0.044)	(0.044)	(0.044)	(0.044)
LnNAF	-0.003	-0.003	-0.003	-0.003	-0.002
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
LnTA	-0.015	-0.016	-0.015	-0.015	-0.011
	(0.026)	(0.026)	(0.026)	(0.026)	(0.022)
Micro	0.063	0.063	0.064	0.065	(0.062)
	(0.040)	(0.040)	(0.040)	(0.041)	(0.038)
ROApat	-0.038***	-0.038***	-0.037***	-0.037***	-0.036***
	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)
LAT	0.034	0.034	0.032	0.032	0.032
	(0.021)	(0.021)	(0.021)	(0.021)	(0.021)
LevRatio	0.033	0.033	0.024	0.027	0.036
	(0.075)	(0.076)	(0.076)	(0.076)	(0.069)
l.BIndpd	0.026	0.025	0.028	0.027	0.033
	(0.081)	(0.081)	(0.081)	(0.081)	(0.080)
Constant	4.715***	4.717***	4.703***	4.703***	4.842***
	(0.457)	(0.454)	(0.454)	(0.453)	(0.381)
Year dummies	Yes	Yes	Yes	Yes	Yes
Adjusted r ²	0.767	0.767	0.767	0.767	0.748
Number of observa	tions 828	828	828	828	828

Notes:

^{1.} LnARL – Audit report lag in natural logarithm term; l.AC – Lag of Existence of audit committee; l.CEOduality – Lag of CEO duality; l.NomadBro – Lag of Nominated adviser cum broker; DAcc - Discretionary accruals

measured by the performance-adjusted cross-sectional modified-Jones (Kothari, Leone and Wasley, 2005) with constant model; DAcc2 - Discretionary accruals measured by the performance-adjusted cross-sectional modified-Jones (Kothari, Leone and Wasley, 2005) without constant model; DAcc3 - Discretionary accruals measured by the cross-sectional modified-Jones (Dechow, Sloan and Sweeney, 1995) with constant model; and DAcc4 - Discretionary accruals measured by the cross-sectional modified-Jones (Dechow, Sloan and Sweeney, 1995) without constant model; AuSize – Auditor size: Big 4; MAR – Modified audit report; SAS – Statutory auditor switching; LnSAF – Statutory audit fee in natural logarithm term; LnNAF – Non-audit fee in natural logarithm term; LnTA – Total assets in natural logarithm term; Micro – Microenterprise; ROApat – Return on assets after tax; LAT – Loss after taxation; LevRatio – Leverage ratio; l.BIndpd – Lag of board independence.

- 2. Model 1 is the model for this study.
- 3. Model 3, Model 4, and Model 5 regress against different discretionary accruals model for robustness tests.
- 4. Model 6 is a two-stage least-squares (2SLS) regression.
- 5. Robust standard errors shown in parentheses are clustered by client.
- 6. All the above regressions also include year dummies (not reported).
- 7. The symbols ***, **, and * indicate 1%, 5%, and 10% significance level, respectively.

5.4.5. Summary and conclusion

The findings of this study offer useful insights that the extent of audit report lag for AIM SMEs in the UK is explained by the level of auditor-client negotiations and not by the corporate governance characteristics. AIM SMEs with higher discretionary accruals appear to have longer audit report lag and so are those companies being issued with modified audit report, which provide empirical evidence in supporting Salterio (2012)'s suggestion to repurpose audit report delay as a measure of probability that auditor-client negotiations took place during the statutory audit. On the other hand, it appears that the audit committee and CEO cum chairman of AIM SMEs play no significant roles in financial reporting timeliness. The significant negative relationship shown by the return on assets and some insignificant results shown by other control variables corroborate those obtained by other researchers.

A particular useful contribution of this study is the emergence of a new variable, NomadBro, in the audit report lag of the AIM SMEs. The dual leadership role shouldered by a firm acting as the Nomad cum broker, a unique external governance mechanism of AIM companies has not been investigated under this research area. The AIM SMEs engage NomadBro appears to have shorter audit report lag as predicted but the result is not significant, which reveals that the provision of the Nomad and broker positions by a single firm does not emphasise much on financial reporting timeliness.

Overall, the Model 1 using the fixed effects panel data estimator as adopted in this study is specified without the presence of multicollinearity, heteroskedasticity and endogeneity issues.

Substituting alternative proxy variables for discretionary accruals produce consistent results throughout the robustness tests. Hence, the regression results are consistent, robust, and valid for interpretations.

5.5. Conclusions

This section concludes with summaries of key issues together with limitations of this study and recommendations for future research.

The "triangle relationship" among the shareholders, directors, and statutory auditor of a company portrayed in the agency theory, stewardship theory, and signalling theory, and alongside the auditor-client negotiation process are the cornerstone in determining the audit report lag. This study reveals that the extent of audit report lag for AIM SMEs is explained by the level of auditor-client negotiations and not by the corporate governance characteristics. AIM SMEs with higher discretionary accruals appear to have longer audit report lag and so are those companies being issued with modified audit report. On the other hand, this study reveals that the agents and stewards, namely audit committee, CEO, board chairman, Nomad and broker, of AIM SMEs play no significant roles in enhancing the financial reporting timeliness. Echoing Salterio (2012)'s suggestion to repurpose audit report delay as a measure of probability that auditor-client negotiations took place during the statutory audit, this study provides empirical evidence on the influential impact of the level of discretionary accruals and the issuance of modified audit report on the audit report lag. In addition, this study also demonstrates the passive role of Nomad, the unique feature of AIM companies, and the voluntary formation of audit committee of AIM companies, in determining the audit report lag. This study contributes to the existing literature and fills the gap for smaller listed companies in a less concentrated audit market that are governed by a lighter touch regulatory regime and follow less rigorous corporate governance mechanisms. This study provides important implications to shareholders that audit report lags are not influenced by the internal governance mechanism of a firm, but suggest that the extensive use of discretionary accruals in the preparation of financial reports affects the timeliness of AIM SMEs. Shareholders of AIM SMEs could question their directors on the application of discretionary accruals that caused to the audit delay and put pressure on their directors to deliver more timely financial reporting. For the policy makers, this study could assist them in refining the required timeline for SMEs

to publish their annual report in providing relevant and reliable financial information to facilitate investors' informed judgement and decision-making.

All the data for this study are hand-collected, which are then in turn more accurate and complete as I exercise consistent and careful approach to minimise errors but at the expense of long time period required that restricted the sample size of this study. The use of annual reports in deriving the data for this study would also be prone to the quality of information presented and disclosed within the annual reports. On the other hand, due to unavailability of required data, this study also subject to the limitations as follows. Firstly, this study did not consider the interim audit work conducted during the financial year that would affect the audit report lag (e.g., Jaggi and Tsui, 1999; Knechel and Payne, 2001). Secondly, the measurement of audit report lag in this study includes the scheduling lag that is under the control of the client rather than the statutory auditor (Xu et al., 2013). Finally, this study measures audit report lag in days even though audits are scheduled in man-hours that include number of staff and hours worked (e.g., Bamber, et al., 1993; Jaggi and Tsui, 1999). These limitations should be borne in mind when interpreting the results, which could also suggest interesting avenues for future research.

Future studies could attempt to obtain the proprietary information relating to the work conducted during the interim audit, the start date of audit fieldwork, audit hours spent, and hourly audit staff rate, through conducting interviews or distributing questionnaires, to more accurately examining the level of audit effort and efficiency. At the same time, the newly introduced NomadBro variable and the limited evidence of discretionary accruals on the extent of audit report lag would require more future evidence to corroborate the validity of the results of this study.

Chapter 6. Conclusions

This chapter concludes with summary of key issues together with limitations of this thesis and recommendations for future research.

6.1. Summary of this thesis

This thesis explores the relationship between statutory audit and corporate governance that revolves around shareholders, directors, and statutory auditors towards the demand and supply of statutory audit services of smaller listed companies. The "triangle relationship" among the three key participants of a company portrayed in the agency theory, stewardship theory, and signalling theory is the cornerstone in driving the statutory audit fee, triggering the statutory auditor switching, and determining the audit report lag of the company. Their demand for audit services from the perspective of corporate governance and the supply of audit services from the perspective of audit quality could have complementary or substitution impact on the statutory audit processes resulting in lower or higher level of statutory audit fee. On the other hand, choosing and appointing a right statutory auditor is a crucial decision for any company simply because a high-quality audit could mitigate the principal-agent's conflict of interest arising from the separation of ownership and management in companies while financial reporting timeliness with reliable accounting information could bridge the information asymmetry gap and facilitate shareholders' informed investment decisions.

Past studies, mostly examined larger listed companies, have identified that client-specific characteristics and auditor-specific characteristics are the key factors affecting the level of statutory audit fee, the decision for statutory auditor switching, and the length of audit report lag of companies, but revealed mixed and inconclusive evidence on the impact of corporate governance mechanisms had on those aspects of statutory audit. Given the scarcity of research on smaller listed companies and the potential distinct corporate governance mechanisms adopted by the SMEs, this thesis examines the impacts of the internal and external governance mechanisms (i.e., existence of audit committee, new CEO, CEO duality, new Nomad, NomadBro, and new statutory auditor) alongside the cost-minimisation strategy or auditor independence (i.e., statutory audit fee and non-audit fee), or auditor-client negotiation level (i.e., discretionary accruals and issuance of modified audit report), where applicable, on the

statutory audit fee, statutory auditor switching, and audit report lag of the young and lightly regulated AIM SMEs.

This thesis adopts the positivist philosophy under objectivism using the quantitative strategy to estimate the developed hypotheses in a deductive manner. The sample size for each empirical study varies with reference to their respective objectives, model specifications, and availability of required data. The samples consist of an unbalanced panel data of AIM SMEs for the financial periods covering 2010 to 2015 for all the three empirical studies: 1,325 observations of 236 AIM SMEs for the statutory audit fee study as well as the statutory auditor switching study while there are 1,005 observations of 177 AIM SMEs for the audit report lag study. All the quantitatively measured dependent and independent variables for these studies are hand collected from the companies' annual reports downloaded from their websites. Easy access of these data from the publicly available documents made this study feasible and without ethical and vulnerability issues. The system GMM estimator that could address the dynamic endogeneity, simultaneous endogeneity, and omitted variables bias upon the application of appropriate instrument matrix is chosen to analyse the statutory audit fee model. On the other hand, the statutory auditor switching model applies the fixed effects logit estimator to control for measured and unmeasured stable characteristics by using the subjects as their own controls, which is less vulnerable to omitted variable bias. The audit report lag model is also analysed using fixed effects estimator that could alleviate estimation bias from omitted variables and heterogeneity.

6.2. Main findings, contributions and implications of this thesis

Overall, the main findings of this thesis are as follows. Firstly, this thesis reveals that the voluntary formation of audit committee by the AIM SMEs promotes stronger corporate governance mechanism to maintain higher level of audit quality at lower statutory auditor fee, and it is more likely to recommend for the statutory auditor switching after the receipt of modified audit report from the incumbent statutory auditor, which indicates that the audit committee would not be effective in deterring opinion shopping, if it exists. Nevertheless, the existence of audit committee plays no significant role in shortening the audit report lag. Secondly, this thesis reveals that the new CEO would trigger the statutory auditor switching the following year looking for more familiar and favourable auditor or seeking for fresh and

valuable ideas from the new auditor. However, the new CEO does not influence the level of statutory audit fee while the CEO duality does not enhance the financial reporting timeliness of AIM SMEs. Thirdly, the new Nomad also would trigger the statutory auditor switching the following year looking for more familiar auditor. On the other hand, the NomadBro neither influence the level of statutory audit fee nor enhance the financial reporting timeliness of AIM SMEs. Fourthly, the AIM SMEs tend to pay lower statutory audit fee to the newly appointed statutory auditor at the initial engagement implying the potential existence of "low-balling" scenario. Similarly, the AIM SMEs appear to be more cost cautious and would be more inclined to switch statutory auditor for a lower statutory audit fee at the similar level of audit quality. Fifthly, the AIM SMEs tends to switch statutory auditor the following year when the level of non-audit fee is higher attempting to alleviate the potential impairment of auditor independence and as part of cost-saving strategy. Sixthly, the audit report lag is longer when the level of discretionary accruals is higher signifying lengthier auditor-client negotiations that are required to resolve the differing preferences and contentious accounting issues during the statutory audit. Seventhly, the audit report lag is also longer for AIM SMEs that received modified audit report as auditor-client negotiations are required to address their misalignment arising from disagreement and conflict of opinion. Eighthly, this thesis provides further evidence on the temporal, dynamic, and persistent relationship between the current and past value of statutory audit fees. Finally, AIM microenterprises tend to pay lower statutory audit fee and are less likely to switch statutory auditor as compared to their other counterparts of small enterprises and medium-sized enterprises indicating their cost-saving strategy.

In summary, the above findings have addressed the research questions surrounding the key factors affecting the statutory audit fee, statutory auditor switching, and audit report lag from the perspective of internal and external governance mechanisms, cost-minimisation strategy, auditor independence, and levels of auditor-client negotiations. Table 6.1 summarises the results of hypotheses tests and outcomes for the three empirical chapters under chapter 3, chapter 4 and chapter 5 respectively. This thesis reveals that some corporate governance mechanisms of AIM SMEs have influential roles in driving the statutory audit fee (i.e., existence of audit committee and newly appointed statutory auditor), and triggering the statutory auditor switching (i.e., New CEO and new Nomad), but they play no significant roles at all in determining the audit report lag. In addition, the AIM SMEs apply cost-minimisation strategy and attempt to alleviate the impairment of audit independence when making statutory

auditor switching decision while the occurrence of auditor-client negotiations during the statutory audit significantly lengthen the audit report lag of AIM SMEs.

This thesis extends the understanding of factors affecting statutory audit fee, statutory auditor switching, and audit report lag of smaller listed companies in in a less concentrated audit market that are governed by a lighter touch regulatory regime and follow less rigorous corporate governance mechanisms. Specifically, this thesis contributes preliminary and entirely new evidence on the influential role of Nomad, the unique advisory feature of AIM companies, from the statutory audit perspectives. For practitioners, the findings of this thesis could provide better understanding on the governance roles played by the audit committee and Nomad in the statutory audit fee negotiation process, the decision to switch statutory auditor amid the potential direct and indirect switching costs, and to enhance the financial reporting timeliness of AIM SMEs. For policy makers, the findings of this thesis could provide evidence and insights when drafting auditing guidance and regulations for AIM and smaller listed companies, particularly in setting the statutory audit fee, in deciding whether auditor rotation should be imposed on SMEs, and also in refining the required timeline for SMEs to publish their annual report. An audit needs to recognise companies' different sizes and types, hence, the findings of this thesis would assist the policy makers in refining corporate governance mechanism that better suit the AIM and smaller listed companies, and in debating the pros and cons of the unique Nomad's regulatory framework in offering appropriate investor protection. This is in line with the aim of the newly created regulator, Audit, Reporting and Governance Authority, in looking to balance the benefits of high standards with the costs of introducing and maintaining them, when implementing high-quality regulation and high standards for public interest entities.

Table 6.1: Summary of hypotheses tests and outcomes for the respective study under chapter 3 (statutory audit fee), chapter 4 (statutory auditor switching), and chapter 5

(audit report lag)

(audit report lag)						
Research hypothesis	Outcome					
H1 (chapter 3): There is a positive relationship between the existence of audit committee and the statutory audit fee, ceteris paribus.	Significant negative relationship (i.e., not in the predicted direction).					
H2 (chapter 3): There is a negative relationship between the CEO turnover and the statutory audit fee, ceteris paribus.	Not supported.					
H3 (chapter 3): There is a positive relationship between the retention of NomadBro and statutory audit fee, ceteris paribus.	Not supported.					
H4 (chapter 3): The higher the statutory audit fee, the more likely the occurrence of the statutory auditor switching, ceteris paribus.	Supported.					
H1 (chapter 4): There is a positive relationship between the CEO turnover and statutory auditor switching, ceteris paribus.	Supported.					
H2 (chapter 4): There is a positive relationship between the Nomad turnover and statutory auditor switching, ceteris paribus.	Supported.					
H3 (chapter 4): The higher the statutory audit fee, the more likely the occurrence of statutory auditor switching, ceteris paribus.	Supported.					
H4 (chapter 4): There is a positive relationship between the non-audit fee and statutory auditor switching, ceteris paribus.	Supported.					
H5 (chapter 4): There is a positive relationship between the interaction of existence of audit committee and modified audit report, and statutory auditor switching, ceteris paribus.	Supported.					
H1 (chapter 5): There is a negative relationship between the existence of audit committee and audit report lag, ceteris paribus.	Not supported.					
H2 (chapter 5): There is a positive relationship between the CEO duality and audit report lag, ceteris paribus.	Not supported.					
H3 (chapter 5): There is a negative relationship between the retention of NomadBro and audit report lag, ceteris paribus.	Not supported.					
H4 (chapter 5): There is a positive relationship between the level of discretionary accruals and audit report lag, ceteris paribus.	Supported.					
H5 (chapter 5): There is a positive relationship between the modified audit report and audit report lag, ceteris paribus.	Supported.					

6.3. Limitations of this thesis and future research

All the data for this thesis are hand-collected, which are then in turn more accurate and complete as I exercise consistent and careful approach to minimise errors but at the expense of long time period required that restricted the sample size of this study. This thesis is based solely on company's annual reports and do not benefit from detailed knowledge of each company's business operations and understanding of the underlying transactions entered into. The use of annual reports in deriving the data for this thesis would also be prone to the quality of information presented and disclosed within the annual reports; in addition, the non-observable or non-measurable data, or behavioural factors (such as the reasons of CEO turnover, audit hours spent and hourly staff rate, the nature for the termination of auditor-client relationship, the familiarity of auditor-client relationship, the interim audit work conducted during the financial year, and the commencement date of audit fieldwork) are not readily available in the annual reports. These limitations should be borne in mind when interpreting the results, which could also suggest interesting avenues for future research.

Future studies could attempt to obtain the proprietary information, for examples: CEO turnover classified by dismissal, resignation, or retirement, or varied succession plans; audit billing structures of audit firms in terms of allocations of audit hours, and level of audit staff skills and expertise; termination of auditor-client relationship distinguished by retirement, resignation, or removal; the chemistry of the relationship between client and senior personnel of audit firm; work conducted during the interim audit; and the start date of audit fieldwork, through conducting interviews or distributing questionnaires, because all the above factors have been acknowledged in past studies that there were potential influences in driving statutory audit fee, triggering statutory auditor switching, or determining audit report lag. At the same time, the newly introduced variables of NomadBro and new Nomad plus the limited evidence of interaction of existence of audit committee and modified audit report, non-audit fee, discretionary accruals, and microenterprises variables would require more future evidence to corroborate the validity of the results of this thesis.

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Appendix A: 10 essential principles under QCA Code

The QCA Code was published in 2018 and includes 10 corporate governance principles that companies should follow, and step-by-step guidance on how to effectively apply these principles.

Deliver growth:

- 1. Establish a strategy and business model which promote long-term value for shareholders.
- 2. Seek to understand and meet shareholder needs and expectations.
- 3. Take into account wider stakeholder and social responsibilities and their implications for long-term success.
- 4. Embed effective risk management, considering both opportunities and threats, throughout the organisation.

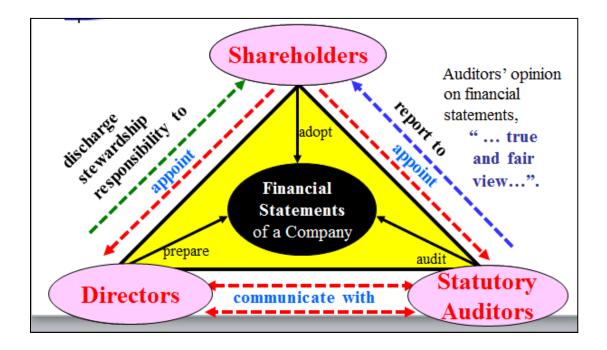
Maintain a dynamic management framework:

- 5. Maintain the board as a well-functioning, balanced team led by the chair.
- 6. Ensure that between them the directors have the necessary up-to-date experience, skills and capabilities.
- 7. Evaluate board performance based on clear and relevant objectives, seeking continuous improvement.
- 8. Promote a corporate culture that is based on ethical values and behaviours.
- 9. Maintain governance structures and processes that are fit for purpose and support good decision-making by the board.
- 10. Communicate how the company is governed and is performing by maintaining a dialogue with shareholders and other relevant stakeholders.

Source: Quoted Companies Alliance and UHY Hacker Young Associates (2020). *AIM good governance review* 2020/21. [online]. Available from: <u>Publications | The Quoted Companies</u> Alliance (theqca.com). [Accessed 20th July 2021].

Appendix B: Triangle relationship within a company

The shareholders, directors, and statutory auditor are the three key stakeholders of a company as well as the key participants of a market. Each of them has their own roles and responsibilities in a company as depicted in the following diagram. Needless to say, the focus of this triangle relationship is the financial statements, which are the main if not the only document providing all the variables for this study.



The shareholders are the owners of a company who appoint the directors to manage the company's assets and to run the day-to-day operations who in turn report to them through the financial statements. As agents to the shareholders, inevitably the directors may occasionally act for their own self-interest benefitting from the information asymmetry on their end. To assess the accountability of the directors for the resources entrusted to them in discharging their stewardship responsibility, the shareholders appoint another agent, i.e., the statutory auditor, to conduct an audit on the financial statements prepared by the directors and to express an independent opinion on the true and fair state of the financial statements therefrom. Both appointments accordingly arising to the bonding and monitoring costs in the form of directors' remuneration and statutory audit fee, which are part and parcel of the agency cost incurred by the company in protecting the shareholders' wealth within the context of exercising proper corporate governance mechanisms and demanding for a high level of audit quality.

Appendix C: Summary of past studies relating to statutory audit fee

		~ .		
No. 1	Author (Date) Simunic (1980)	Sample 397 quoted companies in the US during 1977	•	Key Findings There was a significant positive relationship between statutory audit fee
2	Low, Tan and Koh (1990)	291 quoted companies on the Singapore Stock Exchange during 1986	•	and client size, client complexity, and client risk. No elements of corporate governance were tested in
3	Chan, Ezzamel and Gwilliam (1993)	280 UK quoted companies based on 1987 data		the audit fee model.
4	Pong and Whittington (1994)	A panel of 3,349 cross sectional and time series observation for the period 1981 to 1988 on large listed companies in the UK	•	There was a significant negative relationship between statutory audit fee and statutory auditor switching in the initial engagement. No elements of corporate governance were tested in the audit fee model.
5	Butterworth and Houghton (1995)	268 Western Australian- headquartered companies listed on the Main Board and Second Board of the Australian Stock Exchange in Perth for the years 1987 and 1988	•	There was a negative but insignificant relationship between statutory audit fee and statutory auditor switching. No elements of corporate governance were tested in the audit fee model.
6	Gregory and Collier (1996)	399 firms of the Financial Times All Share Index for the years ended in 1987 to 1991	•	There was a significant negative relationship between statutory audit fee and statutory auditor switching in the initial engagement but such fee deduction did not persist in the longer term. The initial discount was higher for involuntary switching and upward switching. No elements of corporate governance were tested in the audit fee model.

	Statutory audit fee							
No.	Author (Date)	Sample	Key Findings					
7	Collier and Gregory (1996)	315 companies on the Financial Times All Share Index for the year ended in 1991	 There was a significant positive relationship between sized-related statutory audit fee and the presence of an audit committee. There were no relationships between statutory audit fee and risk-related and complexity-related statutory audit fee and the presence of an audit committee. 					
8	O'Sullivan (1999)	146 largest non-financial companies quoted on the LSE based on 1995 financial statements	There were no relationships between statutory audit fee and board and audit committee characteristics.					
9	Goddard and Masters (2000)	233 companies in 1994 and 223 companies in 1995 listed on the stock exchange and included in the Times 1,000 of 1996, excluding the top 350	 There was a significant positive relationship between statutory audit fee and the presence of an audit committee in 1994 only. There was a significant negative relationship between complexity-related statutory audit fee and the presence of an audit committee. There were no relationships between size-related and risk-related statutory audit fee and the presence of an audit committee. 					
10	Carcello, Hermanson, Neal and Riley (2002)	258 companies of Fortune 1,000 that engaged the big 6 audit firms for the fiscal year ended between April 1992 and March 1993	 There were significant positive relationships between statutory audit fee and board independence, diligence, and expertise. There were significant positive relationships between statutory audit fee and audit committee characteristics, only in the absence of board variables. 					

	statutory audit fee								
No.	Author (Date)	Sample	Key Findings						
11	Abbott, Parker, Peters and Raghunandan (2003)	492 non-regulated big 5- audited firms that filed proxy statements with the SEC in the period from 5 February 2001 to 30 June 2001	 There were significant positive relationships between statutory audit fee and audit committee independence and financial expertise with the presence of board variables. There was no relationship between statutory audit fee and meeting frequency of audit committee. 						
12	Goodwin- Stewart and Kent (2006)	401 companies listed on the Australian Stock Exchange in October 2000	 There was a significant positive relationship between statutory audit fee and the existence of audit committee. There were positive significant relationships between statutory audit fee and audit committee meetings and use of internal audit. There was a significant positive relationship between statutory audit fee and expertise of audit committee members when meeting frequency and independence were low. 						
13	Hay, Knechel and Wong (2006)	Meta-analysis on the determinants of audit fee on research publications over 27 years covering 1977 to 2003 for more than 20 countries	They found that evidently statutory audit fee was significantly associated with the measures of client size, client complexity, and client risk, consistent across studies, samples, and countries.						
14	Clatworthy and Peel (2007)	51,429 UK companies, both quoted and unquoted, during 2003	Listed companies on the Main Market paid higher statutory audit fee followed by other listed companies (i.e., including AIM companies), unquoted public companies and						

	statutory audit fee									
No.	Author (Date)	Sample	Key Findings							
14	Clatworthy and Peel (2007) (Cont'd)	51,429 UK companies, both quoted and unquoted, during 2003	 (cont'd) private limited companies. There was a positive but insignificant relationship between statutory audit fee and disclosure of post balance sheet event or contingent liability. No elements of corporate governance were tested in the statutory audit fee model. 							
15	Vafeas and Waegelein (2007)	1,332 sample size on the Fortune 500 firms from 2001-2003 reporting period	 There were significant positive relationships between statutory audit fee and audit committee size, expertise, and independence. There was a significant negative relationship between statutory audit fee and CEO's long-term pay. 							
16	Zaman, Hudaib and Haniffa (2011)	A panel of 135 companies (540 company-year observations) in five sectors quoted on the UK FTSE-350 covered 2001 to 2004 periods	There was a significant positive relationship between statutory audit fee and audit committee effectiveness (includes audit committee independence, expertise, diligence, and size) for larger companies after controlling for board governance variables.							
17	Huang, Parker, Yan and Lin (2014)	13,692 firm-year observations from the Audit Analytics database from 2004 to 2011	 There was a significant positive relationship between statutory audit fee and forced CEO turnover. There was no difference in the statutory audit fee between companies with voluntary CEO turnover and companies without CEO turnover. 							

	statutory audit fee								
No.	Author (Date)	Sample	Key Findings						
18	Kalelkar and Khan (2016)	577 observations from 77 US firms between 2004 and 2013	There was a positive but insignificant relationship between statutory audit fee and statutory auditor switching.						
19	Ghafran and O'Sullivan (2017)	991 firm-year observations of non-financial FTSE 350 firms between the duration 2007 and 2010	There was a significant positive relationship between statutory audit fee and non-accounting expertise of audit committee members particularly for smaller listed firms under FTSE 250.						
20	Bills, Lisic and Seidel (2017)	23,990 firm-year observations from the Audit Analytics database from 2004 to 2013	 There was a significant positive relationship between statutory audit fee and new CEO. The statutory audit fee increased to a lesser extent when the new CEO was promoted within the firm. There was no statutory audit fee adjustment when the new CEO was considered an heir apparent before taking office. 						
21	Xue and O'Sullivan (2023)	453 largest AIM companies for the 2016 financial year	 There were significant negative relationships between statutory audit fee and client liquidity and the length of listing. There was a significant positive relationship between statutory audit fee and levels of audit committee disclosure. There was a significant positive relationship between statutory audit fee and auditor size. 						

Appendix D: Illustrations of model specification under system GMM estimator using "xtabond2" Stata command for statutory audit fee model

Different lag structures: Lag limit					
Model 5	Model 6	Model 7	Model 8		
lag (1 .)	lag (1 .)	lag (1 .)	lag (1 .)		
lag (1 1)	lag (1 .)	lag (1 1)	lag (1 .)		
lag (1 1)	lag (1 .)	lag (1 1)	lag (1 .)		
lag (1 1)	lag (1 .)	lag (1 1)	lag (1 .)		
lag (1 1)	lag (1 1)	lag (2 2)	lag (2 .)		
lag (2 .)	lag (2 .)	lag (2.)	lag (2 .)		
iv	iv	iv	iv		
lag (1 1)	lag (1 .)	lag (1 1)	lag (1 .)		
lag (2 .)	lag (2 .)	lag (2 .)	lag (2 .)		
iv	iv	iv	iv		
lag (2 .)	lag (2 .)	lag (2.)	lag (2 .)		
lag (2 .)	lag (2 .)	lag (2.)	lag (2 .)		
lag (2 .)	lag (2 .)	lag (2 .)	lag (2 .)		
iv	iv	iv	iv		
	Model 5 lag (1 .) lag (1 1) lag (1 1) lag (1 1) lag (1 1) lag (2 .) iv lag (2 .) iv lag (2 .) iv lag (2 .) lag (2 .) lag (2 .)	Model 5 Model 6 lag (1 .) lag (1 .) lag (1 1) lag (1 .) lag (1 1) lag (1 .) lag (1 1) lag (1 .) lag (2 .) lag (2 .) iv iv lag (2 .) lag (2 .) iv iv lag (2 .) lag (2 .) lag (2 .) lag (2 .) lag (2 .) lag (2 .) lag (2 .) lag (2 .)	Model 5 Model 6 Model 7 lag (1 .) lag (1 .) lag (1 .) lag (1 1) lag (1 .) lag (1 1) lag (1 1) lag (1 .) lag (1 1) lag (1 1) lag (1 .) lag (1 1) lag (2 .) lag (2 .) lag (2 .) iv iv iv lag (2 .) lag (2 .) lag (2 .) iv iv iv lag (2 .) lag (2 .) lag (2 .) lag (2 .) lag (2 .) lag (2 .) lag (2 .) lag (2 .) lag (2 .)		

Stata command

xtabond2 LnSAF l.LnSAF l.AC l.NewCEO l.NomadBro SAS AuSize AuLoc l.BIndpd LnTA Micro AcTSubsi LevRatio LnNAF year dummies, gmm (variable list, lag (1 1)) gmm (variable list, lag (2 2)) gmm (variable list, lag (1 .)) gmm (variable list, lag (2 .)) iv (variable list) twostep robust small

Notes:

- 1. LnSAF Statutory audit fee in natural logarithm term; l.AC Lag of existence of audit committee; l.NewCEO Lag of CEO turnover; l.NomadBro Lag of nominated adviser cum broker; SAS Statutory auditor switching; AuSize Auditor size: Big 4; AuLoc Audit location: London; l.BIndpd Lag of board independence; LnTA Total assets in natural logarithm term; Micro Microenterprise; AcTSubsi Total active subsidiaries; LevRatio Leverage ratio; LnNAF Non-audit fee in natural logarithm term.
- 2. Model 5 is the chosen model for this study.
- 3. Predetermined variables represented with gmm (variable list, lag (1 1)); Endogenous variables represented with gmm (variable list, lag (2 2)) and/or gmm (variable list, lag (1 .)) gmm (variable list, lag (2 .)); Exogenous variables represented with iv (variable list).
- 4. "twostep": In two-step estimation, the standard covariance matrix is robust to panel-specific autocorrelation and heteroskedasticity, but the standard errors are downward biased.
- 5. "robust": In two-step estimation, where the standard errors are already robust, robust triggers the Windmeijer correction.
- 6. "small": It requests Stata to use the small-sample corrections to the covariance matrix estimate and report t-test instead of z-test statistics for the coefficients and F-test instead of Wald chi-squared test for overall fit.

Diagnostic tests:

- The Arellano-Bond tests for autocorrelation (i.e., AR(1) and AR(2)) with null hypothesis of "no autocorrelation" and are applied to the differenced residuals. The residuals in the first difference AR(1) should be serially correlated but the residuals in the second difference AR(2) should not be serially correlated.
- The test for over-identifying restrictions of instruments (i.e., Hansen test) with null hypothesis of "the instruments as a group are exogenous". Hansen test is robust but weakened by many instruments.

Appendix E: Summary of past studies relating to statutory auditor switching

	Independent variables:							
Past	Changes in key	Nomad	Statutory	Non-audit	Audit	Modified		
Studies:	management	turnover	audit fee	<u>fee</u>	<u>committee</u>	audit report		
B&R	FC(+)	NA	X	X	X	X		
B&F	FC(+)	NA	FC(+)	X	X	X		
W&K	S(+)	NA	S(+)	X	X	S(-)		
H&C	S(+)	NA	NS	X	X	S(+)		
C&R	NS	NA	X	X	X	S(+)		
S&M	NS	NA	X	X	X	NS		
W	NS	NA	X	X	X	NS		
B&F(a)	FC(+)	NA	FC(+)	X	FC(-)	X		
B&F(b)	xFC	NA	xFC	X	X	X		
C&S	X	NA	NS	X	X	S(+)		
D,K&P (#)	X	NA	X	NS	X	X		
B&S (#)	X	NA	X	NS	X	X		
A,I&M	S(+)	NA	NS	S(-); NS*	X	NS		
L,M&O	X	NA	X	X	S(-)	S(+)		
R&O	X	NA	X	X	S(-)	X		
Y,W&J	X	NA	X	X	NS	NS		
C	X	NA	X	X	X	S(+)		
L	X	NA	X	X	X	S(+)		
C&N	S(+)	NA	X	X	X	X		
B,M&S	S(+)	NA	X	X	X	S(+)		
B,F&V	X	NA	X	X	X	X		
Evidence:	Strong (+)	No	Mixed (+)	Limited (-)	Limited (-)	Strong (+)		

Notes:

- 1. B&R = Burton and Roberts (1967) US data; B&F = Beattie and Fearnley (1995) UK data; W&K = Woo and Koh (2001) Singapore data; H&C = Hudaib and Cooke (2005) UK data; C&R = Chow and Rice (1982) US data; S&M = Schwartz and Menon (1985) US data; W = Williams (1988) US data; B&F(a) = Beattie and Fearnley (1998a) UK data; B&F(b) = Beattie and Fearnley (1998b) UK data; C&S = Cairney and Stewart (2019) US data; D,K&P = DeBerg, Kaplan and Pany (1991) US data; B&S = Barkness and Simnett (1994) Australia data; A,I&M = Abidin, Ishaya and M-Nor (2016) Malaysia data; L,M&O = Lee, Mande and Ortman (2004) US data; R&O = Robinson and Owen-Jackson (2009) US data; Y,W&J = Yanan, Wen and Jinzheng (2013) China data; C = Craswell (1998) Australia data; L = Lennox (2000) UK data; C&N = Carcello and Neal (2003) US data; B,M&S = Bagherpour, Monroe and Shailer (2014) Iran data; B,F&V = Brocard, Franke and Voeller (2018) Germany data.
- 2. S(+/-) = Significant: Positively or negatively; NS = Not significant; X = Not tested or not cited; FC(+/-) = Frequently cited in questionnaire responses: Positively or negatively; xFC = Not frequently cited in interview responses; NA = Not applicable as Nomad is the unique feature for AIM companies only.
- 3. # The dependent variable is non-audit fee while the statutory auditor switching is the independent variable.
- 4. * Different results when applying different measurements.

Appendix E (Cont'd): Summary of past studies relating to statutory auditor switching

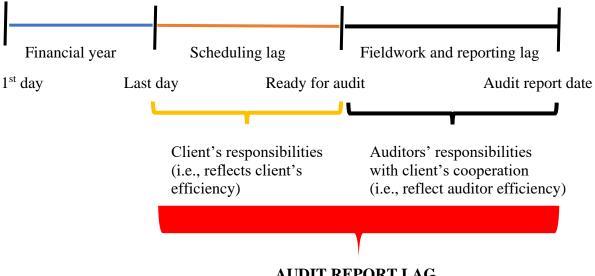
	Independent variables:			
Past	Audit committee and	Client	Financial	Board
Studies:	modified audit report	<u>size</u>	<u>condition</u>	<u>independence</u>
B&R	X	X	X	X
B&F	X	X	X	X
W&K	X	NS	S(-); NS*	X
H&C	X	S(-)	NS	X
C&R	X	X	X	X
S&M	X	NS	S(-)	X
W	X	X	NS	X
B&F(a)	X	FC(-)	X	X
B&F(b)	X	X	X	X
C&S	X	S(-)	S(+/-); NS*	X
D,K&P (#)	X	X	X	X
B&S (#)	X	X	X	X
A,I&M	X	S(-)	NS	S(+)
L,M&O	X	S(-)	S(-); NS*	S(-)
R&O	X	S(+)	X	X
Y,W&J	X	NS	NS	S(-)
C	X	X	X	X
L	X	X	NS	X
C&N	S(-)	X	X	X
B,M&S	X	S(-)	NS	X
B,F&V	X	S(-)	S(-); NS*	X
Evidence:	Limited (-)	Strong (-)	Mixed (-)	Limited (-)

Notes:

- 1. B&R = Burton and Roberts (1967) US data; B&F = Beattie and Fearnley (1995) UK data; W&K = Woo and Koh (2001) Singapore data; H&C = Hudaib and Cooke (2005) UK data; C&R = Chow and Rice (1982) US data; S&M = Schwartz and Menon (1985) US data; W = Williams (1988) US data; B&F(a) = Beattie and Fearnley (1998a) UK data; B&F(b) = Beattie and Fearnley (1998b) UK data; C&S = Cairney and Stewart (2019) US data; D,K&P = DeBerg, Kaplan and Pany (1991) US data; B&S = Barkness and Simnett (1994) Australia data; A,I&M = Abidin, Ishaya and M-Nor (2016) Malaysia data; L,M&O = Lee, Mande and Ortman (2004) US data; R&O = Robinson and Owen-Jackson (2009) US data; Y,W&J = Yanan, Wen and Jinzheng (2013) China data; C = Craswell (1998) Australia data; L = Lennox (2000) UK data; C&N = Carcello and Neal (2003) US data; B,M&S = Bagherpour, Monroe and Shailer (2014) Iran data; B,F&V = Brocard, Franke and Voeller (2018) Germany data.
- 2. S(+/-) = Significant: Positively or negatively; NS = Not significant; X = Not tested or not cited; FC(+/-) = Frequently cited in questionnaire responses: Positively or negatively; xFC = Not frequently cited in interview responses; NA = Not applicable as Nomad is the unique feature for AIM companies only.
- 3. # The dependent variable is non-audit fee while the statutory auditor switching is the independent variable.
- 4. * Different results when applying different measurements.

Appendix F: Definition of audit report lag

Audit report lag is defined as the period between a company's financial year end and the audit report date in many past studies (e.g., Ashton et al., 1987; Knechel and Payne, 2001).



AUDIT REPORT LAG

(reflects the efficiencies of both client and auditor in completing the statutory audit process in meeting the financial reporting timeliness.)

Past studies have identified audit report lag as one of the few externally observable audit output variables that can be used as a proxy to gauge audit efficiency (e.g., Bamber, et al., 1993; Abbott et al., 2012). On the other hand, Knechel and Payne (2001) identified the audit report lag as the sum of three components: scheduling lag (i.e., the lag between the financial year end and the start of fieldwork); fieldwork lag (i.e., the lag between the start and completion of fieldwork); and reporting lag (i.e., the lag between the completion of fieldwork and the audit report date). Xu et al. (2013) argued that the scheduling lag would depend on client's efficiency in finalising their financial statements for audit while Khlif and Samaha (2014) argued that the total length of fieldwork lag and reporting lag would more accurately reflect the audit efficiency. Despite the unavailability of information for each lag, this study examines the efficiencies of both client and auditor in completing the statutory audit process by incorporating discretionary accruals as one of the independent variables. The practice of discretionary accruals prolongs the time required by clients to get the financial statements ready for audit (i.e., extending the scheduling lag), and in turn extending the fieldwork and reporting lag, as auditors require more time to audit more complicated financial statements.

Appendix G: Summary of past studies relating to audit report lag

	Independent	variables:			
Past	Existence of	CEO	Nominated adviser	Discretionary	Modified
Studies	audit committ	ee <u>duality</u>	cum broker	accruals	audit report
S,S&V	NA©	NS	NA	X	NS
G&Y	NA©	X	NA	X	X
Afify	S(-)	S(+)	NA	X	X
Habib	X	S(+)	NA	S(+)	S(+)
K&S	NA©	NS	NA	X	S(-)
Asthana	X	X	NA	S(+)	S(+)
H,L&L	NA©	NS	NA	S(+)	S(+)
G&T	X	X	NA	NS	S(-)
W&L	X	X	NA	NS	S(+)
B,S&S	NA©	X	NA	NS	NS
B,B&S	X	X	NA	X	S(+)
C,L&M	NA©	X	NA	X	S(+)
A,G&N	X	X	NA	X	S(-)
J&T	X	X	NA	X	S(-)
N&T	X	X	NA	X	NS
L,W&C	X	X	NA	X	X
Al-Ajmi	X	X	NA	X	X
I,A&K	X	X	NA	X	X
S&S	X	X	NA	X	S(+)
M&Y	X	X	NA	X	S(+)
E,L&S	X	X	NA	X	S(+)
K&P	X	X	NA	X	X
L,M&S	X	X	NA	X	S(+)
K,S&S	NA©	X	NA	X	X
C&K	X	X	NA	X	S(+)
OA	X	X	NA	X	X
Evidence:	Limited (-)	Limited (+)	No	Limited (+)	Strong (+)

Notes:

^{1.} S,S&V = Sultana, Singh and Van der Zahn (2015) Australia data; G&Y = Ghafran and Yasmin (2018) UK data; Afify = Afify (2009) Egypt data; Habib = Habib (2015) China data; K&S = Khlif and Samaha (2014) Egypt data; Asthana = Ashtana (2014) US data; H,L&L = Harjoto, Laksmana and Lee (2015) US data; G&T = Ghosh and Tang (2015) US data; W&L = Whitworth and Lambert (2014) US data; B,S&S = Baatwah, Salleh and Stewart (2019) Malaysia data; B,B&S = Bamber, Bamber and Schoderbek (1993) US data; C,L&M = Chan, Luo and Mo (2016) China data; A,G&N = Ashton, Graul and Newton (1989) Canada data; J&T = Jaggi and Tsui (1999) Hong Kong data; N&T = Ng and Tai (1994) Hong Kong data; L,W&C = Leventis, Weetman and Caramanis (2005) Greece data; Al-Ajmi = Al-Ajmi (2008) Bahrain data; I,A&K = Imam, Ahmed and Khan (2001) Bangladesh data; S&S = Schwartz and Soo (1996) US data; M&Y = Mao and Yu (2015) US data; E,L&S = Ettredge, Li and Sun (2006) US data; K&P = Knechel and Payne (2001) US data; L,M&S = Lee, Mande and Son (2009) US data; K,S&S = Knechel, Sharma and Sharma (2012) New Zealand data; C&K = Carslaw and Kaplan (1991) New Zealand data; OA = Owusu-Ansah (2000) Zimbabwe data.

^{2.} S(+/-) = Significant: Positively or negatively; NS = Not significant; X = Not tested; NA = Not applicable as Nomad is the unique feature for AIM companies only; NA© = Tested for audit committee characteristics instead as formation of audit committee is compulsory.

^{3. *} Different results when applying different measurements.

Appendix G (Cont'd): Summary of past studies relating to audit report lag

Independent variables:

	-	Statutory					
Past	Auditor	auditor	Statutory	Non-audit	Client	Financial	Board
Studies	<u>size</u>	switching	audit fee	<u>fee</u>	<u>size</u>	<u>condition</u>	<u>independence</u>
S,S&V	NS	X	X	X	S(-)	NS	X
G&Y	S(-)	X	X	X	S(-)	NS; S(+)*	X
Afify	NS	X	X	X	S(-)	S(-)	S(-)
Habib	NS	X	S(+)	X	S(-)	S(+)	NS
K&S	NS	X	X	X	NS	S(+/-)*	NS
Asthana	S(+)	S(+)	S(+)	X	S(-)	S(+/-)*	X
H,L&L	X	S(+)	S(+)	X	S(-)	S(+/-)*	X
G&T	X	NS	X	X	NS	S(+)	X
W&L	S(-)	S(+)	S(+)	NS	S(-)	S(+)	X
B,S&S	X	X	NS	NS	NS	NS	X
B,B&S	X	X	X	X	NS	S(+)	X
C,L&M	NS	S(+)	S(+)	X	NS	S(+/-)*	X
A,G&N	NS	X	X	X	S(-)	NS	X
J&T	X	X	X	X	S(-)	NS	X
N&T	NS	NS	X	X	S(-)	X	X
L,W&C	S(-)	NS	S(-)	X	NS	NS	X
Al-Ajmi	NS	X	X	X	S(-)	S(+/-)*	X
I,A&K	S(+)	X	X	X	X	X	X
S&S	NS	S(+/-)*	X	X	S(-)	S(+)	X
M&Y	NS	S(-)	S(+)	X	S(-)	S(+/-)*	X
E,L&S	X	S(+)	S(+)	X	S(-)	NS; S(+)*	X
K&P	X	X	X	S(+/-)*	NS	X	X
L,M&S	S(+)	X	S(+)	S(-)	S(-)	S(+)	X
K,S&S	S(-)	X	S(+)	S(-)	S(-)	S(+)	X
C&K	X	X	X	X	S(-)	S(+)	X
OA	X	X	X	X	S(-)	NS	X

Evidence: Mixed (+) Strong (+) Limited (-) Strong (-) Strong (+/-)*Limited (-)

Notes

- 1. S,S&V = Sultana, Singh and Van der Zahn (2015) Australia data; G&Y = Ghafran and Yasmin (2018) UK data; Afify = Afify (2009) Egypt data; Habib = Habib (2015) China data; K&S = Khlif and Samaha (2014) Egypt data; Asthana = Ashtana (2014) US data; H,L&L = Harjoto, Laksmana and Lee (2015) US data; G&T = Ghosh and Tang (2015) US data; W&L = Whitworth and Lambert (2014) US data; B,S&S = Baatwah, Salleh and Stewart (2019) Malaysia data; B,B&S = Bamber, Bamber and Schoderbek (1993) US data; C,L&M = Chan, Luo and Mo (2016) China data; A,G&N = Ashton, Graul and Newton (1989) Canada data; J&T = Jaggi and Tsui (1999) Hong Kong data; N&T = Ng and Tai (1994) Hong Kong data; L,W&C = Leventis, Weetman and Caramanis (2005) Greece data; Al-Ajmi = Al-Ajmi (2008) Bahrain data; I,A&K = Imam, Ahmed and Khan (2001) Bangladesh data; S&S = Schwartz and Soo (1996) US data; M&Y = Mao and Yu (2015) US data; E,L&S = Ettredge, Li and Sun (2006) US data; K&P = Knechel and Payne (2001) US data; L,M&S = Lee, Mande and Son (2009) US data; K,S&S = Knechel, Sharma and Sharma (2012) New Zealand data; C&K = Carslaw and Kaplan (1991) New Zealand data; OA = Owusu-Ansah (2000) Zimbabwe data.
- 2. S(+/-) = Significant: Positively or negatively; NS = Not significant; X = Not tested; NA = Not applicable as Nomad is the unique feature for AIM companies only; NA© = Tested for audit committee characteristics instead as formation of audit committee is compulsory.
- 3. * Different results when applying different measurements.