Extended Audit Reporting: Evidence From the Gulf Cooperation Council (GCC)

A thesis submitted for the degree of
Doctor of Philosophy in Accountancy

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Declaration

To the best of my knowledge, this thesis contains no material previously published by any other person, except where the due acknowledgement has been made. This thesis does not include any content that has been previously accepted for application towards any other academic degree or diploma at any university.

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Date: 25th May 2024

Abstract

Extended Audit Reporting (EAR) is an emerging area of research within the domain of auditing, and it represents the most significant change in the structure of audit reports over the past 70 years. Key Audit Matter (KAM) represents a form of EAR mandated by the International Auditing and Assurance Standards Board via the International Standard of Auditing 701. This thesis comprises three essays that examine EAR and KAM. The first essay is a systematic literature review (SLR) of EAR that synthesises and extends the current literature. It further provides a rigorous review of recent additions to auditing requirements. The second and third essays are cross-country research studies that examine the effect of the unique attributes of the six Gulf Cooperation Council (GCC) countries on KAM, using a unique dataset collected manually during the 2016–2021 period for non-financial firms listed on GCC stock exchanges.

The first essay offers a comprehensive systematic review of EAR. It synthesises and extends the current knowledge through an integrative framework of this recent auditing development by exploring eight aspects of EAR. The review includes 156 articles published between 2014-2023 and structured according to the economic context and methodology of the studies to facilitate novel insights. The analysis shows that developed countries document mixed findings regarding the communicative value of EAR and its market effects. Developing countries, conversely, report informativeness and market reactions. Both report a decline in earnings management behaviour and an improvement in the quality of financial reporting. Most studies report that the attributes of audit committees, external auditors, and audited companies influence EAR disclosure, as do accounting standards precision and auditing standards clarity. Several opportunities are provided for future research to reconcile and extend past research, thereby filling existing gaps.

The second essay uses agency theory to examine the relationship between ownership structure (royal, family, and foreign) and board director type (royal, family, and foreign) with the external auditor reporting of KAMs. The results provide strong evidence that royal ownership decreases KAM disclosure, whereas family and foreign ownerships increase disclosure. The study also found that royal board directors reduce the number of disclosed KAMs, suggesting that external auditors consider power and status when determining KAMs. By contrast, foreign board directors increase KAM disclosure, possibly to address information asymmetry due to geographic separation between the principal and agents. The study found no evidence of an association between family directors and KAM reporting.

The third essay investigates the relationship between audit partner tenure and KAM reporting and whether Hofstede's cultural dimensions affect this relationship. Hogarth's (1980) decision-behaviour theory is applied to examine the influence of tenure on partner judgement and KAM disclosure decisions. The results provide strong evidence that partner tenure is positively associated with KAMs disclosures. The study also found that long-tenured partners disclose KAMs in more detail and produce more readable audit reports, and interestingly, long-tenured auditors tend towards boilerplate reporting. The findings on the effect of Hofstede culture moderators suggest that the relationship between partner tenure and KAMs is relatively strong when power distance and uncertainty avoidance are moderating factors, and relatively weak when individualism is considered.

This study extends and contributes to the EAR literature in several ways. First, to the best of the author's knowledge, this thesis presents cross-country evidence of KAM disclosures in six GCC countries for the first time. Second, this thesis offers the first evidence of the effect of the unique characteristics of the Gulf region (ownership structure and board directorship) on KAM reporting. Third, this thesis provides unprecedented evidence for the effect of audit partner tenure on KAM reporting. Fourth, this study provides the first evidence of how national cultural values, using Hofstede's cultural dimensions, can influence the behaviour of long-tenured partners' KAM reporting.

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List of Abbreviations

Abbreviation	Definition
AJG	Academic Journal Guide
ALKAMs	Account Level KAMs
CAM	Critical Audit Matters
EACGT	Economic and Corporate Governance Theories
EAR	Extended Audit Reporting
ELKAMs	Entity Level KAMs
EOM	Emphasis of Matter
EU	European Union
FRC	Financial Reporting Council
GC	Going Concern
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GICS	Global Industry Classification Standard
IAASB	International Auditing and Assurance Standards Board
ISA	International Standards of Auditing
ISA 570	International Standard on Auditing 570 Going Concern
ISA 700	International Standard on Auditing 700 Forming an opinion and reporting on financial statements
ISA 701	International Standard on Auditing 701 Communicating key audit matters in the independent auditor's report
ISA 706	International Standard on Auditing 706 Emphasis of Matter paragraphs and other matter paragraphs in the independent auditor's report
JoA	Justification of Assessment
KAM	Key Audit Matters
KSA	Kingdom of Saudi Arabia
MENA	Middle East and North Africa
PCAOB	Public Company Accounting Oversight Board
RMM	Risk of Material Misstatements
SEC	Securities and Exchange Commission
SJR	Scimago Journal Rating
SLR	Systematic Literature Review
SOCPA	Saudi Organisation for Certified Public Accountants
SSPT	Sociological Or Socio-Psychological Theories
UAE	United Arab Emirates
UK	United Kingdom
USA	United States of America

Chapter 1

Introduction to the Thesis

1.1 Introduction

Extended Audit Reporting (EAR) is an emerging research topic in the expanded auditing domain. This represents the most substantial change in the structure of audit reports in more than 70 years (Doty, 2017). EAR has emerged with an increased focus on ways to improve the communicative value of audit reports. These efforts were made in response to scandals, fraud, and misstatements. Several financial statement users, scholars, practitioners, and policymakers have criticised the traditional pass/fail audit reporting model for being highly standardised, arguing that it may not provide adequate communicative value (Church et al., 2008; Gray et al., 2011). As a result, standard setters and regulators worldwide have begun to enhance the audit reporting model by introducing EAR to reduce information asymmetry and improve transparency (Mock et al., 2013; Vanstraelen et al., 2012). They mandated the disclosure of the most significant matters and risks in financial statement audits (e.g. Financial Reporting Council 2013, 2016; European Union 2014; International Auditing and Assurance Standards Board, 2015; Public Company Accounting Oversight Board, 2017). The EAR represents a significant expansion of audit reporting.

EAR was adopted first in France with its Justification of Assessment (JoA) in 2003 in response to the United States' Sarbanes-Oxley (SOX) Act of 2002 (Bédard et al., 2019). The audit standard NEP 705 (Justification des appreciations) mandates that auditors justify their findings and assessments to provide insight, over and above the auditor's opinion, and enrich the quality of the audit report (Haut Conseil des Commissaires aux Comptes, 2006). Ten years later, the Financial Reporting Council (FRC) in the United Kingdom (UK) adopted the EAR with the disclosure of the Risk of Material Misstatements (RMM). This standard required auditors to disclose materiality and assess the risks of material misstatements that have the greatest impact on the overall audit strategy, allocation of resources, and direction of the audit team during the audit cycle (FRC, 2013). In 2014, the European Union (EU) passed Regulation No. 537/2014, requiring auditors who conduct statutory audits for public-interest entities to include a description of the most significant risks of material misstatements due to fraud or error (Regulation (EU) 2014, sec. 10 paragraph c). Regulation (EU) was issued with new requirements for statutory auditors after an extensive consultation that commenced with the European Commission Green Paper. The Green Paper discussed the critical issues that led to the 2007 financial crisis (European Commission, 2010; Humphrey et al., 2011).

In 2015, the International Auditing and Assurance Standards Board (ISAAB) mandated the disclosure of Key Audit Matters (KAMs). The International Standard for Auditing (ISA) is the most widely adopted standard globally, with 62% of the International Federation of Accountants (IFAC) member jurisdictions fully adopting the standards and 36% partially adopting them (IFAC 2022). The main objective of the ISA is to maintain consistency and comparability in external auditor reporting.

During the revision of the ISAs 700 suite, ISA 701 'Communicating KAM in the Independent Auditor's Report' was released with the purpose to (IAASB 2015, para. 2) "enhance the communicative value of the auditor's report by providing greater transparency about the audit that was performed". KAMs are items that are considered the most significant based on auditor judgement during the audit period. They are selected from matters communicated with those charged with governance. The FRC proposed revisions to the UK Audit Standard in response to changes in Regulation (EU) 537/2014 and ISA 701 issued by the IAASB. In 2016, the FRC aligned its standards with these standards and mandated ISA (UK) 701 (FRC 2016). The last to follow was the Public Company Accounting Oversight Board (PCAOB) in the United States which issued (AS 3101) in 2017. This required the disclosure of Critical Audit Matters (CAM) (PCAOB 2017) following extensive consultation and calls for comments that commenced in 2011 (PCAOB 2011, 2013, 2016). CAMs require auditor judgement (subjective) and relate to material accounts or disclosures that are either communicated to or are required to be communicated to the audit committee.

Accounting bodies issued standards mandating EAR in order to reduce information asymmetry between publicly traded firms and their stakeholders. EAR expands the communicative value of an independent auditor's report by providing greater transparency and offers additional information to financial statement users to better evaluate a firm's financial condition. This then enhances the dialogue between the auditor and those charged with governance, increasing focus on financial statement disclosures in the audit report, and influencing audit quality to reduce misstatements and scandals (IAASB, 2016; PCAOB, 2017). The EAR literature presents several intended benefits such as communicative value, effect on the stock market, and audit quality.

The letters addressed to the IAASB and PCAOB in response to invitation to comment highlighted several concerns about EAR. These include auditors' legal liability, increased audit fees, audit lag, and additional work to prepare the audit report. Taking stock of the implications, the PCAOB suggested in 2017 that "the final standard seeks to strike an appropriate balance between the value of the information being provided and the costs of providing it" (p. 99). The EAR literature takes into consideration several potential unintended consequences, such as impacts on auditor liability and audit fees.

Standards outline a principle-based approach for the determination of the EAR and offer broad guidelines in comparison to precise requirements. The EAR is mainly concerned with significant matters that require an auditor's professional judgement and relate to material accounts or disclosures. Thus, many factors affect the quantity, subject area, and details of auditor disclosures. The literature on EAR determinants includes auditor, audit client, audit committee characteristics, and the precision of accounting standards.

In 1981, the Gulf Cooperation Council (GCC) was established to foster economic partnership and development among six states bordering the Persian Gulf. These were the Kingdom of Saudi Arabia (KSA), the Sultanate of Oman, the United Arab Emirates (UAE), Kuwait, Qatar, and Bahrain. GCC countries adopted and implemented ISA 701 in 2016 and (2017 in the case of Saudi Arabia). GCC countries are considered oil-rich, and their income is heavily reliant on oil exports (Balli et al., 2011; Maalel & Mahmood, 2018). As a result of the oil crisis in the 1970s and 1980s, the GCC countries diversified their sources of income to reduce their dependency on petroleum and invested in industries that could offer competitive advantage. These included financial services, industry, materials, real estate, consumer communication services, and airlines (Fasano & Iqbal, 2003). Several reforms have also assisted GCC countries establish convenient macroeconomic conditions such as low interest rates (generally between 3% and 4%), reduced risk regarding capital repatriation, low translation costs, and regulations introduced to diminish corruption and facilitate foreign ownership (Balli et al., 2011). All these efforts to expand their economies attracted investment from developed countries (Al-Matari et al., 2021; Al Ani & Chavali, 2023).

Ownership and governance features are unique to the region. For example, many listed firms in the GCC have concentrated ownership and a limited number of shareholders (Al-Yahyaee et al., 2011). Appropriate disclosure can reduce agency-related conflicts stemming from concentrated ownership in the GCC and improve transparency (IFC & Hawkama, 2008; Jaggi et al., 2009). Family members dominate many listed firms in the GCC and have at least one royal board member (Halawi & Davidson, 2008). Royal members' economic and political power may undermine regulatory attempts to enhance corporate governance and reporting transparency (Al-Hadi et al., 2016b). KAM disclosure can be viewed as a significant governance aspect that can reduce agency-related issues because it provides transparency, improves communication with financial statement users, and offers specific information about significant matters and risks.

Culture in the GCC generally displays solid social relations connected with the value of family and personal ties, the importance of loyalty, hierarchical structures, and religion (Baatwah et al., 2023; Haniffa & Hudaib, 2007; Patai, 1952). The GCC setting is ranked highly in terms of secrecy because the environment in the region reflects the cultural dimensions of high power distance and uncertainty avoidance, while it is low for individualism, suggesting less disclosure (Gray, 1988; Hofstede, 1980). The region's society is viewed as less individualistic (collectivist), and its members demonstrate the importance of the group's commitment, loyalty, and cohesion. High power distance countries are linked to hierarchical systems, restricted information exchange, and centralisation of power at the top level. Countries with high uncertainty avoidance are characterised by discomfort in ambiguous environments and a greater tendency to exercise caution when taking risks. These cultural dimensions are expected to influence the nature of the KAMs in the region.

Prior studies on EAR were limited to three countries within the GCC: the UAE, Bahrain, and Oman (Al-Lawati & Hussainey, 2022; Baatwah, 2023; Baatwah et al., 2022; Barghathi et al., 2021; Mah'd & Mardini, 2022). The existing body of literature on EAR in the GCC region predominantly concentrated on investigating the relationship between auditor characteristics, mainly their type, and the disclosure of KAM. Examining EAR in the context of the GCC offers an opportunity to investigate variables unique to regions that have not been explored in prior literature. Moreover, cross-country studies on EAR in developing markets are scarce, with only one study having been conducted (Mah'd & Mardini, 2022). Studies that are cross-referenced facilitate the generalisation of results. This presents an avenue for conducting cross-country research in developing markets by examining EAR in the six GCC countries collectively. Proper disclosures in audit reports are significant for listed firms in the GCC. This provides transparency, enhances communicative value, and safeguards the users of financial statements.

This study is not only motivated by scholarly literature. Auditor disclosure has received significant attention from financial statement stakeholders, including preparers, auditors, regulators, standard setters, and investors. This study was driven by recent regulatory developments that mandate the disclosure of KAMs in audit reports. This is for the purpose of enhancing transparency, strengthening governance, and to protect the interests of shareholders. The primary objective of all the EAR standards is to improve the quality of audit reporting by disclosing the most significant matters and risks that necessitate auditors' professional judgement. Moreover, EAR's novelty has led to increased scholarly interest. As EAR establishes a greater foothold with financial statement users, there is a growing need for a better understanding among scholars and practitioners. In response to this need, this study offers a comprehensive review of the EAR literature and provides additional insights into the factors influencing KAMs disclosure using GCC data. These factors are unique to the region and include the ownership structure, board directorship, partner tenure, and the moderating role of Hofstede's cultural dimensions. This study offers novel findings that reflect the context of auditing and accounting in GCC countries. It considers the complexities of the region's institutional and cultural contexts that can potentially impact KAM disclosure by external auditors.

This thesis revolves around the concepts of agency theory and Hogarth's (1980) decision behaviour theory. The insights provided by these theories improve the understanding of EAR. In the context of the GCC, effective disclosure by external auditors can minimise agency-related problems stemming from concentrated ownership as well as conflicts between the board of directors and management (Jaggi et al., 2009). Agency theory emphasises auditor independence to effectively monitor management (agents) and report to shareholders (principals) (Jensen & Meckling, 1976). KAM reporting can serve as an additional means for auditors to inform shareholders about management's conduct. KAMs are anticipated to alleviate existing principal-agent issues and enhance corporate governance practices. Moreover, Hogarth's (1980) theory of information assimilation for reasoning and decision-making is used to describe how audit partners exercise judgment to determine which significant matters should be considered in their audit reports. Hogarth's theory posits that judgements are influenced by several factors - the individual, task context in which decisions are made, and subsequent results. In extended audit reporting, the audit partner serves as the individual, and the determination of whether to disclose a significant risk as a KAM represents the results. Culture refers to the surroundings in which the client functions, influencing accounting practices and disclosure (Hope, 2003; Mueller et al., 1991). Agency and Hogarth's (1980) theories supports rationalise the findings of this thesis, and connect these findings to evidence from previous studies.

1.2 Objectives of the Study

This thesis rigorously reviews recent additions to auditing requirements and offers more information on the determinants of KAMs using evidence from the GCC. This thesis aims to achieve the following objectives:

- Objective 1: Present a Systematic Literature Review (SLR) on Extended Audit Reporting.

- Objective 2: Examine the relationship among ownership structure, corporate governance, and Key Audit Matters.

- Objective 3: Explore the relationship between audit partner tenure and key audit matters in the Gulf Cooperation Council.

1.3 Summary of Results and Significant Contributions

1.3.1 Objective 1: Present a SLR on Extended Audit Reporting

The SLR seeks to answer three main questions. First, what does the literature show about the current state of EAR research? Second, which topics related to EAR have been examined? Third, what are the research gaps and possible directions for future EAR research? The purpose of the first essay that examines Objective 1 is to provide a comprehensive systematic review of EAR. This is to offer an integrated and synthetic overview of the current knowledge on EAR to connect inconsistencies in prior results with potential explanations through an integrative framework comprising eight areas of EAR. These include seven topical themes: (1) investors, debtholders, and the stock market; (2) management; (3) audit committees; (4) external auditors; (5) audit features; (6) audited companies; and (7) standard setters. The eighth area covers the theoretical perspectives on these themes. The SLR also outlines an agenda for future research by addressing the gaps in the existing literature.

1.3.1.1 Summary of Results

The SLR demonstrates that the EAR literature has produced diverse results. It finds that EAR communicative value research focusing on investor and creditor decision making both varies and lacks clear patterns for generalised inferences. For instance, existing literature on developed countries reveals diverse results on the communicative value of EAR to investors and its effect on the market. However, some studies conducted in developing countries suggest informativeness and document market reactions. Both economies document positive findings regarding a reduction in earnings management behaviour and improvement in financial reporting quality. Similarly, most studies in both economies find that the specific attributes of external auditors, audit committees, and auditees affect EAR disclosure. Regarding audit features, most studies in developing countries have not observed a change in audit fees, whereas those in developing economies have shown an increase. Similarly, developed countries did not experience considerable audit delays related to EAR, whereas developing countries documented mixed findings. In both economic settings, many studies report improved audit quality and found that accounting precision and the clarity of auditing standards affect EAR disclosure. In relation to the most commonly used theories for the study of EAR, the findings indicate that agency theory is the most common, given its prominence in the fields of accounting and auditing. The existing literature lacks qualitative studies that utilise surveys and interviews, mixed studies, cross-cultural research, studies in developing economies, and multi-theoretical perspectives. Readers should be careful about generalising the results, partly because of archival research limitations such as small sample sizes, short timeframes, and experimental research with student participants.

1.3.1.2 Significance

The first objective of this thesis (“objective 1”) provides contribution to the extended audit reporting literature. The SLR is motivated by the recent expansion of research on changes in audit reporting models. EAR’s novelty has made it an increasingly popular subject of scholarly research. Thus, improved understanding is required in both academia and business. This study contributes to the literature by providing a comprehensive systematic review of EAR using a sample of 156 studies from 80 journals rated by the Academic Journal Rating (AJG 2021) and/or the Scimago Journal Rating (SJR 2022). This contribution is necessary because a holistic academic perspective remains underdeveloped. The SLR differs from prior existing literature reviews on EAR (Bédard et al., 2016; Gimbar et al., 2016a; Gold & Heilmann, 2019; Luo, 2021; Minutti-Meza, 2021; Pais, 2020; Porumbăcean & Tiron-Tudor, 2021; Velte & Issa, 2019; Yoga & Dinarjito, 2021) in that it is comprehensive and systematic.

This review employed a systematic method that follows a transparent process and can be replicated by other researchers based on the description of the methodology used. The SLR critically analysed 156 sample articles through an integrative framework comprising eight areas covering both determinants and consequences and synthesised the results of the existing literature. Its analytical structure is based on economy (unprecedented) and methodology that provides novel insights for the reader. The integrative research framework provides both an analysis of the current research and a future research agenda for scholars, practitioners, and other financial statement users.

To the best of the author's knowledge, this is the first literature review that comprehensively examines the theories used in EAR studies. Theories were categorised into two disciplines: Economic and Corporate Governance Theories (EACGT) and Sociological Or Socio-Psychological Theories (SSPT), which were derived from other reviews in the field (Alhossini et al., 2021; Nguyena et al., 2020). The purpose is to explain commonly utilised theories and explore the potential of new, seldom used theories. The SLR also identifies trends, limitations, and current gaps in the EAR literature. Addressing these gaps sets the agenda for future research. Eleven major questions deserving additional scholarly scrutiny and examination are suggested based on the limitations of this study.

1.3.2 Objective 2: Examine the relationship among ownership structure, corporate governance, and key audit matters

The second essay addresses two primary research questions that have not been investigated previously. The first research question is whether the audit client ownership structure can affect KAM reporting. The second research question is whether the audit client board directorship type can affect KAM reporting. The purpose of the second essay, which examines Objective 2, is to investigate the association between ownership structure, board directorship, and the number of KAMs disclosed. In particular, the focus is on the following types of ownership and directorship: royal, family, and foreign. The relationship is also examined by manipulating the dependent variable. Furthermore, the association is studied using the royal chairperson as an alternative measure for royal directors.

1.3.2.1 Summary of Results

Using a hand-collected sample of 430 non-financial listed firms (2,107 firm-year observations) in six GCC countries from 2016 to 2021, there is evidence of a strong negative relationship between royal ownership and the number of KAMs disclosed. Conversely, family and foreign ownership show a positive relationship with KAM disclosure. The results support the royal ownership effect, which suggests that royal owners tend to be more protective, avoid negative market attention, and prioritise short-term performance over monitoring (Al Nasser, 2020). Moreover, the necessity for disclosure is greater when a high ratio of shares is owned by foreign investors, potentially because of the geographic separation between management and foreign owners (Craswell & Taylor, 1992; Schipper, 1981), However, the findings for family ownership contradict the hypothesis of a negative relationship rooted in agency-related issues. This positive association could be explained by Wang (2006) and Demsetz and Lehn's (1985) suggestion that family firms alleviate the owner-manager conflict and tend to have low information asymmetry. High family concentration could induce family owners to improve monitoring and provide additional accounting information. Moreover, there is evidence that royal directors decrease disclosure, suggesting the latter's aversion to negative attention that may follow the disclosure of significant and complex matters. There is also evidence that foreign directors increase disclosures, suggesting that foreign investors seek high-quality information. There is no evidence of an association between family directors on the board and KAM disclosures. Furthermore, there is a strong negative association between the royal chairman (an alternative measure for royal directors) and the number of KAMs disclosed. The regression results for the royal chairman remain negative and significant for all the regression models used (OLS, Tobit, Robust, and Poisson). Additionally, when the dependent variable is altered from the number of KAMs disclosed to the length of KAMs, the findings were generally consistent with the main models.

1.3.2.2 Significance

The second objective of this thesis ("objective 2") contributes to the EAR (auditor disclosure) and governance literature in several ways. First, to the best of the author's knowledge, this study is the first to present cross-country evidence of KAM disclosures in six GCC countries. EAR research has covered individual GCC countries, such as the UAE, Bahrain, and Oman (Al Lawati & Hussainey, 2022; Baatwah, 2023; Baatwah et al., 2022; Barghathi et al., 2021; Mah'd & Mardini, 2022) but has not yet explored the GCC as a region. Second, it explores a set of features unique to the GCC region, in relation to which this study examines ownership and directorship types that have not been studied before in the EAR literature. Third, considering the recent efforts to strengthen corporate governance reforms to improve transparency, protect shareholders, and encourage foreign investments in the region, empirical research on the association between ownership and directorship and KAM disclosure by external auditors in the GCC is both beneficial and timely. Fourth, findings complement the stream of ownership and disclosure research that highlights the negative effects of royal ownership and positive effects of foreign ownership. This is because the findings provide evidence that ownership structure plays a significant role in external auditors' reporting. Finally, the results extend the literature on corporate governance by providing evidence that royal directors influence the disclosure of fewer KAMs, while foreign directors influence the disclosure of more KAMs.

1.3.3 Objective 3: Explore the relation between audit partner tenure and key audit matters in the GCC.

The third essay aims to answer two unexplored research questions. First, it examines whether partner tenure effects KAM disclosures. Second, it examines whether the moderating role of Hofstede cultural dimensions can affect the relationship between partner tenure and KAM reporting. The purpose of the third essay that investigates Objective 3 is to examine the relationship between partner tenure and KAMs and to explore the moderating effect of Hofstede's national culture dimensions, namely the impact that power distance, individualism, masculinity, and uncertainty avoidance have on the relationship between partner tenure and KAMs. This study also examines Hofstede’s cultural dimensions as control variables to investigate their impact on KAM reporting. Furthermore, the association is studied using audit firm tenure as an alternative measure of partner tenure. Additionally, this relationship is tested by manipulating the dependent variable (e.g. KAM length and readability). Moreover, the contents of 4,792 hand-collected KAMs are analysed to demonstrate the types of KAMs disclosed and the most commonly reported KAMs.

1.3.3.1 Summary of Results

Using a manually collected sample of 456 non-financially listed firms (2,415 firm-year observations) in six GCC countries from 2016 to 2021, evidence is provided of a strong positive association between partner tenure and the number of KAMs disclosed. This finding indicates that long-tenured partners disclose more KAMs, suggesting that auditors gradually acquire a better understanding of an audit client and industry over longer tenure periods. The regression results for partner tenure are consistently positive and significant across all regression models (OLS, Tobit, robust, Poisson, and fixed effects), including the robustness checks that control for endogeneity. Moreover, when the dependent variable is manipulated, it is found that partner tenure is positively associated with KAM length and readability. This further suggests a more detailed and better explanation for KAMs, resulting in enhanced communication value. Interestingly, it is discovered that long-tenured auditors tended to disclose the same KAM in subsequent years, suggesting boilerplate reporting. Evidence is also provided of a strong positive association between audit firm tenure (an alternative measure of partner tenure) and number of disclosed KAMs. This is consistent with the results of Rahaman and Karim (2023), who also found a positive association between audit firm tenure and KAM disclosures in Bangladesh. The results remain substantially unchanged for all regression models. Additionally, evidence is provided that account-level KAMs dominate the sample and that revenue recognition is the most commonly disclosed KAM, based on content analysis conducted on 4,792 hand-collected KAMs. This is consistent with previous studies (Bepari et al., 2022; Camacho-Miñano et al., 2023; Kend & Nguyen, 2020; Pérez et al., 2021; Sierra-García et al., 2019) because revenue recognition can involve complex contract arrangements, extended commitments, and substantial management judgement and estimations.

Regarding Hofstede's cultural moderators, evidence is provided that power distance and uncertainty avoidance positively affect the association between partner tenure and KAM disclosure, whereas individualism negatively affects this relationship. Evidence for the role of masculinity is not provided because the results were insignificant. The findings indicate that long-tenured partners can impact hierarchical structures and information sharing, resulting in the reporting of more significant matters as KAMs. Additionally, long-tenured auditors are more likely to disclose more KAMs to avoid potential litigation and reputation loss. When Hofstede’s cultural dimensions are used as controls, it is found that power distance and uncertainty avoidance are associated with less KAM reporting, whereas individualism is associated with more. These results align with the disclosure literature (Gray & Vint, 1995; Hope, 2003; Jaggi & Low, 2000; Orij, 2010; Zarzeski, 1996) and Gray's (1988) hypothesis that societies with greater power distance, higher levels of uncertainty avoidance, and collectivism are secretive. This is associated with members’ inclinations to limit information exchange to maintain inequalities in power, feeling uncomfortable with uncertainty, and demonstrating concern for the interests of the group.

1.3.3.2 Significance

The third objective of this thesis (“objective 3”) provides several contributes. First, it provides unprecedented evidence of the impact of audit partner tenure on KAM reporting. It provides evidence that long-tenured partners disclose a greater number of, more detailed, and more readable KAMs, which can improve audit reporting. To the best of the researcher’s knowledge, existing EAR literature has not explored tenure at the audit partner level. However, tenure at the audit firm level has been explored with mixed outcomes (Elshafie, 2023; Jaggi, et al., 2022; Pinto & Morais, 2019; Rahaman & Karim, 2023). Second, the study demonstrates how partner tenure can drive audit reporting, thereby enabling regulators and scholars to better evaluate the implications of long-tenured partners on audit reporting, and consequently produce regulations and research accordingly. Third, first-time evidence is presented of how national cultural values, using Hofstede's cultural dimensions, can impact the behaviour of long-tenured partners’ KAM reporting. The study uses variations in cultural values across countries to explain the differences in the behaviour of long-tenured auditors towards the disclosure of KAMs, contributing to the literature. Fourth, this paper responds to Bédard et al. (2019) and Pinto and Morais’s (2019) call for further research on the influence of national culture on auditors’ behaviour with regard to EAR reporting. Fifth, as part of an additional analysis, strong evidence is provided to support the existing literature on the positive impact of audit firm tenure on KAM reporting. Finally, this study is the first attempt to analyse the content of KAMs (type and theme) in the GCC region, filling a considerable gap in the related literature.

1.4 Overview of Thesis

This thesis comprises five chapters. *Chapter 1* introduces the thesis with the background and motivation, provides an outline of the research questions and objectives, discusses the summary of the findings along with the significant contributions for each objective independently, and finally runs through the thesis structure.

Chapter 2 presents the first essay "A Systematic Literature Review on Extended Audit Reporting: Evidence from Developed and Developing Economies". This study has been submitted to the *International Journal of Accounting (TJIA)*, which is currently undergoing a second round of revision and resubmission. This paper was also presented in the *2022 British Accounting and Finance Association (BAFA) Doctoral Masterclasses*, and *2023 TIJA PhD Consortium (Vienna, Austria)*. A poster summarising this paper was presented in the *2022 BAFA South-East Area Group Annual Conference*, and *2022 Brunel Doctoral Research Poster Conference* where the poster won for the best theme in "Communities: Global, Secure, Connected Communities".

Chapter 3 presents the second essay: Ownership Structure, Corporate Governance, and Key Audit Matters: Evidence from the Gulf Cooperation Council". This paper is accepted for presentation at the *2024 BAFA Annual Conference (08-10 April 2024 at the University of Portsmouth)* and for a presentation in a Parallel Session at the *46th Annual Congress of the European Accounting Association (15-17 May 2024 in Bucharest, Romania).*

Chapter 4 presents the third essay, "Audit Partner Tenure and Key Audit Matters in the Gulf Cooperation Council: The Moderating Effect of Culture." This paper has been submitted for presentation at the following conferences and is awaiting their decision notification: *34th Audit and Assurance Conference (09-10 May 2024 in Dublin, Ireland) and 11th International Conference of the Journal of International Accounting Research (20-22 June 2024 in Taipei, Taiwan).*

Chapter 5 provides a summary and conclusion of the thesis, along with its contributions and implications. Chapter 5 provides limitations and suggestions for future research.

Chapter 2

Essay1

A Systematic Literature Review on Extended Audit Reporting: Evidence from Developed and Developing Economies

Abstract

This paper offers a comprehensive systematic review on Extended Audit Reporting (EAR). It synthesises and extends current knowledge through an integrative framework comprising eight areas of EAR. These include seven topical themes: (1) Investors, debtholders, and stock market; (2) management; (3) audit committee; (4) external auditors; (5) audit features; (6) audited company; and (7) standard setters. The eighth area covers theoretical perspectives on these themes. The review included 156 articles published between 2014 and 2023 to bridge knowledge gaps by: (1) mapping existing knowledge; (2) synthesising results in an integrative framework representing the distinct landscape of contributions; and (3) debating viable future research avenues. The review is structured according to studies' economic context and methodology to facilitate novel insights. The analyses show that developed economies report mixed results on the communicative value of EAR and its market effect, while developing economies report informativeness and market reaction. Both reported declines in earning management behavior and enhancements in financial reporting quality. A majority reported that the characteristics of external auditors, audit committees, and audited companies affected EAR disclosure, as did accounting standards precision and auditing standards clarity. Finally, several opportunities for future research are listed as research questions to reconcile and extend past research.

Keywords*:* expanded audit reporting; key audit matters; systematic literature review; audit reporting model.

2.1 Introduction

Extended Audit Reporting (EAR) is emerging as a promising research area within the broader sphere of auditing research (Abdelfattah et al., 2021; Elmarzouky et al., 2022). Some financial statement users, researchers, practitioners, and policymakers have critiqued the traditional pass/fail audit reporting model for its high standardization, arguing that it may not provide sufficient communicative value (Church et al., 2008; G. L. Gray et al., 2011). This motivated standard setters and regulators globally to enhance the audit reporting model through the introduction of EAR to reduce the information gap and improve transparency (Mock et al., 2013; Vanstraelen et al., 2012).

The earliest effort at extending what was included in the audit report occurred when France approved the Justification of Assessment (JoA) requirement in 2003. Ten years later, the United Kingdom (UK) adopted EAR via disclosure of Risk of Material Misstatements (RMM). In 2015, the International Auditing and Assurance Standards Board (IAASB) mandated the disclosure of Key Audit Matters (KAM) and in 2016, the UK aligned its EAR standards with IAASB. The Public Company Accounting Oversight Board (PCAOB) in the United States (US) issued the Critical Audit Matters (CAM) requirement in 2017. These newly required disclosures aim to decrease information asymmetry through greater communicative value and enhanced decision usefulness. It is also crucial to consider potential unintended consequences, such as impacts on auditor liability and audit costs.

EAR is defined as the most significant risk areas and matters in financial statements auditing based on the auditor's professional judgment with respect to challenging, complex, and subjective matters. Throughout this paper, "EAR" will refer to Extended Audit Reporting covering JoA, RMM, KAM, and CAM. "KAM" is more widely used, given its international recognition.

This review is motivated by the recent increase in the number of studies that are examining this change in the audit reporting model. The novelty of EAR's has made it an increasingly popular subject of scholarly research, but a holistic academic perspective remains underdeveloped. As EAR gains a greater recognition among financial statement stakeholders, more understanding is needed for both academia and business. In response to this need, a Systematic Literature Review (SLR) is conducted to propose an integrative research framework to synthesise and extend current literature and to provide a rigorous review of recent additions to auditing requirements. The study is guided by the following research questions (RQs): RQ1. What does the overall literature show about the current state of EAR research? RQ2. Which topics related to EAR have been examined? RQ3. What are the research gaps and possible future research directions for EAR?

This study contributes to the literature by providing a comprehensive systematic review of EAR using a sample of 156 studies from 80 journals rated by the academic journal rating (AJG 2021) and/or the Scimago Journal Rating (SJR 2022). This review has three major objectives and outcomes. First, it offers an integrated and synthetic overview of current knowledge to connect inconsistencies in prior results with potential explanations. It is structured according to economy and methodology to generate adequately novel insights for readers. Second, it delivers unique insights through an integrative framework that provides both an analysis of current research and a future research agenda. Third, this SLR differs from previous literature reviews on EAR (Bédard et al., 2016; Gimbar et al., 2016a; Gold & Heilmann, 2019; Luo, 2021; Minutti-Meza, 2021; Pais, 2020; Porumbăcean & Tiron-Tudor, 2021; Velte & Issa, 2019; Yoga & Dinarjito, 2021) in that it is comprehensive and systematic. This means that it could be independently replicated based on the description of the methodology used. Table 2.1 compares previous literature reviews to contrast their focus on specific aspects of EAR with the holistic view offered here.

This SLR shows that EAR literature has produced mixed findings. It finds that EAR communicative value studies focusing on investor and creditor decision making are diverse and lack clear patterns for generalized conclusions. For example, existing literature in developed economies reports diverse findings on the communicative value of EAR to investors and its impact on the market. However, several studies in developing economies report a market reaction and suggest informativeness. Both economies report promising results about a decrease in earning management behavior and an enrichment of financial reporting quality. Likewise, according to the majority of studies in both economies, the specific characteristics of audit committees, external auditors, and audited companies affected EAR disclosure. For audit committees, these characteristics included gender; for external auditors they included gender, type, and industry experience; and for audited companies they included size, industry, complexity, corporate governance, and company performance. Regarding audit features, most studies in developed economies did not observe a change in audit fee while developing economies reported an increase. Similarly, developed economies did not see considerable audit lag in relation to EAR, while developing countries reported mixed results. Across both economic contexts, many studies reported improved audit quality and observed that accounting standards precision and clarity influence KAM disclosure. Readers should be cautious about generalizing results, partly due to archival research limitations such as small sample sizes, short timeframes, and experimental research with student participants. This SLR study also identifies trends, limitations, and current gaps in EAR literature. It sets an agenda for future research by addressing these gaps.

This paper proceeds as follows: A background of EAR and follows this with sections detailing methodology and descriptive findings. Next, the integrative research framework will be explained in terms of its components and design. A thematic analysis will then explore the following EAR areas: (1)

Investors, debtholders, and stock market; (2) management; (3) audit committee; (4) external auditors; (5) audit features; (6) audited company; (7) standard setters; and (8) theories use in literature. The paper will conclude by discussing avenues for future research.

2.2 Extended Audit Reporting Background

Methods for improving corporate governance and addressing financial malfeasance through more informative audit reporting date back to the Public Oversight Board (POB), established by the US in 1977. The UK's 1992 Cadbury Report focused on improving similar measures (Dahya & McConnell, 2007). Financial scandals and bankruptcies among top US companies in the 1990s (e.g., Enron and WorldCom) prompted the US Congress to pass the Sarbanes-Oxley Act (SOX) in 2002 to improve auditing and increase auditor responsibility (Aboud & Helfaya, 2021; Azizkhani et al., 2022; Duh et al., 2022). This legislation ultimately replaced the POB (Public Law Act, 2002) with the Public Company Accounting Oversight Board (PCAOB) to oversee the audits of US listed public companies. The failure of early regulatory and oversight efforts to prevent major financial malfeasance demonstrated that institutional bodies with the authority, incentive, and means to enforce standards needed to do more to prevent scandals (Hassan & Marston, 2019; Khlif et al., 2020; Krishnan & Zhang, 2019; D. Li et al., 2022). These improved regulatory methods gave rise to EAR. This represents a significant expansion in audit reporting.

The earliest attempt at extending what was included in the audit report occurred in France. France adopted the Justification of Assessment (JoA) in 2003 in response to the SOX Act (Bédard et al., 2019), where auditors need to include an explanatory paragraph in their report to justify their assessments. While it does not contain the level of EAR standards, guidelines, and structure later imposed by the IAASB and PCAOB, it was a step forward. Bédard et al. (2019) recognised it as a form of EAR. Inspired by France's experience, the UK adopted EAR ten years later via disclosure of RMM requirements. In 2014, the European Union (EU) stated specific requirements regarding statutory audit of public interest entities (including EAR) after reviewing critical issues underlying the 2007 financial crisis. In 2015, the IAASB mandated the disclosure of KAM. In 2016, the UK aligned its EAR standards with IAASB. The US was last to follow; PCAOB issued the CAM requirement in 2017. Figure 2.1 illustrates a timeline of EAR's introduction.

Table 2.1 Comparison between previous literature reviews and this SLR

#	Author and Year	Literature Review/ SLR	Gaps/Focus	# of Studies	Type of Studies	Interval Time*	Classification
1	Bédard et al. (2016)	Literature Review	Only one section focused on the disclosure of CAM/KAM. Other sections were related to other changes in auditing standards.	22	(4) Journal Articles (18) Working Papers	2013- mid 2015	Disclosure of Critical or Key Audit Matters: (1) Experiments with CAMs (2) Archival Research on CAMs (3) Experiments with Additional Auditor Disclosures (4) Augmented Audit Report Wording (5) Justification of Assessments Disclosures
2	Gimbar et al. (2016a)	Literature Review	Focused on the effect on CAM on auditor liability in US setting.	5	(2) Journal Articles (3) Working Papers	2014-2016	Impact of CAM on auditor liability (1) Related CAM (2) Unrelated CAM
3	Gold & Heilmann (2019)	Literature Review	Focused on the impact of KAM.	22	(7) Journal Articles (15) Working Papers	2014-2018	(1) Investor behavior and market reaction (2) Auditor responses (3) Auditor liability (4) Client management responses
4	Velte & Issa (2019)	Literature Review	Focused on stakeholders' reaction.	40**	(16) Journal Articles (4) Dissertations (20) Working Papers	2014-2018	(1) Shareholders (2) Debtholders (3) External auditors (4) Boards of directors and (5) Other stakeholders
5	Pais (2020)	Literature Review	Focused on users and market reaction.	4	(4) Journal Articles	2014-2018	(1) Users (2) Market reaction
6	Yoga & Dinarjito (2021)	SLR (Methodology not detailed to be easily replicable by other researchers)	Focused on the communicative value of KAM.	13	(13) Journal Articles from reputable international journals	2014-2020	The impact of KAM on the communicative value (1) Pre-implementation of KAM standard (2) Post-implementation of KAM standard
7	Luo (2021)	Literature Review	Focused on KAM determinants and consequences in US setting.	13	(4) Journal Articles (9) Working Papers	2014-2020	(1) Determinants of CAM (2) Informativeness of CAM on investors (3) Impact of CAM on auditor litigation risk (4) Impact of CAM on management disclosure and reporting behavior (5) Impact of CAM on audit fee and audit delay
8	Minutti-Meza (2021)***	Literature Review	Organized by methodology and focused on prominent EAR studies.	19	(17) Journal Articles (2) Working Papers	2008-2020	(1) Early studies (discussion papers and literature reviews) (2) Experimental studies (3) Archival studies of the UK experience
9	Porumbăcean & Tiron-Tudor (2021)	Literature Review	Focused on the perception of stakeholders regarding KAMs communication.	24	(21) Journal Articles (2) Conference Papers (1) Working Paper	2014-2020	(1) Added value of KAMs (2) Negative reactions towards the usefulness KAMs (3) Neutral and/or doubtful opinions regarding the usefulness of KAMs
8	**This Reviews**	**Both Comprehensive and SLR**	**Comprehensive on major EAR topics covering both determinants and consequences.**	**156**	**(156) Journal Articles listed in AJG 2021 and/or SJR 2022**	**2014- 2023**	**(1) Investors, debtholders and stock market** **(2) Management** **(3) Audit committee** **(4) External auditors** **(5) Audit features** **(6) Audited company** **(7) Standard setters** **(8) Theoretical perspective**

* Interval time is for the period of sample studies
** Although the paper indicates that it includes 49 empirical studies on KAM disclosure in audit reports, there were nine duplicate studies which are excluded from the count.
*** The classification of "Studies of departures from the standard unqualified audit report" has been removed as it is not related to EAR

Figure 2.1 Timeline –Extended Audit Reporting

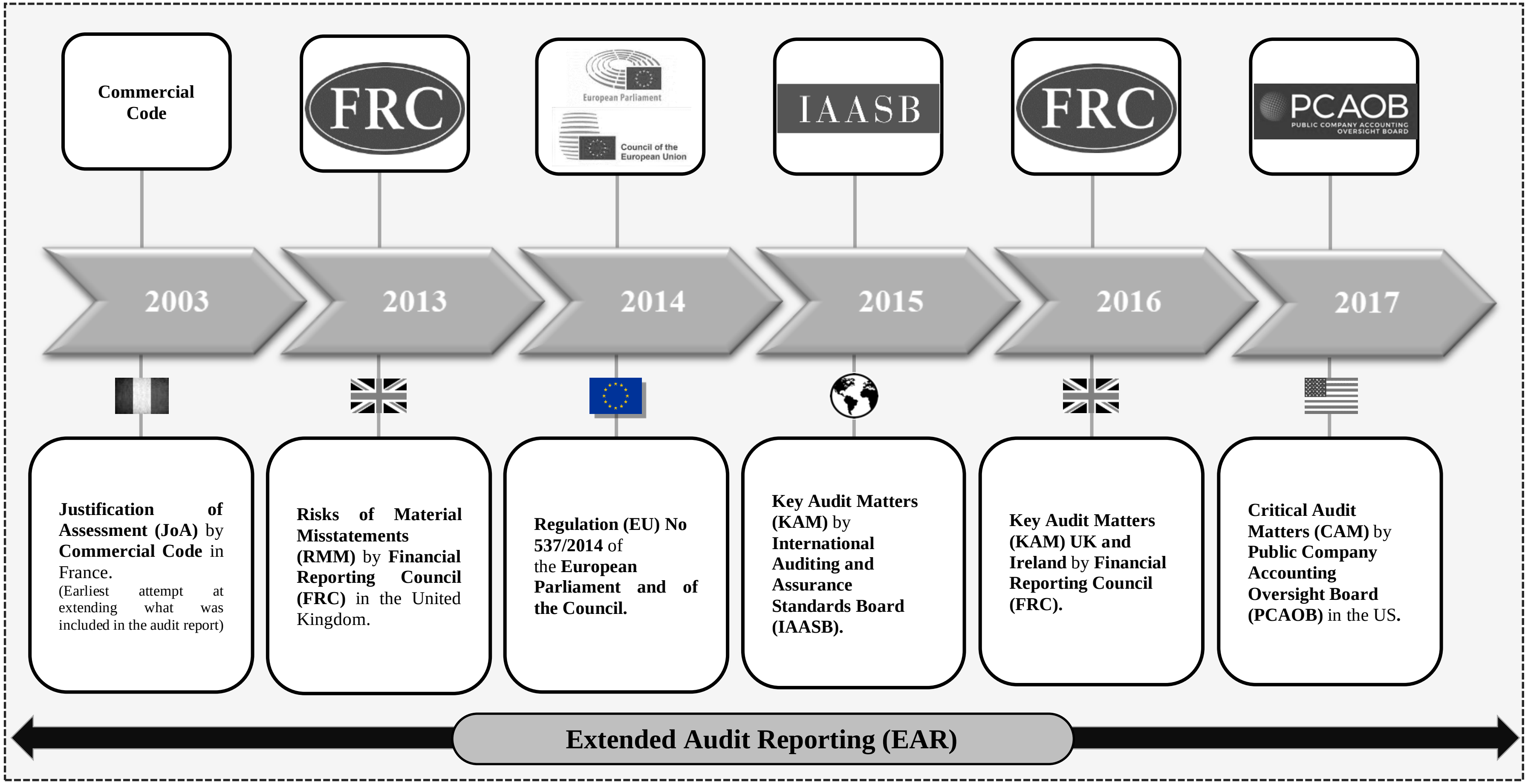


Table 2.2 provides a summary and comparison of various EAR standards to cultivate better understanding and to shed light on similarities and subtle differences about their implementation. A primary element common to all EAR standards is the motive to improve the quality of the independent auditor’s report by disclosing those specific and most significant audit matters that required the auditor’s professional judgement. All of these standards also maintain the existing binary pass/fail opinion; the auditor remains responsible for providing an overall opinion on the audited financial statements.

EAR standards could report the same audit matter or accounting issue despite using different methodologies (PCAOB, 2017). This is because most significant audit matters that require auditor judgement mostly leads to the disclosure of key matters requiring the attention of financial statement users. For example, while most frequently used KAMs (UK) relate to revenues recognition, carrying value of goodwill/intangibles, taxation, accounting for acquisitions, and pension (ICAE, 2017), JoA (France) mainly focuses on goodwill, depreciation, choice of methods, provisions, deferred taxes, and retirement commitments (Bedard et al., 2020).

For RMM (UK), Significant Areas of Risk (SAR- EU), and KAM (UK), the level of materiality used by the auditor must be explicitly stated to decide a matter’s relative significance. By contrast, JoA (France), KAM (International), and CAM (US) determine “most significant matters” based on auditor judgement, whether these relate to selection of accounting methods (JoA), communication with governance entities (KAM International), or communication with the audit committee (CAM).

Communication requirements of EAR in the main standards recognise that there may be instances without KAMs (IAASB, 2015; FRC, 2016; PCAOB, 2017). These standards necessitate a statement indicating such cases. They emphasise, however, that at least one KAM disclosure on the audited financial statement is expected.

Table 2.2 Summary for EAR standards

Item	JoA (France)	RMM (UK & Ireland)	SAR (EU)	KAM (International)	KAM (UK & Ireland)	CAM (US)
Name of Standard	*NEP 705: Justifications of Assessments * The original French Name of the Standard is NEP-705 Justification des appréciations.	Revision to ISA (UK and Ireland) 700 Requiring the auditor's report to address risks of material misstatement, materiality, and a summary of the audit scope	Regulation (EU) No 537/2014 regarding statutory audit	International Standard on Auditing 701 Communicating Key Audit Matters in The Independent Auditor's Report	International Standard on Auditing (UK) 701 Communicating Key Audit Matters in the Independent Auditor's Report	AS 3101 The Auditor's Report on an Audit of Financial Statements when the Auditor Expresses an Unqualified Opinion and Related Amendments to PCAOB Standards
Standard Issued by	Financial Security Law	Financial Reporting Council (FRC)	European Parliament and of the Council	International Auditing and Assurance Standards Board (IAASB)	Financial Reporting Council (FRC)	Public Company Accounting Oversight Board (PCAOB)
Publication Year	2003	2013	2014	2015	2016	2017
Effective Year	2003	2013	2016	2016	2016	*2019 **2020
Definition	Matters related to the choice of accounting methods, significant accounting estimates that require professional judgement, and aspects of internal control procedures.	Risks of material misstatement that had the greatest effect on the overall audit strategy, the allocation of resources in the audit, and directing the efforts of the engagement team.	Most significant assessed risks of material misstatement, including risks of material misstatement due to fraud.	Matters that are of most significance based on auditor's professional judgment and includes matters that are communicated with those charged with governance and required significant auditor attention in performing the audit.	Extending the KAM definition issued by IAASB to include the description of key assessed risks of material misstatement that had the most significant impact on the allocation of resources, audit strategy and direction of audit team efforts.	Any matter arising from the audit that was communicated or required to be communicated to the audit committee and that: relates to accounts or disclosures that are material to the financial statements and involved especially challenging, subjective, or complex auditor judgment.
Applicability	Public interest entities.	Entities that report on how they have applied the UK Corporate Governance Code.	Public interest entities.	Applies both to listed entities and in circumstances when the auditor otherwise decides to communicate key audit matters in the auditor's report, which could be a requirement by law or regulation.	All listed entities in London Stock Exchange (LSE). Nevertheless, non-listed entities in the UK can decide to voluntarily implement it, which could be a requirement by law or regulation.	*2019: For audits of large, accelerated filers. **2020: For audits of all other companies to which the requirement applies.

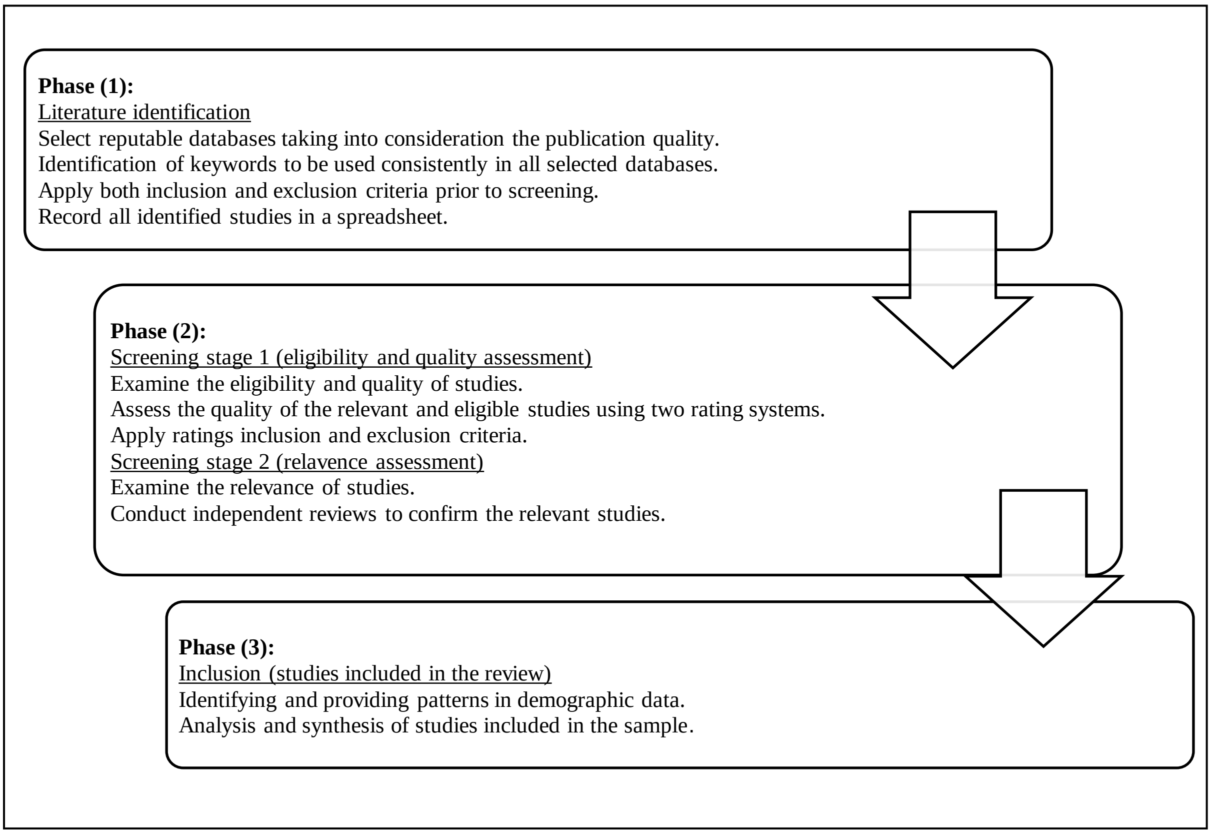
2.3 Methodology

2.3.1 Systematic literature review

This SLR method is being applied to review existing literature via the collection, analysis, synthesis, and reflective interpretation of available research (Rousseau et al., 2008). The Literature Review (LR) study is comprehensive and systematic, meaning that it could be independently repeated based on the description of the methodology used.

Tranfield et al. (2003) postulated the use of a systematic approach to LR in the management field, which would parallel its application in medical sciences research and improve the quality of the LR process. Compared to traditional narrative reviews (Cook et al., 1997), systematic reviews follow a replicable and transparent process by providing audit trails of reviewers' judgments. Following the SLR approach presented in Tranfield et al. (2003) and adopted in other studies (Alhossini et al., 2021; Nguyena et al., 2020), this study utilises a three-stage approach (refer to Figure 2.2).

Figure 2.2 Three-stage approach



2.3.2 Literature identification

As no database contains the entire set of available papers, multiple prominent electronic databases were used to find relevant EAR studies. These include Scopus, Web of Science (WoS), and Business Source Premier (EBSCO). For the sake of consistency, the literature identification employed the same keywords across these search engines. The selection of keywords aimed to strike a balance between comprehensiveness—meaning the inclusion of all relevant literature on extended audit reporting—and precision—ensuring that the studies included are specifically focused on the subject of extended audit reporting (Wanden-berghe & Sanz-valero, 2012). The chosen keywords, therefore, have been tailored to maximize the relevance and specificity of the literature included in the review. The sources of keywords were EAR research, LR studies, and tests to explore their applicability. Table 2.3 presents justifications for the keywords considered. The search was not restricted to any timeframe and covered all available papers. Foreign language papers were included initially as some of these had official translations. Given the unique topic, all academic fields were considered. At the end of the process, Google Scholar was used to ensure that all relevant articles on EAR had been identified. A total of 860 papers were obtained during the identification stage. Duplicates and papers without authorised translations were subsequently removed. Table 2.4 details result from database per search string used from the three selected databases. A PRISMA Diagram in Figure 2.3 adopted from Page et al. (2021) shows the breakdown for these papers per search engine.

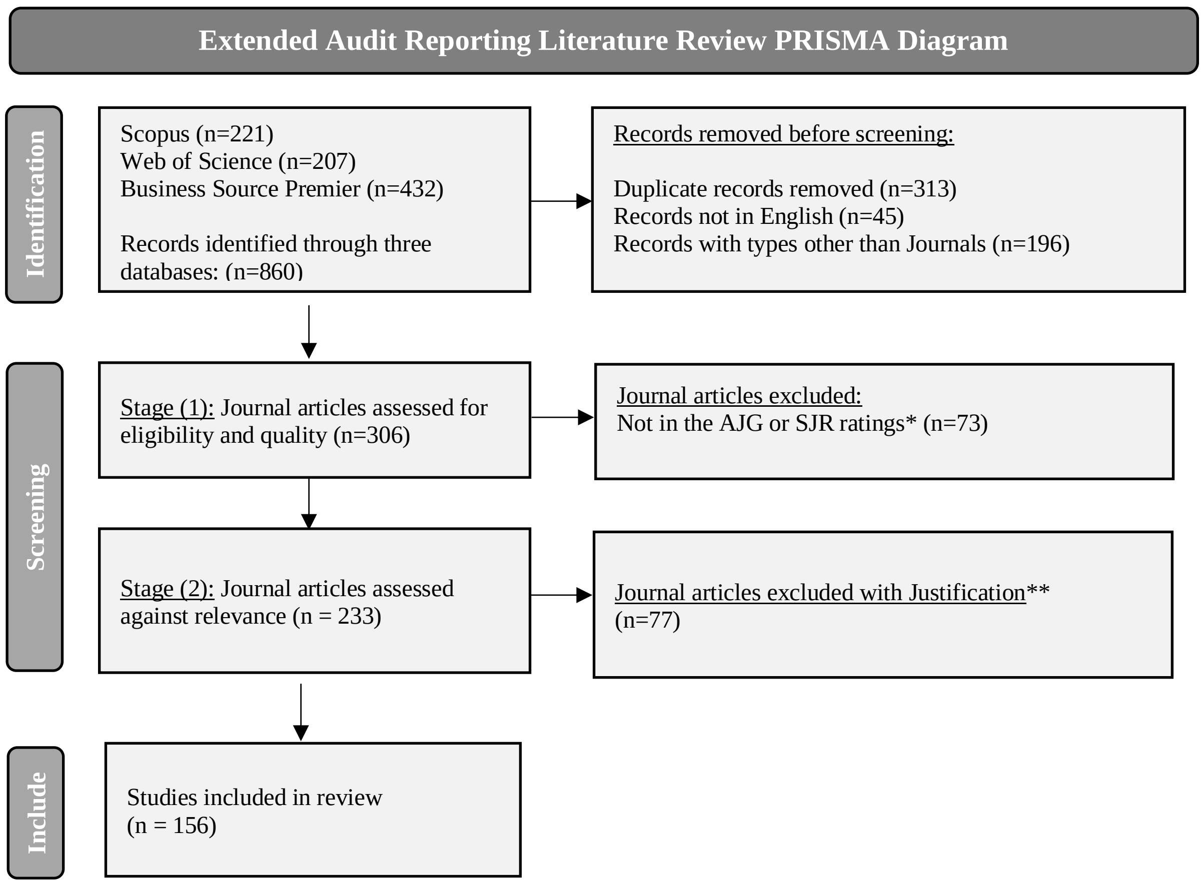
Table 2.3 Keywords and their justifications

Key Words Considered	Justification
Key Audit Matters **Critical Audit Matters**	These were considered as the main keywords especially since the IAASB requires reporting Key Audit Matters and the PCAOB requires reporting Critical Audit Matters. Therefore, KAM/CAM and their derivatives were used.
Expanded Audit Report **Extended Audit Report**	The purpose of these keywords is to expand the results to the range of Expanded Audit Reporting/ Extended Audit Reporting papers which are not necessarily focused on a specific EAR type* but on the general concept. Therefore, EAR and its derivatives were used. *EAR type includes Key Audit Matter (KAM), Critical Audit Matter (CAM), Justification of Assessment (JoA), Risk of Material Misstatement (RMM) and Significant Areas of Risk (SAR).
Audit Report Disclosure **Audit Disclosure**	Auditing standard bodies are now requiring the disclosure of most significant matters in the audit of the financial statements based on the auditor's professional judgment. These would be Audit Disclosure for any type of EAR. Therefore, Audit Report Disclosure and its derivatives were used.
New Audit Report **Audit Report Change** **Audit Report Modification** **Audit Report Reform** **Enhanced Audit Report**	EAR has been introduced as a new enhancement that modified and updated the independent auditor's report. Therefore, the synonyms of new/enhanced have been used.

Table 2.4 Results of search strings from four separate databases

#	Search String	Scopus	WoS	EBSCO	Total
1	"Key Audit* Matter*" OR "Critical Audit* Matter*"	143	146	267	556
2	"Expand* Audit* Report*" OR "Extend* Audit* Report*"	16	6	30	52
3	"Audit* Report* Disclosure*" OR "Audit* Disclosure*"	48	41	85	174
4	"New Audit* Report*"	4	7	26	37
5	"Audit* Report* Change*"	-	-	8	8
6	"Audit* Report* Reform*"	2	2	2	6
7	"Enhance* Audit* Report*"	2	1	4	7
8	"Audit* Report* Modification*"	6	4	10	20
	Total Results per Database	**221**	**207**	**432**	**860**

Figure 2.3 Prisma Diagram showing the identification, screening, and inclusion stages of the SLR methodology



* These cover all the ratings for AJG 2021 five number rating with 4* being the highest (1, 2, 3, 4 and 4*) and SJR 2022 four level rating approach with Q1 being the highest (Q1, Q2, Q3 and Q4) in all the fields.
** Journal articles assessed for relevance includes justification for exclusion wherever these articles are not focused on EAR.

2.3.3 Screening

Screening began with 306 papers, subtracting 313 duplicates, 45 untranslated papers, and 196 non-journal papers from the total of 860. Next, papers were assessed for eligibility and quality. Two rating systems were used to filter the articles: the Academic Journal Rating (AJG) and Scimago Journal Rating (SJR). Whenever an article was not rated in AJG 2021, the SJR 2022 rating was consulted. 73 articles not rated in AJG 2021 and/or SJR 2022 were excluded from the sample.

After the eligibility and quality assessment, each paper's relevance to EAR was determined by a title and abstract review. In ambiguous cases, the full text was reviewed. Only studies focusing on EAR were eligible. Altogether, 77 papers were excluded and justification for each decision was documented. Two independent researchers conducted analogous relevance assessments taking into consideration the applied inclusion/exclusion criteria; they both arrived at similar results. A total of 156 studies from 80 rated journals were confirmed as listed in the AJG 2021 and/or SJR 2022. Refer to Table 2.5 for a summary of inclusion and exclusion criteria.

Table 2.5 Summary of inclusion and exclusion criteria

Description	Criteria
Identification	
Inclusion Criteria (databases)	Papers in all fields and languages* wherein search strings appear in their title, abstract, or author's keywords covering anytime period Total (860). *Initially all languages are included as official translated versions are available for some papers.
Exclusion Criteria	Duplicates Total (313) are removed along with the following: records that are not in English where an official translated version is not found Total (45) and records with types other than Journals Total (196).
Screening Stage (1)- Quality Assessment	
Inclusion Criteria	Covers all the ratings for AJG 2021 five number rating with 4* being the highest (1, 2, 3, 4 and 4*) Or SJR 2022 four level rating approach with Q1 being the highest (Q1, Q2, Q3 and Q4) in all the fields Total (233).
Exclusion Criteria	Journal articles that are not rated in AJG 2021 and SJR 2022 Total (73).
Screening Stage (2)- Relevance and Eligibility Assessment	
Inclusion Criteria	Journal articles that are focused on Extended Audit Reporting Total (156).
Exclusion Criteria	Journal articles that are not focused on Extended Audit Reporting Total (77). These were excluded with justification.

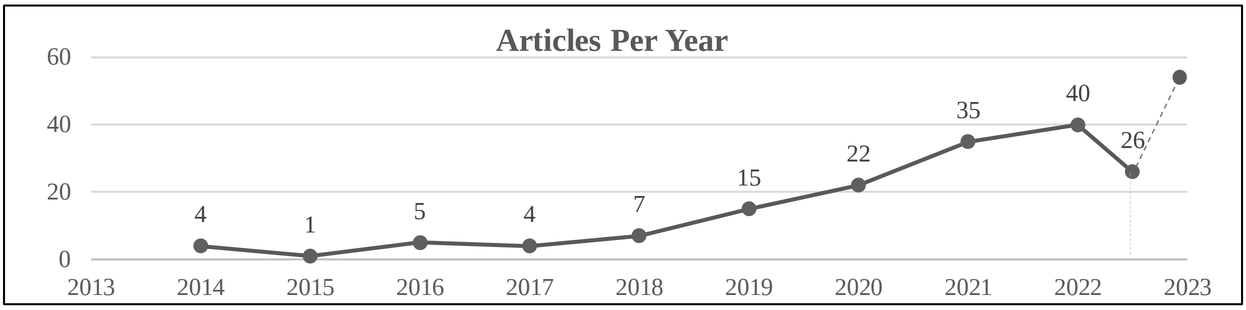
2.4 Descriptive Findings

A descriptive finding of the papers in the sample was conducted to understand the current trend of publication on EAR. The sampled literature was analysed by total publications per year, journal (subject area and frequency), leading authors, region (type of economy and country), EAR and data types, research methods used, and statistical techniques applied.

2.4.1 Total publications per year

As per Figure 2.4, publications about EAR began to increase from 2017, following the ISA's KAM disclosure mandate in 2016 and the PCAOB's mandate in 2019 (fully expanded in 2020).

Figure 2.4 Articles per year



*The number of articles for 2023 is only for initial 5 months of the year (until May 2023) so it reflects a continuing increase as more articles have been released since then.

2.4.2 Journal (subject area and frequency)

78% of the sampled articles are from the accounting field. 10% and 6% are from the finance and business/management fields, respectively. The remaining 5% are from fields unrelated to management (see Table 2.6). Predictably, accounting journals dominate publication of EAR studies. The top journals issuing the most EAR articles are International Journal of Auditing (10), Managerial Auditing Journal (10) and, closely followed by The Accounting Review (9); see Table 2.7.

Table 2.6 Classification of studies by journal subject field

Subject Area*	Frequency	Percentage
Accounting	122	78.21%
Finance	16	10.26%
Business and Management	10	6.41%
Law	3	1.92%
Building, Construction and Geology	2	1.28%
Economics	2	1.28%
Computer Science	1	0.64%
Grand Total	**156**	**100%**

*The articles subject area is taken from AJG 2021. If the article is not rated in AJG 2021 then the SJR 2022 rating is used. For SJR 2022 rating, when there are multiple subject areas, accounting will have the preference of field selection in case it is part of the multiple subject areas.

Table 2.7 Top journals publishing articles on Extended Audit Reporting

Sr. No	Journal Name	Journal Rating (AJG 2021)					Frequency*
		4*	4	3	2	1	
1	International Journal of Auditing				✓		10
2	Managerial Auditing Journal				✓		10
3	The Accounting Review	✓					9
4	The British Accounting Review			✓			4
5	Journal of Applied Accounting Research				✓		4
6	Journal of Accounting and Management Information Systems					✓	4
7	Australian Accounting Review				✓		4

* Of the remaining Journals, 11 appeared thrice, 10 appeared twice and 31 appeared once.

2.4.3 Leading authors

The four most prolific authors on EAR are affiliated with three countries. Michael Kend (Australia) and Muttanachai Suttipun (Thailand) count 4 publications each. Patrick Velte (Germany) and Mahmoud Elmarzouky (United Kingdom) each have 3 publications (refer to Table 2.8).

Table 2.8 List of most productive leading authors in Extended Audit Reporting research

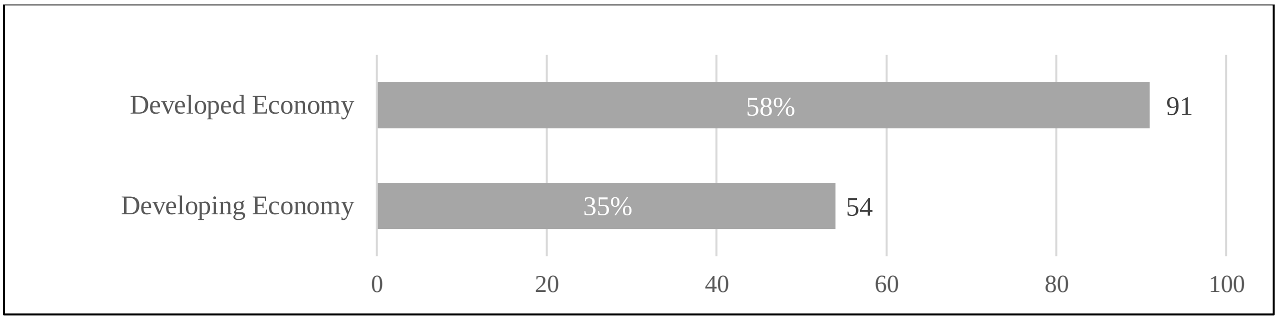
Author's Name*	TP**	Affiliation	Country
Michael Kend	4	RMIT University	Australia
Muttanachai Suttipun	4	Prince of Songkla University	Thailand
Patrick Velte	3	Leuphana Universität Lüneburg	Germany
Mahmoud Elmarzouky	3	Aston Business School	United Kingdom

* Author's name represents the main author for Extended Audit Reporting research.
** TP: Total Publications in Extended Audit Reporting.

2.4.4 Region (type of economy and country)

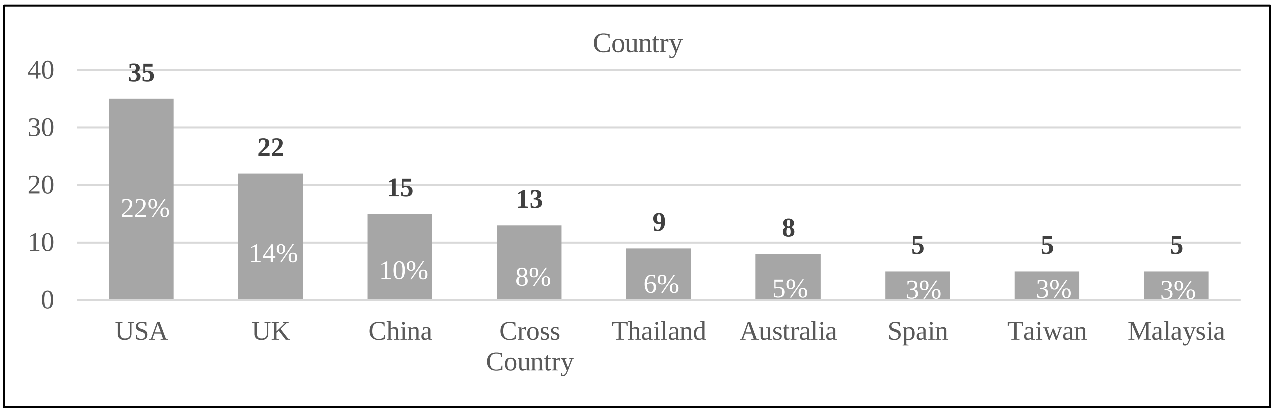
Most of the sampled literature gathered data from developed countries (refer to Figure 2.5). This could reflect data availability and/or researcher location. 91 articles (63%) stem from developed countries such as USA, UK, Australia and Spain. The developing countries of China and Thailand contributed 15 and 9 articles respectively (see Figure 2.6). The geographical distribution of studies presents a noteworthy observation: studies conducted in the African region, the Oceania region, and the Middle East are relatively fewer (see Figure 2.7 and Table 2.9).

Figure 2.5 Economy type classification



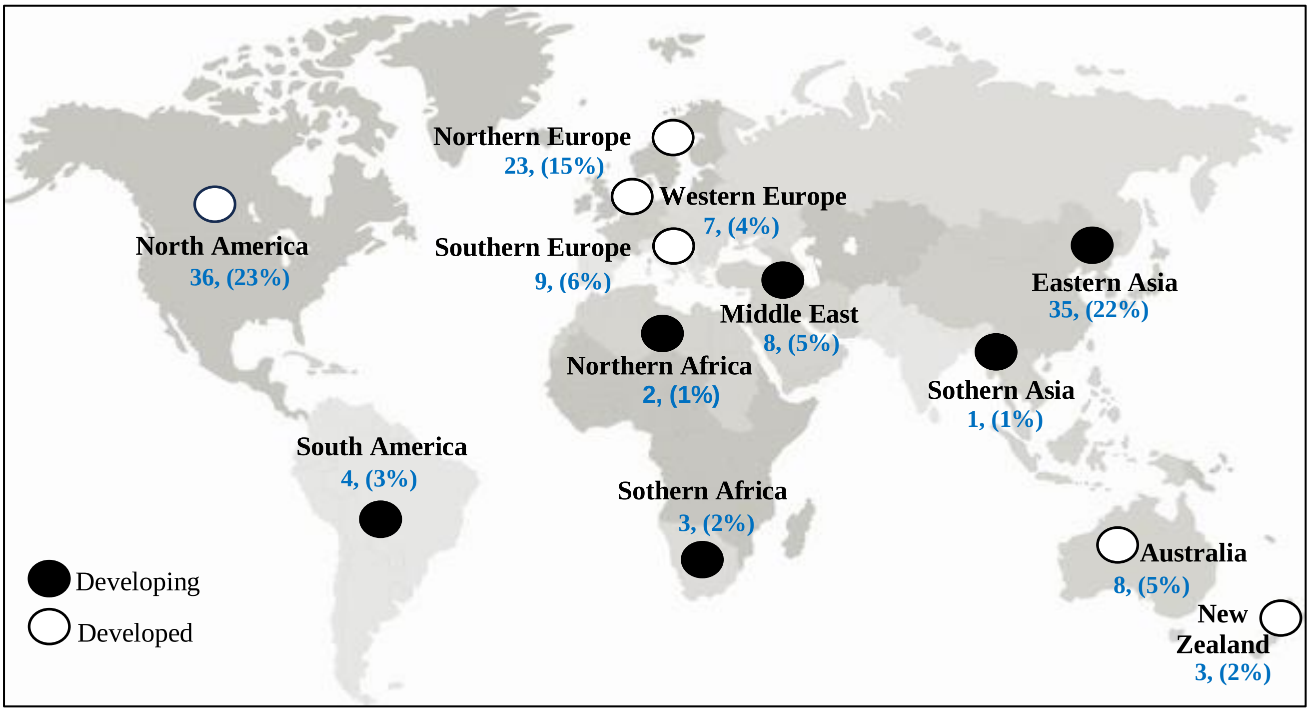
* Cannot categorize category contributed 7% (11) of the total articles, which either collected cross-country data (5) or did not indicate country (6). The latter subcategory included literature review articles (3), commentaries (2), and commentary letter analysis (1).

Figure 2.6 Leading countries



* Of the remaining 39 articles in the sample, 33 articles (21%) are in countries contributing to less than 5 articles. For 6 articles (4%) the country details are "not indicated."

Figure 2.7 Geographic region (Map)



* The cannot categorize category contributed 7% (11) of the total articles, which either collected cross country data (5) or did not indicate country (6). The latter subcategory included literature review articles (3), commentaries (2), and commentary letter analysis (1).

Table 2.9 Geographic region by country

Asia- 44 (28%) Developing Countries									
Eastern Asia					**Middle East**				**Southern Asia**
China	Thailand	Taiwan	Malaysia	Korea	Oman	Jordan	UAE	Cross Country	Bangladesh
15	9	5	5	1	3	3	1	1	1

Europe- 44 (28%) Developed Counties										
Northern Europe		**Southern Europe**				**Western Europe**				**Cross Region**
UK	Finland	Spain	Croatia	Macedonia	Italy	Germany	Netherlands	France	Cross Country	Cross Country
22	1	5	2	1	1	3	2	1	1	5

Americas- 40 (26%) Developed / Developing		
North America		**South America**
USA	Canada	Brazil
35	1	5

Oceania- 12 (8%) Developed Counties		
Australia	**New Zealand**	**Cross Region**
Australia	New Zealand	Cross Country
8	3	1

Africa- 5 (3%) Developing Countries	
Northern Africa	**Southern Africa**
Egypt	South Africa
2	3

* The cannot categorize category contributed 7% (11) of the total articles, which either collected cross country data (5) or did not indicate country (6). The latter subcategory included literature review articles (3), commentaries (2), and commentary letter analysis (1).

2.4.5 Type of extended audit reporting

Table 2.10 presents EAR type for the 156 articles sampled. Nearly 58% focus on Key Audit Matters, mandated by the ISA. This is followed by the USA's Critical Audit Matters and the UK's Risk of Material Misstatement. EAR is mostly discussed in qualitative articles. Justification of Assessment only appeared once (most articles on JoA are written in French).

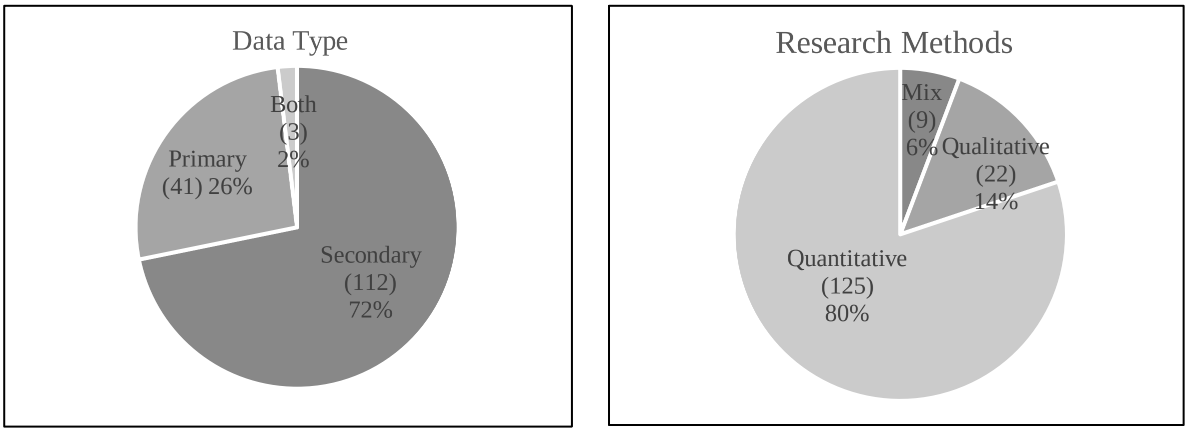
Table 2.10 Extended Audit Reporting (EAR) type

EAR Type	**Count of Articles**	**%**	**Origin**
Key Audit Matters (KAM)	90	58%	International
Critical Audit Matters (CAM)	37	24%	United States
Risk of Material Misstatement (RMM)- UK (KAM)	22	14%	United Kingdom
Extended Audit Reporting (EAR)	6	4%	General
Justification of Assessment (JoA)	1	1%	France
Grand Total	**156**		

2.4.6 Type of data and research methods

A majority of studies used secondary data (72%). 26% of studies used primary data and only 2% used both primary and secondary data (see Figure 2.8). Mixed method studies were few (6%). Most studies used quantitative research methods (80%), primarily archival and experimental studies. Qualitative studies (14%) covered literature reviews, interviews with open-ended questions, surveys, and commentaries.

Figure 2.8 Data types and research methods



2.4.7 Statistical techniques used for EAR

An analysis of statistical techniques indicated that Panel Data Analysis, Analysis of Variance (ANOVA), and regression (multiple kinds) were the most popular. This is unsurprising since most studies observed the impact of one variable on another. In contrast, some techniques were rarely used. Placebo Tests and Simulation, for instance, were only used to validate statistical outcomes in three studies (Porumb et al., 2021; Zhai et al., 2021; Zhi & Kang, 2021) and one study (Zhai et al., 2021) respectively. Similarly, only three studies employed Multivariate Analysis of Variance (MANVOA), with the vast majority preferring ANOVA (Coram & Wang, 2021; Rapley et al., 2021; Sirois et al., 2018). This might be taken as evidence that authors do not prefer working with multiple dependent variables. As such it presents another gap that could be filled in future studies.

2.5 Research Framework

A research framework has been developed for this SLR study through the critical insights gained from 156 studies to illustrate what has been studied in EAR literature and how it can be improved further (refer to Figure 2.9). The dimensions of the framework align with the topics of the thematic analysis. Seven topical themes were found to represent the most significant trends in the literature and form the core of the framework (see section 6). These seven topical themes include the following: (1) Investors, debtholders, and stock market; (2) management; (3) audit committee; (4) external auditors; (5) audit features; (6) audited company; and (7) standard setters. In addition, the theories employed in these studies were reviewed and analysed. These eight areas constitute the framework for reviewing the literature on EAR disclosure. The above themes were identified based on pattern analysis to detect similarities and differences over time.

2.5.1 Framework Design

The top of the framework identifies the major characteristics of EAR employed in research studies. The arrows going to and from show the relationship between the seven topical themes and EAR.

Downward arrows (colored in green) denote a consequence and upward arrows (colored in red) denote a determinant. A topical theme could have arrows in both directions as each theme consists of various components where some would be a consequence of EAR and others would be a determinant of EAR. Blue components denote unexplored variables, not covered in the literature sample. At the bottom, the last group focuses on the theories applied in EAR literature covering all seven topical themes in the framework. Overall, the integrative framework provides scholars and practitioners a snapshot of research on EAR and offers suggestions for future research based on the gaps found in existing literature.

2.5.2 Framework Components

Studies have examined different aspects of EAR, with a majority focusing on the presence and number of KAMs. This is reflected at the top of the framework. Other characteristics explored include KAM length (number of words/characters), type (entity level vs. account level), readability, tone, and specificity. Scholars are encouraged to manipulate different aspects of KAM; results could vary with research hypotheses. A few studies examined audit procedures involving KAMs (Gambetta et al., 2023; Kend & Nguyen, 2020) in UK and Australia.

Research on how EAR affected investors, debtholders, and the stock market represented the third largest number of research studies. There is increasing interest in how KAM affects financial performance and stakeholders' perceptions of that performance. Studies on management focused on earnings management, financial statement quality, management operation decisions, and management disclosure.

Studies on audit committees are expanding rapidly as scholars learn more about how the audit committee affects EAR disclosure. Components explored in this topical theme include audit committee oversight, gender, expertise, number of meetings, and members serving in other committees within the same company. Components not covered in existing literature and thus recommended for future study include audit committee independence, tenure, ethnicity, diversity in nationality, compensation, and the nature of communication with the audit committee.

External Auditors represent the single largest number of research studies. Components examined include auditor liability as well as characteristics such as gender, experience, industry specialisation, accounting degree, tenure and rotation, and type. Expert insights were also gathered through interviews and surveys. Unexplored areas include external auditor age, race, ethnicity, and joint audit participation, especially for high-risk entities such as financial institutions.

Audit Features represents the second largest number of research studies. Components studied include audit fee, audit report lag, and audit quality. Interest in studying the audited company in relation to EAR has shown an increase. Components included company characteristics such as size, industry, complexity, corporate governance, performance, leverage, and age. Unexplored components in this category include culture and ownership type.

The last topical theme is standard setters and regulators. It is important for auditing standard setters to conduct post implementation reviews to better understand the impact of EAR on the other six topical themes. It is equally essential for accounting standard setters to understand that the precision of accounting standards can influence KAM disclosure. The role of regulators on the disclosure of EAR has not yet been explored. Regulators are expected to enforce proper KAM implementation by encouraging disclosure of firm-specific information and avoiding boilerplate KAMs.

The eighth area covers theoretical perspectives on the seven topical themes. These are the most common theories adopted in EAR literature covering agency theory, signaling theory, culpable control model, decision affect theories, institutional theory, theory of Hogarth 1980, source credibility and communication theory.

2.6 Thematic Analysis

Thematic analysis has been conducted on the literature in the sample based on insights gained from the framework's comprehensive analysis of EAR research. This section will discuss the studies covered in each of the framework's topical themes. Refer to Table 2.11 for the list of studies covered by each topical theme. Table 2.11 also illustrates that the average count of CAMs/KAMs reported within the context of archival studies spans from 0.48 to 4.54. The most substantial quantity, that is, 11, was documented in a study conducted by Sneller et al. (2017) in the Netherlands. Notably, within the developing nations' context, the highest recorded number of CAMs/KAMs was 8, as reported by Rahaman et al. (2022) in Bangladesh.

Each topical theme will be considered in terms of its research basis in developed and/or developing economies and the types of study employed to address it, whether they be experimental, archival, or interview- and (rarely) survey-based. The purpose of this grouping is to sort studies into similar categories (economic and methodological) in order to compare results. This is especially important as developed and developing economies present different characteristics that can impact or influence KAM disclosure. Moreover, as per author’s knowledge no literature review study so far has compared results by economy. Conceivably, such an approach could bring novel insights to existing literature and provide future avenues for both developed and emerging markets.

Figure 2.9 Research Framework

Extended Audit Reporting Disclosure

KAM presence, number, length (number of words/characters), type (account and entity level), readability, tone, specificity, and audit procedures

2.6.1 Investors, Debtholders & Stock Market

- 2.6.1.1 Investor decision (c)
- 2.6.1.2 Creditors decision (c)
- 2.6.1.3 Effect on stock market (c)

2.6.2 Management

- 2.6.2.1 Earnings management (c)
- 2.6.2.2 Financial statements quality (c) (d)
- 2.6.2.3 Management operating decisions (c)
- 2.6.2.4 Management disclosure (c)
- CEO characteristics such as narcissism personality, academic qualifications and age (d)

2.6.3 Audit Committee

- 2.6.3.1 AC oversight (c)
- 2.6.3.2 AC gender (d)
- 2.6.3.3 AC expertise (d)
- 2.6.3.4 AC number of meetings (d)
- 2.6.3.5 AC members serving in other committees within the same company (c)
- Independence (d)
- Tenure (d)
- Ethnic (d)
- Nationality diversity (d)
- Compensation (d)

2.6.4 External Auditors

- 2.6.4.1 External auditors gender (d)
- 2.6.4.2 Auditor experience, industry specialisation and accounting degree (d)
- 2.6.4.3 External auditors tenure and rotation (d)
- 2.6.4.4 External auditors type (d)
- 2.6.4.5 Insights from auditors (d)
- 2.6.4.6 External auditors liability (c)
- Age (d)
- Race and ethnicity (d)
- Social Ties (d)
- Joint audits (d)
- Auditor Quality Control (c)

2.6.5 Audit Features

- 2.6.5.1 Audit fee (c) (d)
- 2.6.5.2 Audit report lag (c) (d)
- 2.6.5.3 Audit quality (c)

2.6.6 Audited Company

- 2.6.6.1 Audited company size, industry and complexity (d)
- 2.6.6.2 Corporate governance (d)
- 2.6.6.3 Performance (c) (d)
- 2.6.6.4 Leverage (d)
- 2.6.6.5 Age (d)
- Culture (d)
- Ownership Type (d)

2.6.7 Standard Setters & Regulators

- 2.6.7.1 Accounting standard setters (d)
- 2.6.7.2 Auditing standard setters (d)
- Role of regulator (d) (c)

2.6.8 Theories: Agency Theory, Signaling Theory, Culpable Control Model (CCM), Decision Affect Theories, Institutional Theory, Theory of Hogarth 1980, Source Credibility and Communication Theory.

(d) – Determinant of EAR: | (c) – Consequence of EAR :
Blue Font: components not explored.

Table 2.11 Studies covered in each topical theme

Topical Theme	Consequences (c)	Determinants (d)	Method	Economy	Country	KAM Mean	KAM Max
1. Investors, debtholders & stock market							
Investor decision	Christensen et al. (2014)		Experimental	Developed	USA	-	-
	Kachelmeier et al. (2020)		Experimental	Developed	USA	-	-
	Rapley et al. (2021)		Experimental	Developed	USA	-	-
	Brooke Elliott et al. (2020)		Experimental	Developed	USA	-	-
	Carver et al. (2023)		Experimental	Developed	USA	-	-
	Austin & Williams (2021)		Experimental	Developed	USA	-	-
	Dennis et al. (2019)		Experimental	Developed	USA	-	-
	Köhler et al. (2020)		Experimental	Developed	Cross Country	-	-
	Ozlanski (2019)		Experimental	Developed	USA	-	-
	Moroney et al. (2021)		Experimental	Developed	Australia	-	-
	Hoang & Phang (2021)		Experimental	Developed	USA	-	-
	Hoang et al. (2022)		Experimental	Developed	USA	-	-
	Ong et al. (2022)		Experimental	Developed	Australia	-	-
	Xu et al. (2023)		Experimental	Developing	China	-	-
Creditor decision	Boolaky & Quick (2016)		Experimental	Developed	Germany	-	-
	Sirois et al. (2018)		Experimental	Developed	Canada	-	-
	Porumb et al. (2021)		Archival	Developed	UK	4.14	-
	H. Liu et al. (2022)		Archival	Developing	China	2.06	-
	Trpeska et al. (2017)		Survey	Developing	Macedonia	-	-
Effect on stock market	Burke et al. (2023)		Archival	Developed	USA	1.69	7
	Gutierrez et al. (2018)		Archival	Developed	UK	3.97	-
	Bédard et al. (2019)		Archival	Developed	France	2.3	-
	Lennox et al. (2023)		Archival	Developed	UK	3.77	-
	Elsayed et al. (2023)		Archival	Developed	UK	4.07	-
	D. Li et al. (2022)		Archival	Developed	UK	-	-
	Seebeck & Kaya (2023)		Archival	Developed	UK	3.79	-
	Klevak et al. (2022)		Archival	Developed	USA	2.11	-
	Li & Luo (2023)		Archival	Developed	USA	1.7	-
	Alves & Galdi (2020)		Archival	Developing	Brazil	-	-
	Chirakool et al. (2022)		Archival	Developing	Thailand	-	-
	Suttipun (2020)		Archival	Developing	Thailand	-	-
	Zhai et al. (2021)		Archival	Developing	China	2.39	-
	Zhi & Kang (2021)		Archival	Developing	China	0.48	-
2. Management							
Earnings Management	Gold et al. (2020)		Experimental	Developed	Germany	-	-
	Sai et al. (2024)		Archival	Developed	China	-	-
	Barghathi et al. (2021)		Interviews	Developing	UAE	-	-
Financial Statements Quality	Ong et al. (2022)		Experimental	Developed	Australia	-	-
	Boolaky & Quick (2016)		Experimental	Developed	Germany	-	-
	Reid et al. (2019)		Archival	Developed	UK	3.87	-
		Elshafie (2023)	Archival	Developed	USA	-	-
	Wu et al. (2019)		Archival	Developing	China	2.00	6
Management Operating Decisions	Bentley et al. (2021)		Experimental	Developed	USA	-	-
	An et al. (2023)		Archival	Developing	China	-	-
Management Disclosures	Fuller et al. (2021)		Experimental	Developed	USA	-	-
	Tan & Yeo (2022)		Experimental	Developed	USA	-	-
	Burke et al. (2023)		Archival	Developed	USA	1.69	7
	Elmarzouky et al. (2022)		Archival	Developed	UK	3.32	10
	D. Li et al. (2022)		Archival	Developed	UK	-	-
3. Audit committee							
AC oversight	Kang (2019)		Experimental	Developed	USA	-	-
AC gender		Bepari (2023)	Archival	Developed	Australia	2.71	7
		Velte (2018)	Archival	Developed	UK	-	-
		Mah'd & Mardini (2022)	Archival	Developing	Cross Country	4.4	8
AC expertise		Bepari (2023)	Archival	Developed	Australia	2.71	7
		Velte (2020)	Archival	Developed	UK	-	-
		Zhang & Shailer (2022)	Archival	Developed	UK	3.81	-
		Wuttichindanon & Issarawornrawanich (2020)	Archival	Developing	Thailand	1.99	6
		Mah'd & Mardini (2022)	Archival	Developing	Cross Country	4.4	8
AC number of meetings		Mah'd & Mardini (2022)	Archival	Developing	Cross Country	4.4	8
		Wuttichindanon & Issarawornrawanich (2020)	Archival	Developing	Thailand	1.99	6
AC members serving in other committees within the same company		Al Lawati & Hussainey (2022)	Archival	Developing	Oman	0.97	5

Topical Theme	Consequences (c)	Determinants (d)	Method	Economy	Country	KAM Mean	KAM Max
4. External auditors							
External auditors' gender		Abdelfattah et al. (2021)	Archival	Developed	UK	3.77	10
		Bepari et al. (2022)	Archival	Developed	Australia	2.76	7
		Hussin et al. (2022)	Archival	Developing	Malaysia	2.00	6
		Wuttichindanon & Issarawornrawanich (2020)	Archival	Developing	Thailand	1.99	6
Auditor experience, industry specialisation and accounting degree		Bepari et al. (2022)	Archival	Developed	Australia	2.76	7
		Y. Liu et al. (2022)	Archival	Developing	China	-	-
External auditors tenure and rotation		Elshafie (2023)	Archival	Developed	USA	-	-
		Pinto & Morais (2019)	Archival	Developed	Cross Country	3.84	9
		Duboisée de Ricquebourg & Maroun (2023)	Archival	Developing	South Africa	2.25	
		Rahaman et al. (2023)	Archival	Developing	Bangladesh	3.77	10
		Hussin et al. (2022)	Archival	Developing	Malaysia	2.00	6
		Chen et al. (2023)	Archival	Developing	China	2.05	6
		Lin & Yen (2022)	Archival	Developing	Taiwan	1.82	-
External auditors type		Kend & Nguyen (2020)	Archival	Developed	Australia	2.01	-
		Tušek & Ježovita (2018)	Archival	Developed	Croatia	0.8	4
		Honkamäki et al. (2022)	Archival	Developed	Cross Country	4.54	8
		Sierra-García et al. (2019)	Archival	Developed	UK	4.25	10
		Dwyer et al. (2024)	Archival	Developed	UK	3.54	-
		Abdullatif & Al-Rahahleh (2020)	Mix	Developing	Jordan	-	-
		Ferreira & Morais (2020)	Archival	Developing	Brazil	2.43	8
		Rahaman et al. (2023)	Archival	Developing	Bangladesh	3.77	10
		Suttipun (2022)	Archival	Developing	Thailand	1.63	-
		Wuttichindanon & Issarawornrawanich (2020)	Archival	Developing	Thailand	1.99	6
		Baatwah (2023)	Archival	Developing	Oman	1.96	6
Insights from auditors		Pelzer (2021)	Interviews	Developed	USA	-	-
		Segal (2019)	Interviews	Developing	South Africa	-	-
		Abdullatif & Al-Rahahleh (2020)	Survey	Developing	Jordan	-	-
		Hegazy & Kamareldawla (2021)	Interviews	Developing	Egypt	-	-
External auditors liability	Backof et al. (2022)		Experimental	Developed	USA	-	-
	Gimbar et al. (2016b)		Experimental	Developed	USA	-	-
	Brasel et al. (2016)		Experimental	Developed	USA	-	-
	Kachelmeier et al. (2020)		Experimental	Developed	USA	-	-
	Brown et al. (2020)		Experimental	Developed	USA	-	-
	Vinson et al. (2019)		Experimental	Developed	USA	-	-
	Coram & Wang (2021)		Experimental	Developed	USA	-	-
	Gimbar et al. (2016a)		Literature Review	Developed	USA	-	-
	Pratoomsuwan & Yolrabil (2020a)		Experimental	Developing	Thailand	-	-
	Pratoomsuwan & Yolrabil (2020b)		Experimental	Developing	Thailand	-	-
5. Audit features							
Audit fee	Elmarzouky et al., (2023)		Archival	Developed	UK	3.32	10
	Gutierrez et al. (2018)		Archival	Developed	UK	3.97	-
	Reid et al. (2019)		Archival	Developed	UK	3.87	-
	Zhang & Shailer (2021)		Archival	Developed	UK	3.36	-
	Al-mulla & Bradbury (2022)		Archival	Developed	New Zealand	2.1	5
	H. Li et al. (2019)		Archival	Developed	New Zealand	-	-
	Li & Luo (2023)		Archival	Developed	USA	1.7	-
	Bédard et al. (2019)		Archival	Developed	France	2.3	-
		Bepari et al. (2022)	Archival	Developed	Australia	2.76	7
		Mamcarczyk et al. (2020)	Archival	Developed	Cross Country	2.77	7
		Pinto & Morais (2019)	Archival	Developed	Cross Country	3.84	9
		Vera & Alijarde (2021)	Archival	Developed	Spain	1.46	4
		Sierra-García et al. (2019)	Archival	Developed	UK	4.25	10
	Baatwah et al. (2022)		Archival	Developing	Oman	1.87	-
	Suttipun (2022)		Archival	Developing	Thailand	1.63	-
		Hussin et al. (2022)	Archival	Developing	Malaysia	2.00	6
		Ferreira & Morais (2020)	Archival	Developing	Brazil	2.43	8
		Rahaman et al. (2023)	Archival	Developing	Bangladesh	3.77	10
Audit report lag	Al-mulla & Bradbury (2022)		Archival	Developed	New Zealand	2.7	5
	Bédard et al. (2019)		Archival	Developed	France	2.3	-
	Li & Luo (2023)		Archival	Developed	USA	1.7	-
	Reid et al. (2019)		Archival	Developed	UK	3.87	-
	Baatwah et al. (2022)		Archival	Developing	Oman	1.87	-
		Abdullatif et al. (2023)	Archival	Developing	Jordan	1.89	7
Audit quality	Al-mulla & Bradbury (2022)		Archival	Developed	New Zealand	2.7	5
	Bédard et al. (2019)		Archival	Developed	France	2.3	-
	Gutierrez et al. (2018)		Archival	Developed	UK	3.97	-
	H. Li et al. (2019)		Archival	Developed	New Zealand	-	-
	Reid et al. (2019)		Archival	Developed	UK	3.87	-
	Daugherty et al. (2021)		Survey	Developed	USA	-	-
	Rautiainen et al. (2021)		Survey	Developed	Finland	-	-
	Nguyen & Kend (2021)		Interviews	Developed	Australia	-	-

Topical Theme	Consequences (c)	Determinants (d)	Method	Economy	Country	KAM Mean	KAM Max
	Al Lawati & Hussainey (2022)		Archival	Developing	Oman	0.97	5
	Suttipun (2021)		Archival	Developing	Thailand	-	-
	Wu et al. (2019)		Archival	Developing	China	2.00	6
	Zeng et al. (2021)		Archival	Developing	China	2.00	6
	Kitiwong & Sarapaivanich (2020)		Archival	Developing	Thailand	2.03	6
	Barghathi et al. (2021)		Interviews	Developing	UAE	-	-
6. Audited company							
Size, industry and complexity		Bepari et al. (2022)	Archival	Developed	Australia	2.76	7
		Kend & Nguyen (2020)	Archival	Developed	Australia	2.01	-
		Pérez et al. (2021)	Archival	Developed	Spain	2.84	-
		Sierra-García et al. (2019)	Archival	Developed	UK	4.25	10
		Vera & Alijarde (2021)	Archival	Developed	Spain	1.46	4
		Mamcarczyk et al. (2020)	Archival	Developed	Cross Country	2.77	7
		Sneller et al. (2017)	Archival	Developed	Netherlands	3.6	11
		Ferreira & Morais (2020)	Archival	Developing	Brazil	2.43	8
		Hashim et al. (2021)	Archival	Developing	Malaysia	2.87	6
		Mah'd & Mardini (2022)	Archival	Developing	Cross Country	4.4	8
		Rahaman et al. (2023)	Archival	Developing	Bangladesh	3.77	10
		Wuttichindanon & Issarawornrawanich (2020)	Archival	Developing	Thailand	1.99	6
Corporate governance		Fera et al. (2022)	Archival	Developed	Italy	2.04	7
		Elmarzouky et al. (2023)	Archival	Developed	UK	3.32	10
		Wuttichindanon & Issarawornrawanich (2020)	Archival	Developing	Thailand	1.99	6
Performance		Vera & Alijarde (2021)	Archival	Developed	Spain	1.46	4
	W. Liu et al. (2022)		Archival	Developing	Taiwan	2.04	5
Leverage		Pinto & Morais (2019)	Archival	Developed	Cross Country	3.84	9
Age		Rahaman et al. (2023)	Archival	Developing	Bangladesh	3.77	10
7. Standard setters and regulators							
Accounting standards setters		Pinto et al. (2020)	Archival	Developed	Cross Country	3.84	9
		Pinto & Morais (2019)	Archival	Developed	Cross Country	3.84	9
		Lau (2021)	Archival	Developing	China	-	-
Auditing standards setters	Bentley et al. (2021)		Experimental	Developed	USA	-	-
	Lennox et al. (2023)		Archival	Developed	UK	3.77	-
		Abdullatif & Al-Rahahleh (2020)	Mix	Developing	Jordan	-	-
		Segal (2019)	Interviews	Developing	South Africa	-	-
		Hegazy & Kamareldawla (2021)	Survey	Developing	Egypt	-	-

2.6.1 Investors, debtholders & stock market

This section explores studies that examined whether EAR delivered a communicative value that affected investor decisions, creditor perceptions, or the stock market.

2.6.1.1 Investor decision

Experimental- Developed Economy

The examination of EAR on investor decisions reveals a complex landscape. Thirteen studies (10 USA, 2 Australia, and 1 cross country study including Germany, USA, Canada, and others) present mixed evidence on the communicative value of EAR on investors' decisions. Christensen et al. (2014) authored the most cited article about KAM's effect on nonprofessional investors. Authors found that nonprofessional investors are more likely to alter their investment decisions when an audit report disclosed KAM as compared to investors who either received a standard audit report (an information effect) or encountered the same KAM in footnote from management (credibility effect). Similarly, studies such as Kachelmeier et al. (2020) and Rapley et al. (2021) found that KAM reduced nonprofessional investors’ intention to invest and lessened their confidence in the financial statement area disclosed as a KAM. In contrast, Brooke Elliott et al. (2020) and Carver et al. (2023) found a positive association between auditor commentary (CAM) and nonprofessional investors' perception of audit quality, thereby lowering perceptions of investment risk. This divergence in findings raises questions about the consistency of the impact of EAR on investor decisions.

The interaction of auditors and management disclosures can affect investor assessments. Austin & Williams (2021) and Dennis et al. (2019) highlighted this interaction, but the complexity of these relationships suggests that the understanding is still in its infancy and warrants further exploration. Austin & Williams (2021) found that nonprofessional investors assessed investments most harshly when the auditor associated the CAM with a firm's implementation of advanced technology and management presented narratives about that technology in the 10-K (in this particular case it was about blockchain). Dennis et al. (2019) found, on the other hand, that management disclosures mitigated the negative effects of auditor disclosures about material measurement uncertainty.

Kachelmeier et al. (2020) and Köhler et al. (2020) extended existing empirical studies by including both professional and nonprofessional investors. Köhler et al. found that professional investors positively value the disclosure of entity specific critical related information in KAMs. For nonprofessional investors, however, KAMs did not have communicative value. Their findings suggest a disparity in the communicative value of KAMs between these two groups, indicating a potential comprehension gap among nonprofessional investors. This discrepancy underscores the need for further research to understand the differential impacts of EAR on various investor groups.

Experimental- Developing Economy

One experimental study in China, Xu et al. (2023) used nonprofessional investors to explore the joint impact of investor skepticism and KAM characteristics on the communicative value of audit reports. Their findings suggest that the positive influence of KAM inclusion in audit reports is dependent on both the specific attributes of the KAM and nonprofessional investors' degree of skepticism. However, the limited number of studies in developing economies leaves a significant gap in understanding the impact of EAR in these contexts.

The current body of literature presents several limitations. The predominant use of nonprofessional investors and the concentration of studies in the USA may limit the generalizability of the findings. Earlier studies suggested that nonprofessional and professional investors obtain and utilise information in different ways (Frederickson & Miller, 2004; Hodg & Pron, 2006). This might suggest that KAM disclosures affect professional and nonprofessional investors differently. Most experiments presented participants with extracts from the audit report rather than the full report. This was meant to encourage participation by reducing time and effort. Participants had direct and intentional exposure to the auditor's report as part of experimental design. Moreover, most empirical studies experimentally manipulated KAMs such that the audit report only disclosed one, which may not accurately reflect real-world conditions. These limitations underscore the need for future research to include both professional and nonprofessional investors, conduct studies in diverse economic contexts, and use experimental designs that more closely mimic real-world conditions.

2.6.1.2 Creditors decision

Experimental- Developed Economy

The impact of EAR on creditors' decisions has been explored in a limited number of studies. Two experimental studies (1 Canada and 1 Germany) focused on debtholders by employing junior loan officers and bank directors, respectively. Both studies, Boolaky & Quic (2016) and Sirois et al (2018) found that KAMs did not significantly influence credit and loan decisions. Boolaky & Quick's (2016) experiment included the following manipulations in relation to the EAR: assurance level, materiality level, and KAM. Results showed a positive impact only from disclosing the assurance level. They concluded that KAM disclosure does not have a significant impact on bank directors' perceptions and decisions. In the same vein, Sirois et al. (2018) evaluated participants' responses to loan applications and found that KAM disclosure did not significantly influence loan decisions. Moreover, to assess the communicative value of KAM, authors employed eye-tracking technology and found that KAMs drew participants' attention to relevant financial statement matters. However, when more than one KAM was present, participants paid significantly less attention to the remainder of the financial statement.

Archival- Developed Economy

One archival study in the UK (Porumb et al., 2021) found a positive correlation between the number of unique Risk of Material Misstatements (RMMs) in the audit report and loan spread. This suggests that the reform is useful for borrowers and lenders, as KAMs contain relevant information for loan contracting.

Archival- Developing Economy

H. Liu et al. (2022) investigated the effect of KAM disclosure on debt contracting in China. They found that interest rates decreased whereas long-term debt increased after the adoption of KAMs. This suggests that debt holders utilise KAM disclosure to evaluate risks.

Survey- Developing Economy

Trpeska et al. (2017) conducted a survey in Macedonia using corporate loan officers. They discovered that KAMs contain relevant information for loan contracting and tend to inform banks' decisions. The additional information provided in the audit report by KAMs was highly important to participants' decision making.

The current body of literature presents several limitations. Empirical research on debtholders is limited in comparison with research on investors. The two experimental studies in developed countries were conducted about 5-7 years ago, and the results of experimental and archival/survey studies are contradictory. While Boolaky & Quick (2016) and Sirois et al. (2018) concluded that EAR does not impact credit decisions, H. Liu et al. (2022), Porumb et al. (2021), and Trpeska et al. (2017) concluded that EAR contains impactful information for loan contracting and loan decisions. This discrepancy underscores the need for future empirical and archival efforts to explore the communicative value of EAR in relation to debtholders and creditors.

2.6.1.3 Effect on the stock market

The influence of EAR on stock market decisions has been the subject of several archival studies. A group of studies analysed the effect of EAR on investor decision making. These include Burke et al. (2023) and Gutierrez et al. (2018) in the US, Bédard et al. (2019) in France, and Lennox et al. (2023) in the UK. They consistently found that EAR does not provide incremental information to the market on average. Burke et al. (2023) evaluated market reaction using difference-in-difference method and reported that CAM disclosures do not cause significant market reaction, attributing this to the predictability of CAM disclosures. In a similar vein, PCAOB's Interim Analysis Report about the initial impact of CAM regulation noted an insignificant market reaction subsequent to CAM regulation (PCAOB, 2020). Using French public companies, Bédard et al. (2019) found no significant market reaction to the disclosure of KAMs (first implementation and in following years). Another study Gutierrez et al. (2018) used the difference-in-difference method and findings revealed that risk disclosures in EAR provide little incremental information to investors. Expanding on these tests, Lennox et al. (2023) concluded that RMM disclosures do not provide incremental information to the market. Their results further revealed that the magnitude and types of RMM disclosures are not incrementally useful to investors even in relatively weaker information environments. However, authors did find evidence that RMM disclosures are not useful because investors were previously informed probably via earnings announcements, conference calls, audit committee reports, and/or the previous year's financial statements. This suggests that EAR generally does not deliver new information to investors.

On the other hand, several emerging studies in developed countries have reported that EAR provides incremental information to the market. These are Elsayed et al (2023), D. Li et al. (2022), and Seebeck & Kaya (2023) in the UK and Klevak et al. (2022) and Li & Luo, (2023) in the US. D. Li et al. (2022) examined whether the UK's mandatory implementation of EAR lowered the risk of future (one year forward) stock price crash over a time interval of seven years. Results indicated that mandatory adopters of EAR showed a significant decrease in crash risk. This suggests that EAR positively affected the market by decreasing crash risk, as a proxy for adverse returns. Elsayed et al. (2023) examined the information content of the new audit reform and found a relative impact on the market. Results indicated that the new audit reform is associated with higher trading volume and a volatility of market returns. This suggests that EAR provides meaningful information about the risks faced by firms. In parallel, Seebeck & Kaya (2023) responded to the call in Bédard et al. (2019) for more studies on the way KAM disclosures are articulated. They found preliminary evidence that KAMs with more specificity are significantly and positively linked with market reactions. This suggests that investors desire precise and specific information. Klevak et al. (2022) found that firms with extensive reporting were significantly correlated with more volatile stock prices, suggesting a higher level of perceived risk. Broadly, this also implies that investors use CAM disclosures to make decisions. Similarly, Li & Luo (2023) found that CAM disclosures enhanced the value-relevance and informativeness of earnings to equity investors.

Despite these findings, the current body of literature presents several limitations. The results of studies in developed economies are diverse, with some indicating that EAR is not informative to the market, while others found market reaction resulting from EAR. This diversity further complicates these studies' divergences in terms of market research design and selection of dependent variables. Elsayed et al. (2023), for example, caution the reader against comparing their results (focused on the content of risk disclosure) with prior research (Gutierrez et al., 2018; Lennox et al., 2023) that focused on the magnitude of risks disclosed. Moreover, Seebeck & Kaya (2023) looked at KAM specificity, Klevak et al. (2022) studied extensive CAMs, and Chirakool et al. (2022) examined KAM readability. Their inconsistent conclusions suggest the necessity of further research on the impact of KAM features (e.g., number, length, readability, specificity, and tone of KAMs) on investor perception and decision making.

Archival- Developing Economy

Five studies in developing economies (2 China, 2 Thailand and 1 Brazil) demonstrated that EAR provides incremental information to investors, decreases stock price synchronicity through company-specific information, and reduces the probability of stock crash (Alves & Galdi, 2020; Chirakool et al., 2022; Suttipun, 2020; Zhai et al., 2021; Zhi & Kang, 2021). The latter two Chinese studies produced contradictory results regarding the significance of ownership structure. Zhai et al. noted that the reduction in synchronicity was more evident in companies with controlling shareholders than in those with institutional shareholders, The authors associated this with institutional investors' relatively inexpensive access to company-specific information. Zhi and Kang suggested on the other hand that institutional investors utilise EAR more. Thus, for EAR to affect stock prices it would have to be used by a significant number of institutional investors.

2.6.2 Management

Studies examining KAM's consequences for financial reporting behavior are emerging. As more time elapses in the wake of new audit reform implementation, impacts on management behavior become increasingly visible. A range of studies have examined KAM's effects on earnings management, financial statement quality, management operating decisions, and management disclosures.

2.6.2.1 Earnings management

The implementation of EAR is anticipated to curb earnings management behavior due to the expectation of increased auditor scrutiny on reporting decisions. This is based on the premise that enhanced disclosure transparency leads to less earnings management behavior due to the heightened risk of exposure, a notion supported by prior literature such as Cassell et al. (2015) and Lee et al. (2006).

Experimental- Developed Economy

One study using a German sample by Gold et al (2020) experimentally employed 104 financial statements preparers to explore whether KAM adoption influenced management reporting behavior. As per the authors' prediction, financial statements preparers had less propensity for aggressive financial reporting behavior and were more cautious in the presence of KAM as compared to preparers who received audit reports without a KAM. This outcome aligns with the objective of EAR to enhance the transparency and quality of reporting.

Archival - Developing Economy

Similarly, one archival study by Sai et al (2024) in China found that KAM significantly reduced earnings management for Chinese A-share listed firms. They drew on auditor and management perspectives to explain the results. For the auditor, professional skepticism and judgment are improved when KAM is identified and reported. For management, this is due to increased attention to disclosed matters due to continuous communication with auditors. In both cases, the quality of financial reporting and disclosure was improved.

Interviews - Developing Economy

Barghathi et al. (2021) conducted interviews in the United Arab Emirates (UAE) with auditors from Big Four and non-Big Four audit firms. The study uncovered disparity in perspectives between the two groups. Big Four auditors agreed that KAM reduced earnings management. This was evidenced by Big Four audit firms' refusal to entertain management requests to conceal earnings management practices. Conversely, non-Big Four firms expressed concerns about pressure to conceal earnings management practices at the risk of losing a client. The authors suggested that reporting earnings management is a matter that requires regulatory support, and the results could be influenced by the Middle Eastern context, characterized by collectivistic cultural practices and the relatively weak power exerted by non-Big Four firms.

Overall, results indicate that KAMs have a positive influence on financial reporting behavior and contribute to the reduction of earnings management, regardless of the research method employed (experimental, archival, or interview-based). This is particularly significant given that financial report preparers, who are directly influenced by the impact of KAMs, are the initiators of financial statement development.

2.6.2.2 Financial statement quality

Experimental - Developed Economy

Two experimental studies (1 Australia and 1 Germany) explored the impact of KAM on financial statement quality. Results were mixed. Ong et al. (2022) used nonprofessional investors in Australia to examine KAM attributes' (readability and quantification) impact on financial statement understandability. KAM readability improved financial statement understandability while KAM quantification improved understandability only when KAM was more readable compared to less readable KAMs. On the other hand, a contrasting result was observed in a German experimental study by Boolaky & Quick (2016), which involved bank directors. They found that KAM disclosure did not significantly affect the perceived quality of financial statements. The authors attributed this to the perception that matters disclosed in KAMs are associated with risk and uncertainty.

Archival - Developed Economy

The archival study by Reid et al. (2019) in a developed economy (UK) explored the potential influence of KAM disclosure on the quality of financial reporting. Findings indicated KAM disclosure positively affected financial reporting quality as proxied by considerable reductions in absolute abnormal accruals, the tendency to just meet or beat analyst predictions, and a considerable rise in earnings response coefficients. The authors suggested that management might respond to KAMs due to the threat of exposure.

A US archival study by Elshafie (2023) explored whether the quality of financial reporting could be a determinant of CAM disclosure. Results revealed that low financial reporting quality was associated with more CAM disclosure. The authors suggested that increased CAM disclosure could be a way for auditors to signal low financial reporting quality. This may call for more studies about whether the number of CAMs could be used as a measure of financial reporting quality.

Archival - Developing Economy

One Chinese archival study by Wu et al. (2019) examined KAM's impact on the quality of financial statements. Results indicated positive association between CAM disclosure and financial statement quality. The authors suggested that KAMs related to asset impairment better represented the deteriorated economic condition of the audited asset impairment compared to firms that did not recognise asset impairment items as KAMs.

2.6.2.3 Management operating decision

Experimental - Developed Economy

One experimental US study by Bentley et al. (2021) explored whether CAM disclosure reduces managers' tendency for risk-decreasing activities versus risk-increasing activities. Results revealed that CAM disclosures lessen managers' tendency toward risk-decreasing activities while increasing their risk-increasing activities. The authors interpreted these results to suggest that managers perceive a CAM specific to their area of operation as an endorsement of their riskier decisions. The authors recommend that such CAMs include disclaimers, so they are not misinterpreted by management as implying auditor support. Nevertheless, this interpretation might not hold true across different organisational cultures and managerial perspectives. Additional research could explore how managers perceive and respond to CAMs in different settings.

Archival - Developed Economy

One Chinese archival study by An et al. (2023) explored the impact of the disclosure of inventory-related Key Audit Matters (KAMs) on inventory management efficiency. Findings showed that firms with inventory related KAMs are associated with a rise in inventory turnover percentage and a reduction in inventory impairment loss. They concluded that the disclosure of inventory related KAMs positively impacts inventory management by improving auditor monitoring and attracting external attention.

2.6.2.4 Management disclosure

Studies about KAM's effect on management disclosure have only been explored in developed economies. This was covered through archival and experimental research.

Experimental - Developed Economy

Two experimental US studies (Fuller et al., 2021; Tan & Yeo, 2022) explored the effect of CAM on management disclosure. Fuller et al. (2021) found that the disclosure of complex estimates by management is more forthcoming when the audit report contains more information about the related disclosure and when the audit committee is more effective. When auditors report matters concerning risks and uncertainties, management is expected to expand their disclosures in relation to the auditor's complex estimate disclosure. Moreover, management response will be greater in the presence of a more effective versus a less effective audit committee. Tan & Yeo (2022) explored whether management accounting choices are influenced by auditor-client relationship closeness. They asked, in other words, whether management responds differently to information about forthcoming CAMs when these come from a "close" auditor (small social distance) versus a "distant" auditor, given that greater social distance poses less risk to audit independence. Results revealed that when managers are notified about a CAM from a distant auditor, CAM reporting has a deterrent effect on their accounting choices and restrains their opportunistic reporting behavior.

Archival - Developed Economy

Three archival studies in the US and UK (Burke et al., 2023; Elmarzouky et al., 2022; D. Li et al., 2022) examined the impact of KAM on management disclosure. Results were consistent, though the type of management disclosure studied differed. Using a US sample, Burke et al. (2023) found that management significantly altered financial statement footnotes referenced by CAMs following the implementation of CAM, likely in anticipation of increased auditor scrutiny over the relevant matters. D. Li et al. (2022) observed that the compulsory disclosure of EAR in the UK significantly decreases stock price crash risk. The decrease in crash risk is related to EAR disclosure of risk associated with improper revenue recognition. This suggests that EAR encourages management to disclose bad news to investors in a timely manner. Using a UK sample, Elmarzouky et al. (2022) found a significant positive relationship between KAMs disclosed by the auditor and corporate narrative risk disclosure by the management, suggesting an increase in transparency and an improvement in management disclosure.

The body of research examining the influence of KAMs on management disclosure is still nascent, yet the preliminary findings are encouraging. Current studies suggest that KAM positively impacts earnings management, the quality of financial statements, management disclosure, and operational decisions. This aligns with the primary goal of EAR to bolster the quality of financial reporting. Despite these promising findings, there are still gaps in the research that warrant further exploration. For instance, examining the influence of Chief Executive Officer (CEO) characteristics, such as narcissism, personality, academic qualifications, and age, on KAM could yield insightful results. This is particularly important in the context of developing countries, where the dynamics of financial reporting might differ due to varying economic, regulatory, and cultural contexts. Therefore, future research should aim to broaden the geographical scope of these studies to include developing economies, thereby providing a more comprehensive understanding of the global impact of KAM on financial reporting.

2.6.3 Audit Committee

Seven studies in the sample examined the effect of Audit Committee (AC) characteristics on the disclosure and readability of KAMs. Four of these studies were from developed economies (3 UK, 1 Australia) examined various AC characteristics such as expertise (financial, industry, or legal) and gender diversity. Three studies from developing economies (Thailand, Oman, and a cross country study in the Middle East) examined AC financial expertise, size, frequency of meetings, and multiple committee membership.

2.6.3.1 Audit Committee oversight

Experimental- Developed Economy

Kang (2019) is a sole example of an experimental study on the effect of CAM disclosure on AC. Kang noted that AC members exercise more oversight when investors are unsophisticated, tending to challenge management's significant accounting estimates in the presence of potential CAM disclosures. The results revealed that AC oversight intensified, particularly when unsophisticated investors constituted a majority. On the other hand, when sophisticated investors constituted a majority, the AC did not exercise further oversight to question management estimates. The experiment demonstrated that AC oversight was inconsistent, varying with perceptions of shareholder sophistication.

2.6.3.2 Audit Committee gender

Archival- Developed Economy

Bepari (2023) and Velte (2018) studied the impact of AC gender diversity on KAM disclosure. Both reported that firms with a greater ratio of women on ACs have greater KAM readability and higher levels of KAM disclosure. This supports previous studies of the positive effect of gender diversity on corporate governance (Abbott et al., 2012; Bart & Mcqueen, 2013; Wood et al., 1985). These studies showed improved communication, decision-making, and financial reporting in the presence of females.

Archival- Developing Economy

Mah'd & Mardini (2022) conducted a cross country study in the Middle East covering Oman, the UAE, Bahrain, and Jordan. They found that the presence of female AC members has a significant positive association with the level of KAMs disclosed. However, AC female representation is low (about 20%) in the Middle East due to a male-dominated business culture (Arayssi & Jizi, 2019).

2.6.3.3 Audit Committee expertise

Archival- Developed Economy

Bepari (2023) and Velte (2020) also found that the financial and industry expertise of AC members improved KAM readability. AC members who are well acquainted with accounting and auditing standards and possess adequate industry knowledge enable the AC to discuss both account-level KAMs and industry-specific KAMs. Results indicated reduced information asymmetry and enhanced communication with auditors. Bepari (2023) additionally explored the effects of AC legal expertise on KAM disclosure and found that it reduces KAM readability. Auditor perceptions of greater risk in the presence of AC legal experts lead to fewer readable and fewer specific KAMs. Moreover, Zhang & Shailer (2022) found that the expertise of the audit committee impacts the disclosure of KAMs as both financial and industry expertise reduced the number of KAMs disclosed.

Archival- Developing Economy

Wuttichindanon & Issarawornrawanich (2020) found that AC financial expertise is not directly correlated with KAM disclosure. Conversely, Mah'd & Mardini (2022) found that AC financial expertise had a significant positive relationship to the number of KAMs disclosed. AC financial expertise has been positively associated with improved financial reporting and is a key factor in AC effectiveness (J. R. Cohen et al., 2014). Thus, one would expect AC financial expertise to enhance discussions with auditors, reduce information asymmetry, and consequently influence EAR disclosure.

In developing countries, AC impact on KAM disclosure has only been studied in relation to financial expertise. By contrast, studies in developed countries included industry and legal expertise. This could reflect regulatory emphasis. In developing countries, regulations focus on financial expertise. In many developed countries, however, industry expertise is also required. The UK Corporate Governance Code indicates that the audit committee "as a whole" shall have competence applicable to the sector in which the company functions (Financial Reporting Council, 2018).

2.6.3.4 Audit Committee number of meetings

Archival- Developing Economy

Both Mah'd & Mardini (2022) and Wuttichindanon & Issarawornrawanich (2020) found that the number of AC meetings is not directly correlated with KAM disclosure. The frequency of AC meetings was expected to serve as good corporate governance and reduce perceived audit risk (Stewart & Munro, 2007). The quality of expertise and the identity of AC members apparently supersede the quantity of meetings in terms of their relative significance to KAM disclosure.

2.6.3.5 Audit Committee members serving in other committees within the same company

Archival- Developing Economy

Al Lawati & Hussainey (2022) found that AC members sitting on other committees in the same company positively influence KAM disclosure. Such AC members possess comprehensive knowledge about a range of company activities. The authors linked this to earlier results (e.g. Al-Dhamari et al., 2022) indicating a positive correlation between multiple committee membership and high quality accounting information. This calls for further research in developed economies to corroborate these findings.

Despite these findings, the current body of research is insufficient in offering a complete comprehension of how AC affects the disclosure and readability of KAMs. For instance, there is a scarcity of experimental studies conducted in developing economies, potentially reflecting the researchers' inclination for archival studies in these regions. Furthermore, the existing body of literature primarily covers AC member expertise and gender diversity, with features such as AC size, frequency of meetings, and other committee membership covered to a lesser extent. Other potentially influential attributes such as AC independence, tenure, ethnicity, national diversity, social ties, and compensation have been less explored. Furthermore, cross-country studies and combined research on ACs in both developed and developing economies are limited. Therefore, more extensive studies are suggested to foster a better understanding and to generate meaningful results.

2.6.4 External auditors

Studies dealing with external auditors as possible determinants for KAM disclosure have been emerging due to external auditors' instrumental role in identifying and reporting KAMs. Auditors are expected to use their judgement in deciding which issues to disclose as KAMs. A range of studies weighed the effect of external auditors on KAM disclosure in relation to auditor characteristics such as gender, experience, industry specialisation, accounting degree, tenure and rotation, and auditor type (whether from Big Four or not). Studies concerned with the consequences of KAM disclosure on external auditors mainly focused on auditor liability.

2.6.4.1 External auditor gender

Archival- Developed Economy

Two studies in developed economies (1 UK and 1 Australia) explored the effect of audit partner gender on KAM disclosure (Abdelfattah et al., 2021a; Bepari et al., 2022a). These studies found that female audit partners disclose more KAMs compared to their male counterparts. This is consistent with earlier literature that female audit partners exert additional audit efforts due to risk averse characteristics. They are generally inclined to lower risk exposure and legal liabilities (Doxey, 2014; Ittonen et al., 2013).

In addition to exploring the association between audit partner gender and the number of KAMs disclosed, Abdelfattah et al. (2021) studied the relevance of gender to stylistic features of KAM reporting such as detail, tone, and readability. Bepari et al. (2022) examined the effect of gender on the type of KAM disclosed i.e., whether KAMs were more likely to be entity-level (ELKAMs) or account-level (ALKAMs). Abdelfattah et al. (2021) found that female audit partners disclose more detailed and less optimistic KAMs than male auditors, tending to make KAMs less readable. Bepari et al. (2022) found that audit partner gender is significantly associated with KAM type. Specifically, they noted that female audit partners disclose more ALKAMs and fewer ELKAMs than male colleagues. Overall, these findings could be explained in view of female audit partners' risk averse attitude and sensitivity to litigation risk as compared to male audit partners (Hardies et al., 2013; Ittonen et al., 2013; Twedt & Rees, 2012). This aligns with other literature to the effect that female audit partners tend to identify and report more RMMs (Breesch & Branson, 2009), to issue going-concern opinions (Hardies et al., 2016) and to issue modified audit opinions across conditions where such opinion is necessary (Karjalainen et al., 2018). It is essential to note that these conclusions are based on a limited number of studies, and more extensive research would be valuable to identify broader patterns and implications.

Archival- Developing Economy

Two studies in developing economies (Malaysia and Thailand) explored the effect of audit partner gender on the disclosure of KAMs (Hussin et al., 2022; Wuttichindanon & Issarawornrawanich, 2020).

Hussin et al. (2022) revealed an unexpected significant negative relationship between gender and the number of KAMs disclosed. The authors indicated that the results could be impacted by the industry type (consumer services and healthcare) most commonly audited by female partners, implying that industry-specific conditions may affect the number of KAMs disclosed. Wuttichindanon & Issarawornrawanich (2020) found that gender did not correlate with KAM disclosure. Results indicated that auditor gender is statistically insignificant in the Thai context. According to the author's robustness test, however, female audit partners were positively correlated with KAM readability.

Results in developing economies contradicted studies in developed economies on the effect of gender on KAM disclosure. Regarding the number of KAMs disclosed, Hussin et al. (2022) and

Wuttichindanon & Issarawornrawanich (2020) found negative correlation and no correlation with female audit partners respectively. Contrariwise, Abdelfattah et al. (2021) and Bepari et al. (2022) found positive correlation. Inconsistent results were also found between developing and developed economies regarding the KAM readability. Whereas Abdelfattah et al. (2021) found that female partners disclose less readable KAMs, Wuttichindanon & Issarawornrawanich (2020) found their KAMs more readable. Such differences in results could be attributed to variances in culture, legal system and corporate governance factors that may impact KAM disclosures, thus emphasising the necessity for further research to tease out these nuances.

2.6.4.2 Auditor experience, industry specialisation and accounting degree

Archival- Developed Economy

One study in a developed economy (Australia) explored the influence of auditor experience, industry specialisation, and accounting degree on KAM disclosure (Bepari et al., 2022a). Since recognising and reporting KAMs involves the application of an auditor's judgement, the authors projected that these factors would impact disclosure. The authors built their projections on prior literature (Dunn & Mayhew, 2004; Hsieh & Lin, 2016) linking specialisation and experience to higher audit quality. Additionally, Chu et al. (2022) correlated auditors with a university degree in a quantitative field directly related to accounting with higher accrual quality and audit fees. As projected, the authors found that these auditor characteristics significantly affected the number and types of KAMs disclosed.

Archival- Developing Economy

One study in a developing economy by Y. Liu et al. (2022) explored the influence of auditor industry specialisation on CAM disclosure. Authors used a sample of listed companies in mainland China (A-share) and found that the similarity of industry audit risk disclosed as a CAM correlated positively with auditor specialisation at the partner level.

Only a handful of studies (e.g., Bepari et al., 2022; Y. Liu et al., 2022) have begun to explore auditor characteristics such as auditor experience, industry specialisation, and accounting degree. Initial findings suggest these facets can significantly affect the number and type of KAMs disclosed. Still, these conclusions are based on a very limited dataset, underscoring the need for additional research in this direction, both in developed and developing economies.

2.6.4.3 External auditor tenure and rotation

Archival- Developed Economy

Two studies in developed economies (1 USA and 1 cross country: UK, France, and Netherlands) examined the effect of audit firm tenure on the disclosure of KAMs (Elshafie, 2023; Pinto & Morais, 2019). Collectively, these studies found that tenure does not affect KAM disclosure. Both studies expected a negative association between tenure and disclosure, reasoning that auditor-client familiarity would reduce the likelihood of KAM disclosure. As a potential explanation of the results, the authors suggested that because KAMs are often concerned with significant risks and auditor judgement, auditor familiarity with the client business is somewhat irrelevant.

Archival- Developing Economy

One study in developing economies by Hussin et al. (2022) using data from Malaysia examined the effect of audit firm tenure on KAM disclosure. Authors found that audit firm tenure is negatively associated with KAM disclosure. Results are inconsistent with findings in developed economies that found no association. The variation of these findings suggests that a multitude of aspects, probably including regulation, cultural elements, or legal aspects, could influence these relationships.

Four studies in developing economies (1 South Africa, 1 Bangladesh, 1 China, and 1 Taiwan) examined the effect of firm/partner rotation on KAM disclosure with mixed results. Using data from South Africa, Duboisée de Ricquebourg & Maroun (2023) reported that audit partner change is not associated with KAM disclosure. Audit firm change, however, was significantly associated with KAM addition or removal. Authors traced this difference to firms' idiosyncratic internal risk assessment and audit procedures for matters involving professional judgement. On the other hand, Rahaman et al. (2023) used data from Bangladesh and found no relationship between audit firm rotation and KAM disclosure. Chen et al., (2023) achieved a broader perspective using Chinese data. They found the disclosure of more KAMs to be associated with the interrelated changes of audit firm and signatory auditors. Relatedly, Lin & Yen's (2022) results from Taiwan indicated that audit partner change is associated with a change in KAM disclosure in the first year of rotation. The authors explained that such differences in KAM disclosure enhanced the quality of the audit. The additional KAMs provided conclusive assessments and a fresh perspective for the audited firm in relation to significant areas requiring professional judgement. Research needs to take regulations for audit firm/partner rotations, as well as cultural and legal factors into consideration. It is also suggested to determine whether mandatory or voluntary rotation would have different effects on the disclosure of KAMs.

2.6.4.4 External auditor type

Archival- Developed Economy

The influence of auditor type, particularly the divide between Big Four and non- Big Four firms, on KAMs disclosure has been a prominent area of investigation. Five studies in developed economies (2 UK, 1 cross country: EU, Norway, Switzerland and 1 Australia, and 1 Croatia) observed a trend for more KAM disclosures from Big Four firms, along with distinct variations in the substance of their disclosures. Examples include Kend & Nguyen (2020) Australian study that found more KAM disclosures from Big Four firms compared to their non- Big Four counterparts and Tušek & Ježovita (2018) Croatian study which also reported that Big Four auditors disclosed more KAMs and more detailed KAMs. This tendency for Big Four firms to provide more extensive and detailed KAM disclosures has been explained in terms of their superior expertise, reputation, and credibility. However, studies have also highlighted the lack of homogeneity in KAM disclosures within Big Four firms. For instance Honkamäki et al, (2022) cross country study observed that Big Four firms differ significantly in recording management estimates and in the number of audit procedures undertaken in relation to disclosed KAMs. In the UK, Sierra-García et al. (2019) explored the effect of auditor type on KAM type (ELKAM vs. ALKAM). They identified discrepancies among Big Four firms in the UK regarding the type of KAM disclosures, with Deloitte, Ernst & Young, and KPMG disclosing fewer ELKAMs than PricewaterhouseCoopers. The difference in KAM disclosure among Big Four firms could be explained by variance in their audit procedures as well as client-specific attributes such as industry type or business complexity.

Archival- Developing Economy

Six studies in developing economies (1 Bangladesh, 1 Oman, 2 Thailand, 1 Jordan, and 1 Brazil) explored the effect of auditor type on KAM disclosure. The results generally converged on a positive association between Big Four audit firms and increased KAM disclosure (Abdullatif & Al-Rahahleh, 2020; Ferreira & Morais, 2020; Rahaman et al., 2023; Suttipun, 2022; Wuttichindanon & Issarawornrawanich, 2020). Baatwah's (2023) study in Oman further indicated that Big Four firms are heterogeneous in their KAM disclosures, aligning with observations from developed economies (Honkamäki et al., 2022; Kend & Nguyen, 2020).

Findings related to auditor type in both developed and developing economies are generally consistent in showing a relationship between KAM disclosure and Big Four audit firms. While these studies have predominantly focused on the distinction between Big 4 and non-Big 4 firms, emerging research is delving into how other auditor-specific characteristics, such as gender, tenure, and experience, might influence KAM disclosure. The recently implemented ISA 700 mandate, requiring the disclosure of engagement partner names, has opened up new avenues for investigation, potentially allowing for the exploration of how factors like age, race, ethnicity, social ties, and joint audit participation might affect KAM disclosure.

2.6.4.5 Insights from auditors

Interviews- Developed Economy

Pelzer's (2021) study in the US conducted interviews with eight Big Four and eight non-Big Four auditors prior to the release of the final CAM standard. Both Big Four and non-Big Four auditors agreed that CAM disclosure is expected to potentially become standardised boilerplate over time. This could imply diminishment in the effectiveness of CAM disclosure, since the purpose is to disclose the most significant matters specific to the audit client.

Surveys and Interviews- Developing Economy

There were three primary studies conducted in developing economies (1 South Africa, 1 Jordan, and 1 Egypt) about external auditors' perception regarding the introduction of KAMs. Segal (2019) conducted interviews with 20 audit experts in South Africa after KAM implementation to understand whether auditors perceive the potential benefit of KAM for enhancing transparency. Findings indicated that audit experts have diverse perceptions of what constitutes a potential KAM. Similarly, Abdullatif & Al-Rahahleh (2020) conducted face-to-face interviews with 18 audit partners in Jordan to understand the application of ISA 701 during the first two years. There was no general agreement among audit partners about KAM reporting considerations like the nature, type, number, and details of KAM disclosures. In the same vein, a more recent study (Hegazy & Kamareldawla, 2021) used a questionnaire to assess whether auditors in five Egyptian firms were able to classify the requirements for KAM, Emphasis of Matter (EOM), and Going Concern (GC) based on the explanations in their relevant standards (ISA 701, 706, and 570 respectively). Findings indicated that the explanation in ISA 701 may not properly support some auditors in recognising all potential KAMs. Additionally, most auditors misclassified EOM and GC as KAMs. Such primary studies are recommended to examine external auditors' mindsets around KAM recognition and disclosure. This can provide a better understanding of auditors' perception and the factors impacting KAM identification. The practical implication of these results is to encourage standard-setters, policymakers, and regulators to enhance the explanations in the ISA 701 standard by providing more detailed guidance for KAM identification and reporting.

Studies exploring auditors' perceptions of KAM disclosures, including interviews and surveys, provide further insight into the complexities surrounding KAM reporting. Given the eleven years of implementing UK KAM, eight years of implementing KAM, three years of implementing CAM for large, accelerated filers, and four years of implementing CAM for all US companies, questions remain whether external auditors can properly identify significant matters with an adequate level of detail and avoid confusion with ISA 706 and 570. Further research, including primary studies, interviews, and case studies, can address these questions and help to realise the objective of EAR.

2.6.4.6 External auditor liability

Experimental- Developed Economy

The issue of auditor liability concerning KAM disclosure has also been addressed in a number of studies, predominantly in the US due to the high risk of litigation. These investigations have yielded mixed findings; on one hand, studies like those by Brasel et al. (2016) and Kachelmeier et al. (2020) found that CAM disclosure could be seen as an audit "disclaimer" alerting users to the reported risks and mitigating perceived auditor liability in the event of material misstatements. This suggests that KAM disclosure can reduce perceptions of auditor liability, with potential legal motivations for auditors to increase such disclosures. On the other hand, some studies, including those by Backof et al. (2022), Gimbar et al. (2016b) and Vinson et al. (2019), found that KAM disclosure could increase perceptions of auditor liability in specific circumstances, such as when reasonable assurance is not clearly defined in the audit report, or when misstatements concern violations of precise accounting standards, or when KAM is removed after being disclosed for lengthy duration. Additionally, studies by Gimbar et al. (2016b) and Coram & Wang (2021) indicated that the type of KAM disclosure (whether under precise or imprecise accounting standards) is crucial to perceptions of auditor liability.

Experimental- Developing Economy

Two experiments in relation to the effect of CAM disclosure on auditor liability were conducted in developing countries, with both studies focusing on Thailand. Pratoomsuwan & Yolrabil (2020a, 2020b) found that professional evaluators (auditors) assessed lower auditor liability when material misstatements were related to fraud as compared to error. However, nonprofessional evaluators assessed higher auditor liability when the material misstatement related to fraud rather than error. Authors expected these results since professional evaluators (auditors) adequately understand that fraud is more difficult to detect than errors and involves more complex audit procedures. The differences in auditor liability assessments based on the type of undetected misstatements (fraud versus error) adds another layer of complexity to the issue of KAM disclosure and auditor liability.

It is worth noting that while these experimental studies provide valuable insights, they may be subject to certain limitations, such as the varying roles and backgrounds of experimental participants. Furthermore, the manipulation of CAMs and the complexity of accounting issues might also affect the outcomes. Consequently, a move from experimental to archival research could provide more robust and real-world insights.

2.6.5 Audit features

The examination of KAM consequences on audit features, particularly audit fee, audit lag, and audit quality, has been a prevalent subject in academic research. Although the introduction of EAR has provoked interest in these features, especially audit fee and audit quality, the attention accorded to non-audit fee and audit peak season's influence on KAM disclosure has been rather limited.

2.6.5.1 Audit fee

One major concern for EAR implementation is a potential increase in audit fees. The anticipated increase could stem from additional efforts, additional time spent discussing disclosed matters with the audit committee and management, or the additional procedures and enhanced quality control measures conducted by auditors in relation to the disclosed matter (Chalmers, 2013; Overend, 2013).

Archival- Developed Economy

Audit fee as a consequence

In developed economies, the question of audit fee as a consequence of KAM has been addressed by eight studies, with a predominance from the UK due to its early adoption of EAR (4 UK, 2 New Zealand, 1 USA, and 1 France). These studies reported mixed findings. In defiance of expectations, several studies (Al-mulla & Bradbury, 2022; Bédard et al., 2019; Gutierrez et al., 2018; Li & Luo, 2023; Reid et al., 2019) did not observe a considerable change in audit fee as a result of the reform. They did not find evidence that costs associated with the implementation of the new audit reform have been passed to the audit client, suggesting that these could have been borne by the auditor. Meanwhile, others (Elmarzouky et al., 2023; H. Li et al., 2019) reported a significant positive association between KAM disclosure and audit fees. They suggested that the increase was a result of the new audit regime’s impact on auditor liability and effort. Furthermore, Elmarzouky et al. (2023) explored the moderating effect of board size and independence (as main corporate governance factors) on the relationship between KAM disclosure and audit fee. Interestingly, they concluded that a higher ratio of board independence strengthened the relationship. Similarly, Zhang & Shailer (2021) examined the dynamics of disclosures in relation to adding or dropping particular KAMs. They found that when additional KAMs are added in comparison to the previous year, the audit fee increases. The increase in fee is reflected in the auditors' additional efforts to disclose a new KAM. Authors did not observe any significant impact when a KAM is dropped without adding a new KAM.

The discrepancy in findings could be attributed to the disparate methodologies employed, the selection of different samples, or the consideration of distinct moderating factors. The matter requires further examination, considering the implications of these findings on auditors' decision-making processes and potential effects on audit quality.

Archival- Developing Economy

Two studies in developing economies (1 Thailand and 1 Oman) examined the impact of audit fee on the disclosure of KAMs. Both Baatwah et al. (2022) and Suttipun (2022) found a positive relationship between KAM reporting and audit fees. This increase in fees is interpreted with reference to increased audit risk and auditor effort. However, the audit fee's effect on the type of KAM disclosed was not thoroughly explained, indicating a need for further investigation.

Archival- Developed Economy

Audit Fee as a Determinant

Research in developed economies regarding audit fee as a possible determinant of KAM disclosure included five studies. Two of these were cross country (1 Europe, 1 UK, France, and Netherlands); the rest were in the UK (1), Australia (1), and Spain (1).

Bepari et al. (2022), Mamcarczyk et al. (2020), Pinto & Morais (2019), and Vera & Alijarde (2021) revealed a positive relationship between the audit fee and the number of disclosed KAMs in the European and Australian context. This implies that for firms paying higher audit fees, more KAMs are disclosed. They explained that this could be due to the size, risk, and/or complexity of the audited firm as well as the additional amount of work conducted by the auditor to disclose risk areas. On the other hand, Sierra-García et al. (2019) discovered that the audit fee is not significantly related to the number of KAMs identified by auditors in the UK.

Most studies in developed economies suggested that audit fee significantly influences the number of KAMs disclosed. However, KAM recognition and reporting is expected to be based on significant risk areas requiring auditor judgment. Authors rationalized the increase in audit fee in relation to additional efforts or litigation risk incurred due to the additional information disclosed.

Archival- Developing Economy

Three studies in developing economies (1 Bangladesh, 1 Brazil, and 1 Malaysia) explored audit fee as a possible determinant of KAM disclosure. Results are diverse with each study reporting a distinct impact of audit fee on KAM disclosure. In the Malaysian context, Hussin et al. (2022) reported a significant correlation between audit fee and number of KAMs disclosed (higher audit fees corresponding to more KAMs). In contrast, Ferreira & Morais (2020) found a negative correlation between audit fee and the number of KAMs disclosed in Brazil (higher audit fees corresponding to fewer KAMs). Authors noted that an auditor's decision to disclose a KAM could, in effect, amount to a choice between reputation and a certain level of return. Using a Bangladeshi sample, Rahaman et al. (2023) revealed that audit fee does not influence KAM disclosure, whether this be assessed by the magnitude of issues or word count.

For developing economies, audit fee results are consistent in terms of the consequences of KAM adoption. When it comes to the audit fee as a determinant of KAM, the results are varied. Limited availability of audit fee information is one possible reason for the scarcity of audit fee studies in developing economies. Yet many developing countries' regulations do not mandate disclosure of audit fees to the public as part of corporate governance reporting. Audit fee disclosure is one of the aspects of corporate governance meant to promote transparency, yet developing countries continue to be skeptical of its value.

2.6.5.2 Audit report lag

In addition to researching audit fee as a major concern for the implementation of EAR, scholars also explored the possibility of audit report lag or delay. Audit report lag is the period between the firm’s fiscal year end and the issuance date of the audit report. The concern is that auditors would need more time both to discuss significant matters with the audit committee and management, and to prepare and issue audit reports that include KAM disclosures. Thus, an additional cost of EAR could pass to the market in the form of an audit lag.

Archival- Developed Economy

Four studies in developed economies (1 UK, 1 New Zealand, 1 USA, and 1 France) examined audit delay as a consequence of KAM. All of these studies (Al-mulla & Bradbury, 2022; Bédard et al., 2019; Li & Luo, 2023; Reid et al., 2019) confirm that no considerable change in audit delay was attributable to the new reporting requirement. One possible explanation is that auditors were already aware of the additional time and efforts required for KAM disclosure and planned accordingly to reduce delay and to issue reports within the timeframes mandated by the market/regulators (Knechel & Payne, 2001). This also suggests that significant audit matters were already being discussed with management and audit committees prior to the implementation of the new audit regime.

Archival- Developing Economy

Only two studies in emerging markets (1 Oman, 1 Jordan) examined audit report lag. Baatwah et al. (2022) considered it as a consequence and Abdullatif et al. (2023) as a determinant of KAM. Baatwah et al. (2023) found that KAM decreased audit report lag. This contrasts with studies in developed markets where scholars did not find evidence linking KAM to audit delay. Also, the results did not align with the expectation that audit lag could increase because of the reform. Authors explained that audit firms were already aware of the requirements to disclose KAM and therefore had allocated experienced and qualified auditors to prepare timely reports and meet Oman's regulatory requirements to report within 60 days for end-of-year financials. Abdullatif et al. (2023) investigated whether the number of KAMs disclosed was associated with the duration of audit report lag and found no evidence for a relation.

2.6.5.3 Audit quality

One of the main intended benefits of EAR is greater audit quality (IAASB, 2016; PCAOB, 2017). Hence, many scholars in both developed and developing economies examined whether EAR delivered this benefit. Studies examining EAR's impact on audit quality employed a range of methods including archival studies, expert surveys, and interviews.

Archival - Developed Economy

Four studies in developed economies (1 UK, 2 New Zealand, and 1 France) explored whether KAM disclosure improved audit quality. Archival studies dominated the sample and led to divergent conclusions. Al-mulla & Bradbury (2022), Bédard et al. (2019), and Gutierrez et al. (2018) used the absolute value of discretionary/abnormal accruals as a proxy for audit quality and found that KAM disclosure does not affect audit quality. Conversely, H. Li et al. (2019) found that KAM disclosure improved financial reporting quality, marked by reductions in absolute abnormal accruals and tendencies to meet or beat analyst predictions.

Archival- Developing Economy

Six studies in developing economies (2 Thailand, 2 China, 1 Jordan, and 1 Oman) examined whether KAM improved audit quality. Most studies (Al Lawati & Hussainey, 2022; Suttipun, 2021; X.

Wu et al., 2019; Zeng et al., 2021) reported KAM's positive influence on audit quality. On the other hand, one Thai study (Kitiwong & Sarapaivanich, 2020a) did not find evidence that KAM disclosure improved audit quality. The divergence in results could be attributed to different proxies. For example, Suttipun used the Modified Jones Model, Al Lawati & Hussainey used audit fee, while Zeng et al. used five proxies: discretionary accruals, small positive earnings surprise, the implementation of below-the-line matters or non-essential earnings, audit opinions, and audit fees.

Interviews and Surveys- Developed Economy

Insights from experts using quantitative surveys (1 USA, 1 Finland) and interviews (1 Australia) reported that KAM disclosures do not have much effect on audit quality (Daugherty et al., 2021; Nguyen & Kend, 2021; Rautiainen et al., 2021). Participants were skeptical about whether KAM disclosure is achieving its intended benefit vis-a-vis audit quality.

Interviews- Developing Economy

Barghathi et al. (2021) conducted semi-structured interviews in the UAE with auditors from Big Four and non-Big Four audit firms. Findings showed that audit quality improved after KAM was introduced, especially for non-Big Four audit firms. This is explained by increased managerial accountability leading to greater transparency.

In summary, while some advancements have been made in understanding the implications of KAM on audit features, several research gaps remain. The relationship between audit fee, audit lag, audit quality, and KAM disclosure continues to be a complex one, with varied findings across different jurisdictions and economies. Future research is encouraged to further probe these relationships and consider additional factors that may influence the consequences of KAM on audit characteristics.

2.6.6 Audited company

Many studies in developed economies (9 in total) explored the influence of audited firm characteristics on KAM disclosure. These include: (Bepari et al., 2022a; Kend & Nguyen, 2020) in Australia; (Pérez et al., 2021; Vera & Alijarde, 2021) in Spain; (Elmarzouky et al., 2023; Sierra-García et al., 2019a) in the UK; (Fera et al., 2022) in Italy; and (Mamcarczyk et al., 2020; Pinto & Morais, 2019) cross country studies in Europe (for the former) and UK, France, and the Netherlands (for the latter).

Similarly, several studies in developing economies (6 in total) examined the effect of audited firm attributes on the disclosure of KAMs. These include (Rahaman et al., 2023) in Bangladesh, (Hashim et al., 2021) in Malaysia, Wuttichindanon & Issarawornrawanich (2020) in Thailand, (Ferreira

& Morais, 2020b) in Brazil, (W. Liu et al., 2022) in Taiwan, and (Mah'd & Mardini, 2022) in the Middle East (Oman, the UAE, Bahrain, and Jordan).

2.6.6.1 Company size, industry and complexity

Archival- Developed economy

Findings agreed that company characteristics such as size, industry, and complexity impact KAM disclosure both in terms of quantity and type (Bepari et al., 2022; Kend & Nguyen, 2020; Pérez et al., 2021; Sierra-García et al., 2019; Vera & Alijarde, 2021). The number and subject area of KAM tends to be linked with the audited firm's industry/size as well as the significant areas requiring an auditor's professional judgement. Most studies reported at least one disclosed KAM, as per the standards' expectation. Studies also reported similar KAM subject areas such as revenue recognition, valuations in impairment of assets, and allowance for doubtful accounts.

Two studies focused on a specific industry or specific topic for KAM (Mamcarczyk et al., 2020; Sneller et al., 2017). Mamcarczyk's et al. cross country study explored the type and number of KAMs for mining companies in Europe. Findings indicated the following subject areas for KAMs in the mining industry: investment in subsidiaries, property and tangible assets, provisions, and contingencies. Future studies can focus on other specific industries as this could allow a more comprehensive understanding of KAM variance by industry. A Dutch study by Sneller et al. (2017) was the only study to explore the content of IT-related KAM disclosures. The authors postulated that the quantity of KAMs concerning cybersecurity did not reflect the actual number of such threats. Technology's prevalent effects on all aspects of company operation (including cybersecurity) underlines the need for more research studies on KAM reporting about technology risk.

Archival- Developing Economy

Results in developing economies were consistent with studies in developed economies in finding that company characteristics such as size, industry, and complexity influence KAM disclosure (Ferreira & Morais, 2020; Hashim et al., 2021; Mah'd & Mardini, 2022; Rahaman et al., 2023; Wuttichindanon & Issarawornrawanich, 2020). As in developed countries, the most reported KAM subject area was revenue recognition. On average, however, the number of KAMs disclosed was relatively low and several firms did not report any. Additionally, more industry-related KAMs were disclosed than firm-specific KAMs. Authors noted that weaknesses in internal controls were rarely disclosed. These results could reflect economic environments and political factors specific to developing countries.

One Malaysian study by Hashim et al. (2021) examined specific attributes in the construction sector that could influence KAM disclosure. The most reported KAMs concerned revenue recognition. This aligns with prior studies in developed and developing countries. Authors noted that 24% of the reported KAMs were not accompanied with appropriate reasoning and rationale, suggesting auditors may have had difficulty understanding the guidelines for KAM reporting.

2.6.6.2 Company corporate governance

Archival- Developed Economy

In Italy, Fera et al. (2022) explored the influence of corporate governance quality on the magnitude of KAMs reported while Elmarzouky et al. (2023) explored corporate governance as a moderator (using factors such as board size and independence) for the relationship between KAM disclosure and audit costs in the UK. Fera et al. (2022) found that companies with high quality corporate governance and a sustainable corporate governance system were likely to have less KAMs reported. Authors explained that high quality corporate governance systems could promote trust between the auditor and the audited company. High corporate governance quality may also indicate to auditors that a company manages risks properly with appropriate internal controls, leading them to disclose less risk. Elmarzouky et al. (2023) found that the association between KAM and audit costs increases with board independence (corporate governance factor), as predicted by agency theory. Findings were insignificant, however, with respect to board size. Future research is encouraged to explore the influence of other corporate governance attributes on KAM reporting.

Archival- Developing Economy

In contradiction to Fera et al. (2022), Wuttichindanon & Issarawornrawanich (2020) study in a developing economy (Thailand) found that from a corporate governance perspective, the number of KAMs reported is positively associated with the number of independent directors. Authors explained this could be due to the oversight role exercised by independent members, ensuring the disclosure of significant matters and thereby promoting transparency and shareholder protection.

2.6.6.3 Company performance

Archival- Developed Economy

Vera & Alijarde (2021) explored the effect of company profitability on KAM disclosure in Spain. Results indicated that larger firms with a lower return on assets and lower liquidity may have more KAMs. As profitability, liquidity, and return on assets increase, the number of KAM decreases.

This can indicate that more research is needed on the connection between firm profitability and the number of KAMs.

Archival- Developing Economy

In Taiwan, W. Liu et al. (2022) investigated investors' perceptions regarding the relationship between KAM and firm performance. Findings indicated a positive relationship between KAM and future performance. This suggests KAMs utility to investors in forecasting future firm performance.

2.6.6.4 Company leverage

Archival- Developed Economy

Pinto & Morais' (2019) cross country study examined the effect of leverage on firm performance. Contrary to predictions, authors found that leverage did not affect KAM disclosure. Authors explained this could be due to the sample containing large firms that are not greatly leveraged.

2.6.6.5 Company age

Archival- Developing Economy

In developing economies (Bangladesh), Rahaman et al. (2023) explored the influence of company age on KAM disclosure. Findings showed that company age is positively associated with the number of KAMs reported. Authors predicted such results in connection with Suttipun & Nuttaphon (2014) who reported a positive relationship between company age and corporate disclosure.

No studies as per the author's knowledge have yet examined ownership type or company culture in this context. Findings should be interesting, especially when analysed according to their developed or developing economic context. Results are expected to differ due to the institutional arrangements for each economy and jurisdiction.

2.6.7 Standard setters and regulators

Standard-setters and regulators worldwide enhanced the audit reporting model through the introduction of enhanced audit reports, driven by standard-setters and regulators. These reports mandate the disclosure of most significant audit matters and risk areas requiring the auditor's professional judgement. However, the standards appear to lack certain clarifications and guidance. This may lead to inconsistent interpretations about what constitutes significant areas requiring auditor judgement. Moreover, the precision of accounting standards could affect KAM disclosure. Accounting standards are either principles-based standards subject to interpretation and judgment, or precise standards with specific guides and rules (Bradbury & Schröder, 2012).

2.6.7.1 Accounting standard setters

Archival- Developed Economy

Two cross country studies (1 in Europe, 1 in UK, France, and Netherlands) investigated the effect of accounting standard precision on KAM disclosure. Together, Pinto et al. (2020) and Pinto & Morais (2019) found that the precision of accounting standards impacts KAM disclosure. The probability of KAM disclosure increases when a principles-based accounting standard is adopted, since such is subject to professional judgment and interpretations. This is because KAM recognition requires auditor judgment with respect to challenging, complex, and subjective matters.

Archival- Developing Economy

In emerging markets, a study in China by Lau (2021) similarly found that measurement uncertainty is the key determinant of auditors' disclosing KAMs associated with accounting estimates and impairment of assets. Measurement uncertainty is mostly applied using principles-based standards as the estimates require judgments and assumptions.

2.6.7.2 Auditing standard setters

Prior to the release of EAR auditing standards, standard-setters IAASB and PCAOB issued an Invitation to Comment to understand users' perceptions of the new audit reform. Respondents mainly focused on the benefits and consequences of the new standard. The results were mixed (Simnett & Huggins, 2014) and leaned toward support for the new standard (Carcello, 2014; Cordo & Fülöp, 2015; Doxey et al., 2017; Prasad & Chand, 2017; Tiron-Tudor et al., 2018).

Archival- Developed Economy

Now that the standard has been implemented, it is essential for standard-setters to recognise the challenges users face. Bentley et al. (2021) recommended that standard setters exercise caution when conducting post-implementation reviews to improve the standard and implementation guidelines for CAM. Their concern is that CAM might be misinterpreted in support of risk-increasing activities that could increase auditor liability. Lennox et al. (2023) argued that the presence of a highly litigious environment and powerful enforcement from entities like the Securities and Exchange Commission

(SEC) and PCAOB makes auditors in developed economies like the USA more concerned about litigation and regulatory penalties. This could affect their willingness to disclose value-relevant CAMs. Moreover, Vinson et al. (2019) recommenced to standard-setters to examine the possibility of developing a standardised language for removing CAMs. Authors indicated that auditors could be dispirited from disclosing CAMs for more complex accounts or from removing CAMs of lengthy duration even if it could be appropriate to do so due to the increased jurors' negligence judgments as evidenced by their experiment.

Archival- Developing Economy

There was no consensus in developing countries about proper considerations for KAM reporting (Abdullatif & Al-Rahahleh, 2020; Segal, 2019). Additionally, auditing standards do not provide a clear distinction between KAM, Emphasis of Matters, and Going Concern. The potential for auditors to misclassify these was demonstrated in Hegazy & Kamareldawla's (2021) study. More primary studies are recommended to understand external auditors' interpretations of the factors involved in identifying and reporting a KAM. Moreover, studies have yet to explore regulators' role in enforcing proper implementation of EAR. Specifically, this implementation should entail reductions in auditors' tendency to report boilerplates and standardised information in lieu of customised reporting on significant risk areas requiring auditor judgment.

2.6.8 Theoretical perspective

This review is, to the best of the research's knowledge, the inaugural attempt to conduct a theory-based review on EAR. The objective is to elucidate the frequently employed theories and to explore the potential of seldom-used new theories. The primary theories are categorized into two disciplines: Economic and Corporate Governance Theories (EACGT) and Sociological Or Socio-Psychological Theories (SSPT). These categories were adopted from other reviews in the field (Alhossini et al., 2021; Nguyena et al., 2020). For category selection, the process involves first tracking the original source of theory, understanding the theory from the source, and considering the field of the publishing journal. Generally, SSPT are covered in psychology journals while EACGT are found in accounting, finance, and economics journals. To ensure the correct category is selected, the SLR papers were referred to from which these categories were adopted (Alhossini et al., 2021; Nguyena et al., 2020), as the authors had performed similar classification for the theories used in relation to their discussed topic.

This section will provide an overview of the theories used and discuss the most common theories in terms of their importance and implication for the results. Theories from EACGT and SSPT are being used almost equally in EAR studies (refer to Figure 2.10). All the theories used from the 156 articles in the sample have been classified per discipline. This provides a snapshot of the theories used for each discipline and the number of times they were used to understand the most used theories in each discipline (refer to Table 2.12).

Figure 2.10 Discipline for theories applied in EAR

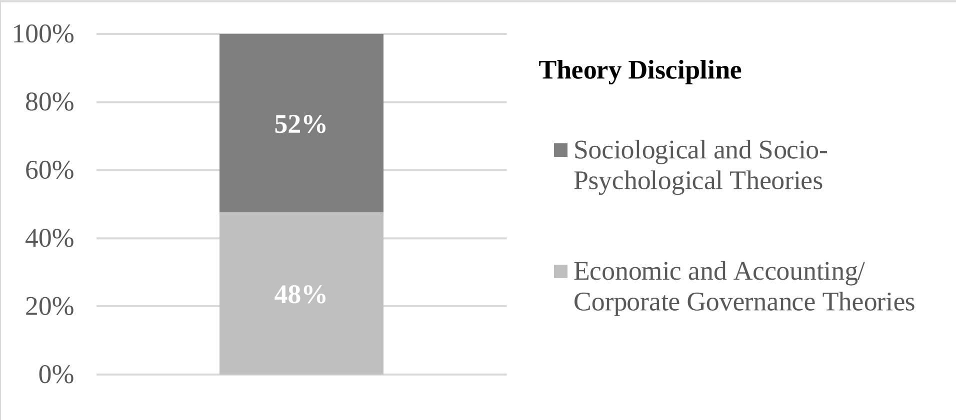


Table 2.12 Classification of theories used in the sample articles and their usage frequency

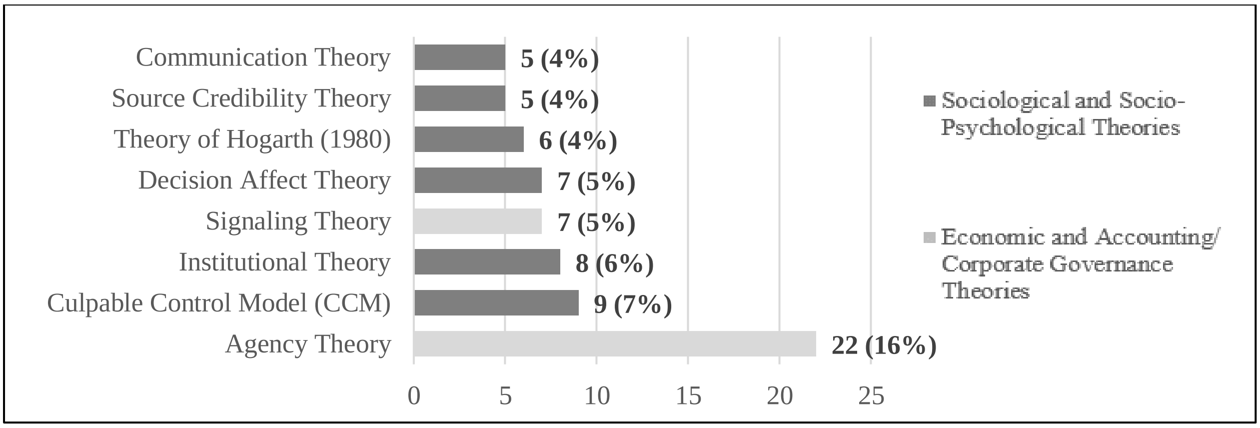
Economic and Accounting/ Corporate Governance Theories	Total	Sociological and Socio-Psychological Theories	Total
Agency Theory	22	Culpable Control Model (CCM)	9
Signalling Theory	7	Institutional Theory	8
Stakeholder Theory	4	Decision Affect Theory	7
Theory of Inspired Confidence	4	Theory of Hogarth (1980)	6
Conventional Economic Theory	4	Source Credibility Theory	5
Accounting Theory	3	Communication Theory	5
Accountability Theory	3	Counterfactual Reasoning Theory	4
Stakeholder Agency Theory	3	Theory of Moral Licensing	3
Legitimacy Theory	3	Information Processing Theory	3
Elaboration likelihood model (ELM)	1	Self-Presentation Theory	2
Theory of Investors' Limited Attention	1	Psychology Theory	2
Theory of Credence Goods	1	Fineness Theorem	2
Audit Risk Theory	1	Congruity Theory	2
Innovations Theory	1	Injunctive Norms Theory	1
Proprietary Costs Theory	1	Theory of Social Responsibility Norm	1
Theory of Audit Hypotheses	1	Theory of Dye (1993)	1
Public Interest Theory	1	Motivational Reasoning Theory	1
Information Assimilation Theory	1	Social Distance	1
Risk Aversion Theory	1	Information Overload Theory	1
Traveling Theory	1	Support Theory	1
Economic Theory	1	Reactance Theory	1
Egocentric Theory	1	Theory of Helping Behaviour	1
		Rough Set Theory	1
		Gender role Socialization Theory	1
		Ecological Theory	1
		Behavioural Decision Theory	1
		Learning Curve Theory	1

In the sample, Agency Theory emerges as the most frequently applied theory, with 22 instances of use. This is followed by the Culpable Control Model, which is applied nine times. Institutional

Theory and Signaling Theory are also commonly used, with eight and seven applications respectively. Similarly, Decision Affect Theory is utilised seven times, and Theory of Hogarth 1980 is applied six times. Other theories such as Source Credibility Theory and Communication Theory are also employed, each with five instances of use (refer to Figure 2.11).

It is important to note that the choice of theory often depends on the specific topic being examined in relation to EAR. For example, articles that discuss EAR's effect on auditor liability, mostly use Culpable Control Model (CCM), Decision Affect Theory, and Counterfactual Reasoning Theory due to their direct relevance to the subject matter.

Figure 2.11 Most commonly used theories in the sample (Frequency >5)



2.6.8.1 Economic and accounting/ corporate governance theories

2.6.8.1.1 Agency Theory. Jensen and Meckling's principal-agent theory (1976) is the theory most applied (22 times) to the study of EAR. This theory is prominent in the fields of accounting, economics, and corporate governance. EAR is expected to reduce conflicts of interests between the agent (management) and the principal (shareholders) and is considered a major element of corporate governance inasmuch as it motivates external auditors to increase report quality and management to reduce opportunistic behaviour. However, the application of agency theory in EAR studies is not without its limitations. Critics argue that the theory's focus is too narrow and it overstates the pessimistic view of managers' opportunistic behaviour. Moreover, the theory's effectiveness varies across different countries due to cultural and regulatory differences.

2.6.8.1.2 Signalling Theory. The second most applied theory (seven times) in EACGT is signalling theory. This was primarily used in studies about EAR's effect on investor decisions and the stock market. Studies such as Dennis et al. (2019) and Suttipun, (2020) have used signalling theory to explore how management disclosures can influence auditor disclosures and address information asymmetry between investors and management. However, these studies often overlook the potential for management to manipulate disclosures, which could undermine the credibility of the information provided. Dennis et al. (2019) US study found that management disclosures reduced the negative effect of EAR perceived by financial statements users. This is in alignment with the market signalling theory (Healy & Palepu, 1993; Spence, 1973), that management reduces the risk to the credibility of financial statements by offering expanded disclosures. If auditor disclosures through EAR compromise the credibility of reported information, then management can reduce financial statement users' concerns by voluntarily presenting additional disclosures. Similarly, Suttipun (2020) Thai study used signalling theory in the sense that there is an information asymmetry between the investors and management because investors use management's financial statements to make decisions and management might not disclose properly transparent information. Therefore, EAR could address this information asymmetry through auditor disclosures credible to financial statement users.

2.6.8.2 Sociological and socio-psychological theories

2.6.8.2.1 Culpable Control Model (CCM), and Decision Affect Theories. These theories have been grouped together because they mostly appeared in articles addressing auditor liability. These theories, which revolve around counterfactual thinking, suggest that auditors could be held accountable for undetected misstatements, implying that such misstatements would not have occurred had the audit been conducted appropriately. CCM posits that individuals, such as financial statement users or jurors, instinctively react to harmful incidents (misstatements) by attributing blame to the perceived culprits, in this case, auditors. This blame allocation occurs irrespective of the auditor's experience. Decision Affect Theory, building on the CCM, plays a significant role in the discourse surrounding EAR and the evaluation of auditor liability. However, these theories may oversimplify the complex dynamics of auditing and may not fully account for the myriad factors influencing auditor decisions.

2.6.8.2.2 Institutional Theory. The first institutional theory was introduced by Meyer & Rowan (1977). They connected organisations' formal structures to their social context. Institutional Theory studies show outside forces like the government and regulatory bodies can shape organisational behaviour. This theory suggests that organisations strive to align with external influences to achieve 'social fitness.' Over time, organisations become ‘institutionalized’ adopting similar structures and resembling each other in order to maintain or gain legitimacy (Deegan, 2014). However, this theory may not fully capture the nuances of individual organisational behaviour and the potential resistance to external pressures. For example, Pelzer's (2021) interviews with Big Four and non-Big 4 auditors in the developed economy (USA) revealed that Big Four auditors publicly conveyed their support for the new audit reform. Privately, however, they relayed their concerns. Institutional theory explains this as coercive isomorphism. In other words, auditors are under pressure from regulators to comply with the reform. Such conformity promotes organisational legitimacy. This suggests a possible tendency to disclose EAR for the sake of compliance and not for the intended objective of transparency. Similarly, Rahaman et al., (2023) applied institutional theory in developing economy (Bangladesh) to explain industry-related EAR disclosures, suggesting that audit firms mimic each other to maintain institutional legitimacy.

2.6.8.2.3 Theory of Hogarth 1980. According to Hogarth (1980) judgement occurs within a structure consisting of three components: person, context of the task (where the person is required to exercise judgement), and the person's schema (as established by the person's memory and the attributes of the task requiring judgement). Information is then processed following these three components. Six studies applied Hogarth's theory to explain how external auditors exercise professional judgement for the identification and reporting of EAR. These studies mostly examined the effect of auditor characteristics on the disclosure of EAR. However, this theory may not fully account for the potential biases and errors in auditors' judgement processes.

2.6.8.2.4 Communication Theory and Source Credibility Theory. Both theories have been used to explore the dynamics of communication in EAR and the impact of auditors' credibility on the perceived value of their audits. These theories highlight the importance of clear, objective language and auditor credibility in enhancing the effectiveness of EAR. Communication theory explains that communication concerns the influence between senders and receivers, where the receiver understands the message from the sender (J. E. Smith et al., 1971). Communication theory is used in EAR literature since disclosures are communicated to financial statement users through auditor reports. Auditors' language is expected to be neutral and objective because disclosures can affect the decision making of financial statements users. Additionally, it is used in EAR literature to assess the readability of the content for financial statement users. Source Credibility theory speculates that a communicator's credibility (e.g., their expertise) influences the acceptability of their message (Pornpitakpan, 2004). Current studies applied source credibility theory to examine the link between EAR and perceived audit value in relation to auditors' credibility. However, both theories may not fully account for the potential of miscommunication and misunderstandings between auditors and financial statement users

2.7 Directions for Future Research

Avenues for future research on EAR emerge for three reasons. Firstly, the thematic analysis reveals that numerous aspects of the identified themes have only been explored in a handful of studies. This necessitates further research to validate the robustness of these initial findings. Secondly, the categorisation of studies based on economic context reveals a noticeable lack of research originating from developing economies. This highlights the need for additional studies to ascertain the applicability of conclusions drawn from developed economies to their developing counterparts. Lastly, several research questions identified in the existing literature remain unanswered, suggesting that the field of EAR research is still in its nascent stages. This underscores the need for caution among regulators and practitioners when interpreting the limited and often inconsistent conclusions currently available.

As observed in the descriptive findings section, many regions around the globe remain underrepresented in EAR studies (refer to Table 2.13). This is inferred based on the sample and it should be acknowledged that there could be EAR studies in regions not captured in the sample as these are not in rated journals (AJG 2021 and/or SJR 2022) or officially translated to English to allow comparison of results with other regions. The replication of previous research conducted in developed contexts does not sufficiently address potential differences in developing countries. This further emphasises the evolving nature of EAR research. Research contributions are far stronger when driven by untested or competing theories and when they utilise innovative research methods that tackle the empirical limitations of existing research (Lennox & Wu, 2018). Furthermore, when research findings based in developed countries differ from those in developing countries, it is critical to investigate and indicate reasons for such divergence.

Table 2.13 Regions and countries not covered in EAR literature

Regions	Percentage	Countries Covered	Proposed Countries for study
Asia	**30%**		
Eastern Asia	24%	China (10%), Thailand (6%), Taiwan (3%), Malaysia (3%), Korea (1%)	Far East: Japan, Hong Kong Singapore, Indonesia, and Philippines.
Southern Asia	1%	Bangladesh (1%)	Indian Sub-continent: India, Pakistan, and Sri Lanka.
Middle East	6%	Oman (2%), Jordan (2%), UAE (1%), Cross Country (1%)	Gulf Co-operation Council Countries: Saudi Arabia, Kuwait, Qatar, Bahrain. Other Middle East Countries: Iran, Iraq, Turkey, Lebanon, Palestine, Yemen.
Europe	**30%**		
Northern Europe	16%	UK (15%), Finland (1%)	Scandinavian Countries: Sweden, Norway, Denmark. Other Northern European Countries: Iceland, Ireland, Estonia, and Latvia.
Southern Europe	6%	Spain (3%), Croatia (1%), Macedonia (1%), Italy (1%)	Greece, Portugal, Slovenia, Malta, Albania, Serbia.
Western Europe	5%	Germany (2%), Netherlands (1%), France (1%), Cross Country (1%)	Belgium, Switzerland, Austria.
Cross Region	3%	Cross-Country (3%)	-
Americas	**28%**		
Northern America	25%	USA (24%), Canada (1%)	-
South America	3%	Brazil (3%)	Latin America: Argentina, Chile, Colombia, Ecuador, Paraguay, and Uruguay.
Central America	0%	-	Panama, Costa Rica, El Salvador.
Oceania	**8%**		
Australia	6%	Australia (6%)	-
New Zealand	2%	New Zealand (2%)	
Cross Region	1%	Cross Country (1%)	
Africa	**3%**		
Northern Africa	1%	Egypt (1%)	Algeria, Libya, Morocco, Sudan, and Tunisia.
Southern Africa	2%	South Africa (2%)	-

Note: Countries proposed for study are based on author judgement as the list can go on.

The integrative research framework proposes productive research directions for scholars, practitioners, and other financial statement users. Several research questions (RQs) deserving additional scholarly scrutiny and examination are listed in Table 2.14 and will be discussed here. RQs are ordered from the most to the least important as per the authors judgement (viz., proceeding from the examined groups).

Table 2.14 Proposed future research directions

No.	Research Question
Standard Setters and Regulators	
RQ1:	What are the factors to be taken into consideration for post implementation review of the standard?
RQ2	Does the Regulator have a role in enforcing KAM disclosure?
Management	
RQ3:	Does EAR affect managers opportunistic/aggressive behavior?
RQ4	How has EAR affected financial reporting quality?
RQ5:	Can CEO Characteristics such as narcissism influence the disclosure of EAR?
Audit Committee	
RQ6:	Does the governance characteristics of audit committee such as independence and tenure affect KAM reporting in comparison to other such national diversity, ethnicity, and compensation rate?
External Auditors	
RQ7:	How has EAR affected internal quality controls employed by external audit firms?
RQ8:	What is the influence of external auditors' characteristics such as age, race, and ethnicity KAM on reporting?
RQ9:	How do social ties between external auditors and audit client affect the disclosure of KAM?
Audited Company	
RQ10:	How do governance, culture and institutional forces affect the disclosure of KAM?
RQ11:	Are firms disclosing a sufficient number of IT KAMs, do these KAMs cover the major risk IT poses to financial outcomes, and how and why do they vary?

RQ1: What are the factors to be taken into consideration for post implementation review of the standard?

Following the worldwide adoption of EAR, audit standard setters need to consider lessons learned and challenges faced so far through a post implementation review. EAR has existed for eleven years, and many gaps are being identified. As such, progress can now be made towards achieving its intended objectives. In developed countries, Bentley et al. (2021) recommended considering the possibility that CAM can be misinterpreted in support of risk increasing activities, thereby increasing auditor liability. Lennox et al. (2023) for their part, suggested that EAR is probably not providing new information to investors and does not support decision making. Vinson et al. (2019) recommenced to standard-setters to examine the possibility of developing a standardised language for removing CAMs. In developing countries, the concern is more about understanding the standard. Abdullatif & Al-Rahahleh (2020) and Segal (2019) recommended that standard setters provide further explanation of the considerations informing KAM identification, and reporting. Hegazy & Kamareldawla (2021) argued that the audit standard should provide a clear distinction between Emphasis of Matters and Going Concern, as auditors could misclassify these. These recommendations from both economic contexts could be addressed through post implementation reviews to improve the standard and guidelines.

RQ2: Does the Regulator have a role in enforcing KAM disclosure?

Regulators are urged to support standard setters in achieving EAR's intended objective of providing transparency and incremental information to financial statements users. This is difficult when, for example, auditors disclose boilerplates and standardised information for the sake of compliance. EAR is meant to support customised reporting on significant risk areas requiring auditor judgment. More research is needed to examine regulators' role in enforcing proper implementation.

RQ3: Does EAR affect managers' opportunistic/aggressive behavior?

Though scarce, current literature (Barghathi et al., 2021; Gold et al., 2020; Sai et al., 2024) provides promising results about the decline in earning management behavior. This could be due to management anticipating increased auditor scrutiny of their reporting decisions. More studies are recommended both in developed and developing countries to confirm the results. Additionally, Gold et al. (2020) suggested examining the impact of KAM reporting on overall all level of opportunistic financial reporting behavior as authors focused on specific accounting issues highlighted in the auditor report.

RQ4: How has EAR affected financial reporting quality?

Management (financial report preparers) initiates the development of financial statements and is responsible for maintaining adequate internal controls. Auditors assess the appropriateness of those controls to provide reasonable assurance that accounting information is properly documented, processed, and reported. Though limited, most studies in the existing literature reported that EAR improved financial reporting quality. More research is needed to better support these results, including more clarity on the measures used to determine financial reporting quality.

RQ5: Can CEO Characteristics such as narcissism influence the disclosure of EAR?

Since the CEO is the highest ranked individual in management, it could be beneficial to examine whether CEO characteristics such as narcissism influence the disclosure of EAR. This has not been explored by any study so far and results could provide a lens to better understand the determinants of KAM reporting by management.

RQ6: How do governance characteristics of audit committees such as independence and tenure affect KAM reporting in comparison to others such as nationality, ethnicity, and compensation rate?

Several emerging studies examine audit committee characteristics in relation to KAM disclosure. So far, scholars have mainly considered gender, expertise, and meeting quantity. Characteristics related to corporate governance such as audit committee tenure and independence have not yet been explored. Additional potentially relevant attributes include nationality, ethnicity, and compensation. Future research is encouraged to examine these characteristics and understand their influence on KAM reporting.

RQ7: How has EAR affected internal quality controls employed by external audit firms?

Improved audit quality is one of the main objectives of EAR standards (IAASB, 2016; PCAOB, 2017). The internal quality controls employed by external audit firms play a crucial role in ensuring audit quality. None of the studies in the literature examined such internal quality controls. In fact, in a call for further research, Nguyen and Kend (2021) emphasise that more field research is needed to assess the changes imposed by regulatory intervention on internal quality controls within audit firms. It is worth understanding whether this could eventually lead to consistent audit quality and how it affects KAM disclosure.

RQ8: What influence do external auditors' characteristics such as age, race, ethnicity, and join audits have on KAM reporting?

Most of the studies detailing auditor characteristics focused on gender, type, expertise, and tenure. It is recommended that other factors be considered, including age, race, ethnicity, and the auditor's participation in a joint audit.

RQ9: How do social ties between external auditors and audited company affect KAM disclosure?

In developing economies, social ties are vital for business success and can be more influential than in developed countries. It is uncertain whether social ties between external auditors and audited companies could have similar effects in developed economies where business is generally done at arm's length. More research is needed in this area. Information on the identities of external auditors in audit reports can provide scholars the means to assess the impact of social connections.

RQ10: How do governance, culture and institutional forces affect the disclosure of KAM?

A limited number of studies explored the effect of corporate governance on the disclosure of KAM. These studies focused on governance quality, board size, and member independence. Many other corporate governance factors can be explored. These include: board structure and tenure, ownership and investor relations, management responsibility towards internal controls, transparency, and disclosure (A. A. N. Abdallah & Ismail, 2017). Cultural elements such as social, ethical, and religious norms also play a vital role that could affect KAM disclosure. Firms in developing economies, for instance, could have fewer KAMs (or more ELKAMS than ALKAMs) due to a cultural aversion to conflict and litigation. Institution type (e.g., private, public, financial, familial, or governmental) could also affect KAM disclosures.

RQ11: Are firms disclosing a sufficient number of IT KAMS, do these KAMs cover the major risk IT poses to financial outcomes, and how and why do they vary?

One study (Sneller et al., 2017) explored the content of IT-related KAM disclosures. Authors encouraged more studies to understand how well EAR captures the full risk of cybersecurity incidents and technology malfunctions across industries, countries, and continents. Cybersecurity incidents with large, publicly traded firms are reported on a regular basis. However, evidence is limited on whether these are disclosed as KAM. Given that technological malfunction takes many forms and commonly affects financial performance, such eventualities could require significant judgment from auditors. This calls for additional research.

2.8 Conclusion

The main objective of this SLR was to provide the most-up-to-date research on EAR in order to understand the current state of the literature and suggest key areas for expansion. This SLR critically analysed 156 sample articles based on eight areas covering both determinants and consequences and synthesised the results of existing literature. Its analytical structure was based on economy (unprecedented) and methodology in order to provide novel insights to the reader. This SLR additionally outlined an agenda for future research. This review employed a systematic method that can be replicated by other researchers. The Scopus, Web of Science, and Business Source Premier search engines were used to secure a preliminary sample of 860 articles. These studies were then subjected to quality and eligibility assessments. The final sample comprised 156 high-quality articles from 80 rated journals rated either by AJG and/or SJR; these were mainly accounting articles covering the period from January 2014 through May 2023. EAR studies were grouped into eight areas consisting of topical themes and their associated theoretical perspectives. The eight areas are aligned with the proposed integrative research framework: (1) Investors, debtholders, and stock market, (2) management, (3) audit committee, (4) external auditors, (5) audit features, (6) audited company, (7) standard setters, and (8) theoretical perspectives. Insights were obtained via the integrative research framework introduced in the thematic analysis section.

This SLR finds that existent assessments of EAR communicative value in relation to investors are diverse for developed countries (based on 13 studies) while informativeness was observed by one study in developing economies. Regarding creditor decisions, two experimental studies in developed countries were consistent in finding that EAR does not affect credit and loan decisions. The results of the only archival study in developed economies and the only archival study in developing economies were consistent in finding that loan contracting is useful for both borrowers and lenders. Only a small number of studies focused on debtholders. Future studies can examine the communicative value of KAM in relation to stakeholders other than investors (e.g., debtholders and creditors). This category is especially important given the role credit institutions play in evaluating credit ratings and providing funds for asset purchases and operations. As for market reaction, a group of studies in developed economies observed that EAR does not significantly affect the market; emerging studies posited a market reaction following EAR adoption. The divergent results could reflect differences in the characteristics examined for EAR disclosure. Some studies looked at the number of EAR while others examined EAR content characteristics such as readability and specificity. These studies were also diverse in terms of market research design employed. For developing economies, a majority of the studies indicated that the market has been affected by EAR.

For management, promising findings about the decrease in earning management behavior were observed. This is associated with improvements in the level of professional skepticism and auditor judgment when KAM is identified and reported as well as increased management attention to disclosed matters grounded in continuous communication with auditors. Likewise, most studies in developed and developing economies reported enhanced financial reporting quality. Most studies in both economies reported that the attributes of audit committees, external auditors, and audited companies affected EAR. Moreover, the majority of studies found that EAR varies based on the type of external auditor.

For audit features, most studies in developed economies did not observe a change in audit fee while developing economies observed an increase. Likewise, developed economies reported no considerable increase in audit lag, while developing economies reported mixed results. Most studies in both economies indicated an improvement to the audit quality. Moreover, most studies found that company characteristics, including size, industry, complexity, corporate governance, and performance were associated with EAR. Furthermore, studies noted that the accounting standards precision influenced KAM disclosure. The possibility of KAM reporting increases when a principles-based accounting standard is used, since such is subject to professional judgment and interpretations. Studies in both developed and developing economies provided recommendations for standard post implementation review. Developed economies in particular could consider that EAR may be misinterpreted as supporting risk taking activities and thereby increase auditor liability. Developing economies were more concerned about the standards' clarity regarding what constitutes a KAM and recommended more details in the standard as well as clearer delineation of KAM, Going Concern, and Emphasis of Matter.

To the best of the author's knowledge, this is the first literature review study to comprehensively examine the theories used for the study of EAR. Results indicate that Agency theory is the most common. This accords with its prominence in the fields of accounting, economics, and corporate governance. Additionally, the following theories were jointly employed to study auditor liability: Culpable Control Model, Counterfactual Reasoning Theory, and Decision Affect Theory. Many studies neglected theoretical framing altogether, which makes it difficult to compare their findings with other studies. This SLR study found many limitations in prior studies. Existing literature lacks qualitative studies utilizing surveys and interviews, mixed studies, cross-cultural research, studies in developing economies, and multi-theoretical perspectives. 11 major questions are suggested for future research, based on current study limitations. The proposed research would possibly expand what is presently known about EAR determinants and consequences in developed and developing contexts.

This research also has its own limitations. The criteria for search only included articles from rated journals listed in the AJG 2021 and/or SJR 2022. The focus has been on assessing high-quality papers as opposed to compiling an exhaustive database for every paper written about EAR. This means that articles about EAR outside of AJG 2021 and/or SJR 2022 rated journals were not included in this review. Significantly, this includes SSRN, which contains many articles by well-known authors. In the future, a more extensive study involving numerous databases in addition to Scopus, WoS, and EBSCO can be pursued. The element of judgement in the eligibility assessment is another potential limitation. This was addressed by confirming results against the eligibility assessments of two independent researchers. These researchers took the author's exclusion and inclusion criteria into consideration and arrived at similar conclusions. The topical themes selected were based on the number of studies and trends. Topics not part of these topical themes were not included therefore, as it is difficult to cover every topic in the 156 articles. These include studies on EAR in relation to materiality, Covid-19, litigation risk, and the impact of financial analysts' forecasts and perceptions.

This SLR is useful for financial statement users, standard setters, regulators, auditors, audit committees, and senior executives. The results indicate that KAM/CAM disclosure can impact most stakeholders and promote better corporate governance. More studies about EAR are encouraged as the results for a couple of topical themes are based on a limited number of studies and the reader is cautioned against generalizing the conclusions reported.

Chapter 3

Essay 2

Ownership Structure, Corporate Governance, and Key Audit Matters: Evidence from the Gulf Cooperation Council

Abstract

This study examines whether ownership structure (royal, family, and foreign) and board director types (royal, family, and foreign) are associated with the extent of external auditor reporting of Key Audit Matters (KAMs). This study is based on a sample of 430 non-financial firms from all six Gulf Cooperation Council (GCC) countries during the 2016–2021 period. The findings offer strong evidence that royal ownership decreases KAM disclosure by the external auditor, while family and foreign ownerships increase disclosure. The findings also show that royal board directors reduce the number of KAMs disclosed, suggesting that external auditors take power and status into consideration when determining KAMs. By contrast, foreign board directors require more KAM disclosure, possibly due to the geographic separation between the principal and agents. No evidence was found for an association between family directors and KAM reporting. The study provides new insights to the extended audit reporting literature regarding the impact of ownership structure and board directorship on KAM reporting. The unique results have significant implications for regulators, external auditors, policymakers, investors, and scholars concerning the implementation of KAM disclosure in the GCC.

***Keywords**:* key audit matters; extended audit reporting; ownership structure; board directorship; corporate governance; Gulf Cooperation Council (GCC).

3.1 Introduction

In 2015, the International Auditing and Assurance Standards Board (IAASB) required the adoption of International Standard of Auditing (ISA) 701 concerning the disclosure of Key Audit Matters (KAMs) for audits of financial statements for fiscal years ending on or after December 15, 2016. The objective is to enhance the audit reporting model to reduce information asymmetry and improve transparency. KAM is defined as the most significant matters and risks requiring an auditor's professional judgment and attention in relation to complex and subjective matters. This includes matters discussed with those responsible for governance, such as the audit committee (IAASB, 2015). Gulf Cooperation Council (GCC) countries adopted and implemented ISA 701 in 2016 and (in the case of Saudi Arabia in 2017).

This research is motivated by recent regulatory reforms that require the disclosure of KAMs in audit reports. The aim is to improve transparency, foster governance and safeguard shareholders. The extant scholarly literature concerning Extended Audit Reporting (EAR) in the GCC region has primarily focused on examining the association between auditor attributes, particularly type, and the disclosure of KAMs. Insufficient knowledge exists regarding the factors influencing KAM disclosure utilizing data from the GCC. Investigating EAR in the GCC setting provides an avenue to study characteristics unique to regions that have not been previously researched. This study investigates the impact of ownership structure (royal, family, and foreign) and board director types (royal, family, and foreign) on the number of KAMs disclosed by external auditors in the GCC. The ownership and governance features under consideration are unique to the region. The six countries comprising the GCC provide an ideal context for this study. To the best of the author's knowledge, this is the first study to investigate the relationship between firm ownership structure and KAM reporting and the first to study KAM's effect on all six GCC countries. It complements existing corporate governance and EAR literature (Elmarzouky et al., 2023; Fera et al., 2022; Jaffar et al., 2023; Wuttichindanon & Issarawornrawanich, 2020) by addressing the unexamined matter of board directors' influence on KAM reporting.

Most firms in the GCC have a high degree of ownership concentration, with a small number of shareholders holding significant stakes (Al-Yahyaee et al., 2011). Adequate disclosure can reduce agency-related conflicts arising from the concentrated ownership of royal or family members in the GCC (IFC & Hawkama, 2008; Jaggi et al., 2009). The economic and political power of royal members, however, may undermine regulatory efforts to improve corporate governance and reporting transparency (Al-Hadi et al., 2016b). Many listed firms in the GCC are dominated by family members and have at least one royal board member (Halawi & Davidson, 2008). These members' appointments result from ownership concentration, their status as founders of the firm, or their monarchical rank. Under these circumstances, the lack of separation between the principal and management is likely to negatively impact firm transparency.

Royal board directors may possess rent-seeking behaviour (Mazaheri, 2013), pursue their interest and the interest of related firms (Al-Hadi et al., 2016b), and seek to deflect negative attention from risk-related disclosures that could expose the firm to scrutiny and impact its reputation (Certo, 2003). Given their powerful presence on the board, royal directors could discourage financial transparency to safeguard management in the event of a complete disclosure to shareholders. External auditors could also conceivably be influenced to disclose fewer KAMs. On the other hand, royal directors may improve firms' performance and lower financial risk (Boubakri et al., 2012b) by reducing tax rates (Faccio, 2006), providing resources during financial distress (Faccio et al., 2006), and reducing government interventions (Hertog, 2012).

Similarly, family board directors may have a sense of belonging to the firm and seek to protect family reputation, to monitor management, and to facilitate quality financial reporting and audits (Demsetz & Lehn, 1985; Hsu et al., 2018; Miller et al., 2013; Wang, 2006). Conversely, agency conflicts could arise between family shareholders and the unaffiliated minority. Family directors may dominate the highest executive management positions, pursue their interests, and discourage transparency to cover opportunistic activities (Claessens et al., 2002; Fan & Wong, 2002; Shleifer & Vishny, 1997). As such, family directors could be reluctant to provide adequate disclosures and influence external auditors to report fewer KAMs.

Recent improvements to corporate governance codes and regulations in the region have encouraged expanded accountability. These codes are well-established in a few countries where firms are held accountable for non-adherence with regulations (Al-Shammari et al., 2008). Some countries have formed task forces for monitoring regulatory compliance (Al-Hadi et al., 2016a). KAM disclosure could be viewed as an important governance factor since it provides transparency, enhances communications with financial statement users, and offers specific information about significant risk matters. GCC nations have made significant efforts to improve governance reforms and attract foreign investors into the region (Balli et al., 2011; Eulaiwi et al., 2016). Foreign investors demand more transparency and disclosure to reduce the information asymmetry inherent in geographic separation (Alhazaimeh et al., 2014; Alnabsha et al., 2018; R. M. Haniffa & Cooke, 2002). It is reasonable to expect foreign board directors to require more disclosure from external auditors.

Using a hand-collected sample of 2,107 firm-year observations of listed non-financial firms in the GCC from 2016–2021 (430 firms), it is posited that royal and family ownership/directorship is negatively associated with KAM reporting by external auditors, whereas foreign ownership/directorship is positively associated. Consistent with expectations, the evidence presented supports the notion that royal owners/directors influenced the disclosure of fewer KAMs by the external auditor while foreign owners/directors influenced the disclosure of more KAMs by the external auditor. Contrary to forecasts, family ownership positively impacted KAM disclosure, possibly due to low information asymmetry. That is, high family concentration could encourage enhanced monitoring and more accounting information (Demsetz & Lehn, 1985; Wang, 2006). The regression analysis holds after robustness checks controlling for endogeneity and alternative specifications.

This study complements and offers insights into previous studies in both developed and developing economies. There are several reasons for this. First, GCC countries share similar and regionally specific economic and institutional attributes. For example, all GCC countries are emerging economies ruled by a royal family (monarchy). There is thus a set of features unique to the GCC region in relation to which this study examines ownership and directorship types that have not been studied in existing literature on EAR. This study is the first to address this gap. Second, cross-country studies in developing economies are scarce. Per the author's knowledge, only one cross-country study has been conducted in developing economies (Mah'd & Mardini, 2022). The utilisation of cross-referenced studies enhances the ability to generalise findings. Although EAR research has examined specific GCC countries like UAE, Bahrain, and Oman (Al Lawati & Hussainey, 2022; Baatwah, 2023; Baatwah et al., 2022; Barghathi et al., 2021; Mah'd & Mardini, 2022), the GCC as a region has not been explored thus far. Third, it is critical that listed firms in the GCC have adequate disclosures in their audit reports to provide transparency and protect shareholders since royal and/or family control can potentially impact KAM disclosure by external auditors. In the GCC context, external auditors' effective disclosure can minimize agency-related issues among the board of directors and management (Jaggi et al., 2009). Fourth and finally, GCC countries have made substantial attempts to advance their economies and attract foreign investors. Such investors require greater scrutiny, transparency, and disclosure (Abu-Nassar & Rutherford, 1996; Al-Matari et al., 2021; Al Ani & Chavali, 2023). GCC countries have accordingly sought to improve governance reforms and encourage foreign investment in the region. Understanding foreign owners' and board directors' impact on KAM reporting is essential.

The paper proceeds as follows. Section 2 offers an overview of the GCC context and corporate governance regulations. Section 3 reviews the extant literature and develops the hypotheses. Section 4 covers research design, including empirical models, sample selection, and distribution. Section 5 discusses empirical results, including multivariate analysis, endogeneity, and additional analysis. Section 6 concludes the paper and outlines avenues for future research.

3.2 Overview of the GCC Context and Corporate Governance Regulations

The GCC was constituted in 1981 to foster economic collaboration and development among six Arab states bordering the Persian Gulf: The Kingdom of Saudi Arabia (KSA), Sultanate Oman, The United Arab Emirates (UAE), The State of Kuwait, The State of Qatar and The State of Bahrain. Not only are all six members of the GCC developing countries but they also have several common characteristics unique to the region. Their populations are primarily Arab Muslims with similar customs and laws. All six are monarchies, have a relatively high gross domestic product (GDP) per capita and human development index (HDI), and are considered oil rich. On average, their global governance indicators exceed both the MENA and global averages. The only exception concerns their populations' voices and accountability, reflecting a low level of contribution to the choice of government (see Table 3.1)

Table 3.1 Worldwide socioeconomic and governance indicators for GCC countries (2021)

GCC Countries	GDP per capita in ($)[a]	HDI[c]	Oil reserves (billion barrels)[a]	Governance Indications[a] (range from -2.5 weak to 2.5 strong)					
				Control of Corruption	Government Effectiveness	Political Stability	Regulatory Quality	Rule of Law	Voice and Accountability
KSA	23,185.87	0.88	258.60	0.31	0.50	-0.58	0.34	0.23	-1.59
Oman	19,509.47	0.82	5.37	0.09	-0.12	0.51	0.33	0.41	-1.19
UAE	44,315.55	0.91	97.80	1.18	1.40	0.65	1.01	0.83	-1.19
Kuwait	43,922.63	0.83	101.50	-0.03	-0.04	0.30	0.17	0.26	-0.70
Qatar	66,838.36	0.86	25.24	0.81	1.11	0.96	0.86	0.93	-1.17
Bahrain	26,562.97	0.88	0.19	0.17	0.72	-0.51	0.85	0.47	-1.50
GCC Average	37,389.14	0.86	81.45	0.42	0.60	0.22	0.59	0.52	-1.22
MENA Average[b]	14,801.19	-	50.67	-0.49	-0.42	-0.88	-0.48	-0.46	-1.14
World Average[b]	17,937.03	0.72	9.09	-0.03	-0.02	-0.07	-0.04	-0.04	-0.04

Note. The “Average GCC” is calculated manually by adding the numbers of the GCC countries divided by the count (6); 2021 GDP per capita is not available for Kuwait. Thus, the chart uses the GDP value for 2020.

[a]https://databank.worldbank.org/source/worldwide-governance-indicators

[b]https://www.theglobaleconomy.com/rankings/GDP_per_capita_PPP/

[c] https://hdr.undp.org/data-center/country-insights#/ranks

To reduce their dependence on petroleum and diversify their income sources, GCC countries have made substantial attempts to improve governance reforms and attract foreign investors to the region. This internationalisation has subjected listed firms to more scrutiny from regulators and foreign investors regarding governance, transparency, accountability, objectivity, and the reporting of significant risks (Abu-Nassar & Rutherford, 1996; Al-Hadi et al., 2016a; Al-Hadi et al., 2016b). In the GCC region, corporate governance principles and practices are unique and distinct from those in other developing and developed economies due to the complexities of their institutional and cultural contexts (Baydoun et al., 2013; Bley & Chen, 2006). The GCC countries have recently initiated corporate governance codes to safeguard investors, enhance transparency, and improve overall governance practices (see Table 3.2 for details about corporate governance codes).

Table 3.2 GCC corporate governance codes

GCC Countries	Corporate Governance Codes[a]	Custodians/ regulators[a]	Initiative[a]	First release[a]
KSA	Corporate Governance Regulations	Capital Market Authority Saudi Stock Exchange	Public	2006
Oman	Code of Corporate Governance for Public Listed Companies	Capital Markets Authority (CMA)	Public	2002
UAE DIFC	DIFC Market Law,12 General Module of the DFSA Rulebook 13	Dubai Financial Services Authority (DFSA)	Public	2004
UAE Federal	UAE Corporate Governance Code	Emirates Securities and Commodities Authority (ESCA)	Public	2007
Kuwait	Governance Regulated by Capital Markets Authority	Capital Market Authority	Public	2013
Qatar	Governance Code for companies and Legal Entities listed on the Main Market	Qatar Financial Markets Authority (QFMA)	Public	2009
Bahrain	CBB Rulebook – High-Level Controls Module	Central Bank of Bahrain (CBB) Ministry of Industry, Commerce & Tourism	Public	2010

[a]OECD (2019, pp.17, 23 and 25)

The following describes the capital markets, audit regulations, and corporate governance of each GCC country.

Kingdom of Saudi Arabia

Tadawul, regulated by the Saudi Capital Market Authority, is the only authorised entity in the KSA for securities trading. Tadawul is considered the largest capital market in the GCC region (OECD, 2019). Investor types range from corporate to royal, foreign, and governmental, with families representing the majority. The KSA is a member of the International Federation of Accountants (IFAC) and released its corporate governance regulations in 2006. The Saudi Organisation for Certified Public Accountants (SOCPA), monitored by the Ministry of Commerce, is responsible for promoting and setting appropriate standards for the accounting and auditing professions in the KSA. The SOCPA endorsed the ISA and ISA 701 (SOCPA, 2018).

Sultanate Oman:

The Muscat Stock Exchange was established in June 1988 and is currently supervised by the Capital Market Authority of Oman. Investor types differ, including corporate, family, foreign, institutional, and governmental investors. In 2002, Oman was the first GCC country to release its governance code. As per Article 287 of the Legislations Regulating the Companies Operating in the Field of Securities and Listed Companies (Capital Market Authority, 2005, p. 126), “auditors shall audit financial statements in accordance with the ISA.”

United Arab Emirates:

There are three stock exchanges in the UAE: the Abu Dhabi Securities Exchange (ADX), Dubai Financial Market (DFM), and NASDAQ Dubai. Federal UAE laws regulate ADX and DFM, while the Dubai International Financial Centre (DIFC) regulates NASDAQ in Dubai. Investors include corporations, institutions, families, foreigners, governments, and royal families. The UAE is a member of the IFAC. The UAE Federation released the UAE Corporate Governance Code in 2007 and, as per Federal Law No. (12) of 2014 relating to the audit profession, firms must ensure compliance with the ISA (Ministry of Economy, 2014).

State of Kuwait:

Kuwait's Capital Market Authority (CMA) regulates Boursa Kuwait. Investors range between corporations, families, and institutions. Kuwait is a member of the IFAC. The CMA released its corporate governance code in 2013. As per Article 230 of the "Auditor's Report" from Law No. 1 of 2016 on the promulgation of the companies' law, auditors shall submit their report using the generally accepted auditing principles and the provisions of this law (Kuwait Ministry of Commerce and Industry, 2016).

State of Qatar:

The Qatar Financial Market Authority (QFMA) regulates the Qatar Stock Exchange. Investors include corporations, governments, families, and royal families. Qatar is a member of the IFAC. Qatar released its corporate governance code through the QFMA in 2009. External auditors are required to perform their work and express their opinions according to the rules and principles of the profession and the ISA (Qatar Financial Market Authority, 2016).

Kingdom of Bahrain:

The Central Bank of Bahrain regulates the entire financial sector, including the Bahrain Bourse. Investors include corporations, families, governments, institutions, and royal families. Audited financial statements must comply with the ISA and IFRS (Ministry of Industry and Commerce, 2013).

3.3 Theoretical framework, literature review and hypotheses development

3.3.1 The theoretical framework

The current study focuses on the audit monitoring function within agency theory on how audited companies' ownership structures and corporate governance characteristics affect KAM disclosure by external auditors. Agency theory is employed in this study, building upon prior research on KAM reporting conducted by Elmarzouky et al. (2023), Hategan et al. (2022), Kend & Nguyen (2022) and Velt (2020).

Firms have ownership by shareholders, who are also referred to as principals, while they are operated by managers, who are also known as agents. These two groups have distinct objectives and motivations. This could give rise to conflict due to the division of owners and managers as a result of the ambiguity surrounding the managers' activities, whether they are acting in the best interest of the owners or for their personal benefit. (Davis et al., 1997). Agency theory focuses on auditor independence for the effective monitoring of management (agents) by communicating back to shareholders (principal) (Jensen & Meckling, 1976). Independent Auditors verify the fairness of the financial results, thereby instilling shareholders with confidence in the reliability of the information being provided by the management. Agency theory posits that shareholders require attentive monitoring of financial reporting from external auditors to accomplish their oversight responsibility.

Due to the divergent interests of shareholders and management, the agency theory posits that agents might insist on receiving an unmodified opinion, regardless of the firm's financial difficulties or the unsatisfactory quality of its earnings. Additionally, management might be motivated to introduce bias into the flow of information, especially in times of crisis (Houghton et al., 2013). Hence, there is a possibility of information asymmetry occurring, when agents possess information that shareholders are not privy to. The agency model holds that the principal will resolve concerns about asymmetric information and management self-interest by establishing a governance mechanism that aligns the interests and priorities of agents with the principal and reduces information asymmetry and opportunistic behaviour.

The inclusion of KAM disclosure in the audit reports can help alleviate problems related to information asymmetry and potentially enhance the auditors' effectiveness in overseeing management. KAM can additionally mitigate conflicts of interest that may arise between the principal and agent. The purpose of KAM reporting as per ISA 701, is to enhance the informational value and use of audit reports, promote more oversight by external auditors over management, and facilitate more transparent communication between external auditors and financial reporting users. KAM reporting can be considered an additional means for external auditors to communicate with shareholders on management's conduct and improve corporate governance practices. This supplements the standardised pass/fail audit opinion on financial statements prepared by management.

Moreover, according to the agency theory research, firms that have effective corporate governance mechanisms are more likely to provide transparent financial reports for the benefit of stakeholders (Alnabsha et al., 2018; Elmagrhi et al., 2020). Corporate governance is commonly employed in literature to address the conflict of interest that arises between management and stakeholders (Buertey et al., 2020). The current research on agency theory posits that management ownership plays a crucial role in aligning the interests of managers and shareholders (Jensen & Meckling, 1976). There is an expectation that the effect of incentive alignment will be more apparent in the presence of increased managerial ownership. This suggests that as managerial ownership increases, opportunistic managerial behaviour will become less prevalent (Chung & Wynn, 2008).

3.3.2 KAM literature in the GCC

Previous literature studied KAM in a limited number of GCC countries (Oman, UAE, and Bahrain) and mostly concentrated on examining the relationship between auditor characteristics, essentially their type, and the disclosure of KAM. Three archival studies investigated KAM in Oman (Al Lawati & Hussainey, 2022; Baatwah, 2023; Baatwah et al., 2022). Baatwah et al. (2022) explored the consequence of KAM reporting on audit features (audit fees and audit report lag). Findings indicated a positive correlation between KAM reporting and audit fees. This aligns with the results of a developing country study conducted in Thailand (Suttipun, 2022). Authors found that audit report lag decreased during the KAM period and postulated that audit firms – previously informed about KAM requirements – had deployed experienced and skilled auditors to develop timely reports. However, the authors did not find evidence that audit report lag affected the number of KAMs disclosed. This is consistent with the results of Abdullatif et al. (2023) in Jordan. Al Lawati & Hussainey (2022) also studied the impact of KAM reporting on audit features and found that KAM positively influenced audit quality. Such findings appear to be consistent in developing countries (Suttipun, 2021; Wu et al., 2019; Zeng et al., 2021). Only one Thai study (Kitiwong & Sarapaivanich, 2020) did not find evidence that KAM disclosure enhanced audit quality. Divergence in results in that instance could be attributable on the different proxies used for audit quality. Finally, Baatwah (2023) examined KAMs for Big Four audit companies and confirmed heterogeneity in the number and style of KAMs reported.

Barghathi et al. (2021) conducted a qualitative study in UAE using semi-structured interviews with auditors from both Big Four and non-Big Four firms. Results indicated confirmation from Big Four auditors that KAM decreased earnings management. This was demonstrated by Big Four audit firms' reluctance to conceal earnings management attempts. Contrariwise, non-Big Four firms conveyed worries about pressure to suppress earnings management connected to the possibility of losing the audit client. These findings could be related to the cultural context of the Middle East and the comparatively weak authority possessed by non-Big Four firms.

Mah'd & Mardini's (2022) is the sole cross-country study that examined KAM in developing economies. The study was conducted on a sample of firms in the Middle East, specifically in Oman, the UAE, Bahrain, and Jordan. They found a significant positive correlation between firm attributes (leverage, liquidity, profitability, and size), auditor types, and audit committee characteristics with KAM disclosure in the majority of sampled countries.

3.3.3 Ownership Structure

3.3.3.1 Ownership structure and KAMs

To the author's knowledge, this is the first study to explore the association between firm ownership structure and KAM disclosure. The GCC offers an ideal context for examining the association between ownership types (royal, family, and foreign) and KAM disclosure.

3.3.3.2 Royal ownership

A firm is regarded as politically connected if it has a royal shareholder (Polsiri & Jiraporn, 2012). A major concern is the possibility that royal owners' political power could precipitate agency-related issues between the principal and the agent. Hertog (2012) and Sidani & Al Ariss (2014) point out that royal family members expect to serve in key institutions and tend to centralise their decision making. Regarding disclosures, Chaney et al. (2011) and Piotroski et al. (2015) view politically linked firms as having low accounting transparency compared to non-linked firms. This may reflect royal members' opposition to accounting disclosures, for instance, to protect management interests in case a complete disclosure is not provided to other shareholders. Conversely, earlier research indicated that political connections can benefit a firm in terms of improving financial performance (Boubakri et al., 2012a), obtaining support during financial crises (Faccio et al., 2006), gaining market recognition (Mazaheri, 2013), and reducing the costs of equity capitals (Boubakri, et al., 2012b).

The empirical assessment is founded on the assumption that a firm's political connections through royal ownership can affect KAM disclosure and audit transparency. It is proposed that firms with royal ownership can be expected to influence the disclosure of fewer KAMs by the external auditors. This proposal leads to the hypothesis:

H_{1a} = There is a negative association between royal ownership and the number of KAMs disclosed.

3.3.3.3 Family ownership

The GCC corporate environment is dominated by family-controlled firms. The extent of family ownership concentration is higher in the GCC versus other developed and developing countries (Al-Yahyaee et al., 2011; Eulaiwi et al., 2016). Family-controlled firms represent a distinctive ownership structure. Two opposing agency viewpoints describe the conduct of family owners.

The first view relates to the alignment effect. It forecasts that the interests of principal and agents are effectively aligned in a family-controlled firm as compared to a non-family-controlled firm. Family owners (principal) hold a high concentration of shares and have incentive to monitor the agents (Hsu et al., 2018). Family owners are also more likely to have a sense of belonging to the firm, to protect family reputation, and to provide quality financial reporting to improve monitoring and exercise oversight to preserve their prosperity (Demsetz & Lehn, 1985; Miller et al., 2013; Wang, 2006). Therefore, family owners are more likely to exercise control and supervision by providing transparent accounting information and as a principal mandate for high quality audits.

The second view concerns the entrenchment effect, which forecasts conflict of interest between the family's controlling shareholders and minority shareholders. Family controlling owners are more likely to dominate executive positions, maximize private benefit, and discourage transparency to obscure opportunistic activities (Claessens et al., 2002; Fan & Wong, 2002; Shleifer & Vishny, 1997). Family owners may resist quality financial reporting if greater transparency would expose them to regulatory monitoring and auditor scrutiny. This proposition leads to the hypothesis:

H_{1b} = There is a negative association between family ownership and the number of KAMs disclosed.

3.3.3.4 Foreign ownership

Prior research explored foreign ownership's influence on disclosure. Though Aljifri et al. (2014) did not substantiate a relationship between foreign ownership and corporate disclosure, most studies have indicated a significant positive relationship (Alhazaimeh et al., 2014; Alnabsha et al., 2018; Haniffa & Cooke, 2002). One possible explanation is that foreign investors (principal) demand more disclosure to reduce agency issues related to geographic distance (Craswell & Taylor, 1992; Healy & Palepu, 2001; Schipper, 1981). This study forecasts a positive relationship between foreign ownership and KAM disclosure, understanding the latter as a means of reducing information asymmetry between principal and agent. It is therefore hypothesised that:

H_{1c} = There is a positive association between foreign ownership and the number of KAMs disclosed.

3.3.4 Corporate Governance

3.3.4.1 Corporate governance and KAMs

Corporate governance has been thoroughly explored by management academics (Tihanyi et al., 2014). Strong corporate governance systems support organisations in accomplishing their corporate objectives, complying with regulations, and protecting shareholder interest (Aguilera & Cuervo-Cazurra, 2004; Gompers et al., 2003; La Porta et al., 2000; Shleifer & Vishny, 1997). Moreover, corporate governance systems have been mandated and established to resolve agency problems (Dey, 2008). It is anticipated that the new audit reform and KAM disclosure will reduce the current principal-agent problem and improve corporate governance practices.

A few prior studies explored the relationship between KAMs and corporate governance in both developed and developing countries (Elmarzouky et al., 2023; Fera et al., 2022; Jaffar et al., 2023; Wuttichindanon & Issarawornrawanich, 2020). Studies explored the following governance characteristics: board size, board independence, and governance quality. Fera et al. (2022) examined the impact of corporate governance quality on the number of KAMs disclosed in Italy. They discovered that firms with both a high quality and a sustainable corporate governance mechanism were prone to fewer KAMs. Authors postulated that high quality corporate governance mechanisms signal that a firm manages risks well with adequate internal controls. This tends to increase auditor confidence, and to decrease KAMs. Elmarzouky et al. (2023) investigated UK corporate governance as a moderator (using board size and board independence as governance measures) for an association between KAM reporting and audit costs. As predicted by agency theory, they observed a positive correlation between the level of KAM reported and audit costs and board independence. Conversely, they found no evidence regarding board size. The authors encouraged further research into the effect of other corporate governance characteristics on KAM disclosure. In Thailand, Wuttichindanon & Issarawornrawanich (2020) observed that KAM disclosures are positively correlated with the number of independent board directors. They suggested that this could reflect independent directors' oversight role, encouraging transparency about significant risks to protect shareholder interest. A Malaysian study (Jaffar et al., 2023) similarly found that KAMs functioned as both an indirect and as a complementary mediator to improve value relevance for the board. Authors interpreted their findings as reinforcing KAM's functionality in decreasing information asymmetry and supporting investor decision making. Expanding on existing corporate governance and KAM reporting research, this study delves into the influence of different board director types in the GCC countries (royal, family, and foreign) on KAM disclosure.

3.3.4.2 Royal directors

Several listed companies in the GCC have at least one royal family member on the board (Halawi & Davidson, 2008). The presence of royal directors could increase agency related issues, either between the board (principal) and management (agent) or between the majority (controlling) and minority (noncontrolling) shareholders. Barclay & Holderness (1989) and Jaggi et al. (2009) argue that royal board directors are expected to wield their substantial control to pursue their own interest at the expense of minority shareholders. That said, politically connected board directors offer unique communication channels with the government, prominent politicians, and business elites. As such, they may secure legitimacy, information, and expertise for the firm (Hillman, 2005) and provide value (Certo, 2003; Goldman et al., 2009) by securing government support in the form of expedited licensing, reduced taxation, and privileged access to debt funding (Faccio, 2006; Fisman, 2001).

Al Nasser's (2020) study in KSA reports that royal owners tend to be more protective, averse to negative market attention, and focused on short-term performance. It is worth considering that the hierarchical authority of royal directors offers them distinctive power on the board. Al-Hadi et al. (2016b) explain that royal directors in the GCC may not be motivated to ensure proper disclosures. This aligns with prior findings that royal directors' lack of accounting transparency, assumption of consensus, and resistance to questioning (Chaney et al., 2011; Piotroski et al., 2015; Sidani & Al Ariss, 2014). Given their power and status, royal directors can elicit external auditor to disclose fewer KAMs. Therefore, it is hypothesised that:

$H_{2a} =$ There is a negative association between royal directors on the board and the number of KAMs disclosed by external auditors.

3.3.4.3 Family directors

Family businesses in the GCC have successfully maintained ownership through various generations. Most members of controlling families are appointed to top executive positions as well as the board (Jaggi et al., 2009). This can trigger agency related conflicts between majority and minority shareholders, there being little segregation between the principal (family owners) and agents (management) (Nicholls & Ahmed, 1995). Family owners may not rely on disclosures to monitor their shareholdings since they can already access information (Adhikari & Tondkar, 1992). Haniffa & Cooke's (2002) study in Malaysia reported a significant negative association between voluntary disclosure and family representation on the board. Conversely, family-controlling firms likely have low information asymmetry and can reduce principal-agent conflict. Family board directors may be motivated to improve oversight and transparency by their desire to safeguard their reputations and long term presence (Anderson & Reeb, 2003; Demsetz & Lehn, 1985; Wang, 2006).

It is posited that family board directors can be expected to influence external auditors to provide fewer disclosures to protect the interest of the family. In general, previous studies report that family controlling firms mostly ensure agents (whether family members or other management) serve in the interest of the family (DeAngelo & DeAngelo, 2000). Therefore, it is hypothesised that:

H_{2b} = There is a negative association between family directors on the board and the number of KAMs disclosed by external auditors.

3.3.4.4 Foreign directors

Many GCC firms trade with offshore allies or have subsidiaries outside the region. Corporate governance reforms presently underway seek to attract more foreign investments (Balli et al., 2011). GCC firms are thus exposed to scrutiny from international investors (Abu-Nassar & Rutherford, 1996), who face information asymmetry due to their (principal) geographic separation from management (agents). Such investors require more transparency, financial reporting quality, and disclosures (Alhazaimeh et al., 2014; Alnabsha et al., 2018; R. M. Haniffa & Cooke, 2002). Foreign board directors are thus expected to demand more disclosure from external auditors. It is hypothesised that:

H_{2c} = There is a positive association between foreign directors on the board and the number of KAMs disclosed by external auditors.

3.4 Research Design

3.4.1 Empirical Model

Table 3.3 presents a list and description of the variable measurement for the two models. Regression tests are employed to evaluate the associations relating to the dependent and independent variables. A regression model is utilised to assess the hypotheses using non-financial listed companies in the GCC stock exchanges over six years from 2016 (the year ISA 701 was adopted by all GCC countries except KSA, which followed suit in 2017) to 2021. KAMs are the dependent variable measured by the number of KAMs disclosed in the auditor report. For the main independent variables, royal ownership, family ownership, and foreign ownership are used for the first model. These are unique ownership structures specific to the GCC. For the second model, royal directors, family directors, and foreign directors are used as the main independent variables.

Table 3.3 List and description of variables

Abbreviated Name	Full Name	Description
Dependent variable		
kamNum	KAMs number	Number of KAMs reported by the external auditor.
Independent variables (model 1)		
ownRoy	Royal ownership	Percentage of shares held by royal family.
ownFam	Family ownership	Percentage of shares held by family.
ownForgn	Foreign ownership	Percentage of shares held by foreign investors.
Independent variables (model 2)		
royalDirRat	Royal directors	Ratio of royal directors to the total number of board members.
familyDirRat	Family directors	Ratio of family directors to the total number of board members.
forgnDirRat	Foreign directors	Ratio of foreign directors to the total number of board members.
Board Characteristics (model 2)		
boardSize	Board size	Number of members on the board.
indepDirRat	Independent directors	Ratio of independent directors to the total board members.
boardDirectships	Board directorship	Number of directorships and involvement of board members.
Control variable		
ownBlock	Block ownership	Percentage of shares held by block holders with at least 5% of the firm shares.
ln_firmSize	Firm size	Natural logarithm of firm total assets.
firmAge	Firm age	Number of years since establishment.
levg	Leverage	Ratio of total debt to total assets.
liquidity	Liquidity	Ratio of total current assets to total current liabilities.
grw	Growth	Ratio of sales during the year relative to the previous year.
roa	Return on assets	Ratio of net income to total assets.
audBig4	Auditor type	Indicator variable, 1= if firm is audited by a Big 4 audit firm, otherwise 0
audRot	Audit firm rotation	Indicator variable, 1= if the audit firm is changed, otherwise 0

3.4.1.1 Research model specification for ownership

The first set of hypotheses assess the association between different ownership types in the GCC (royal, family, and foreign) and the number of KAMs disclosed by the external auditor. It is anticipated that there is a negative relationship between the independent variables (royal and family ownership) and the dependent variable, the volume of KAMs disclosed by the external auditor. A positive relationship between the independent variable (foreign ownership) and the dependent variable is expected. To test these hypotheses, model 1 is employed to connect the number of KAMs reported with royal, family, and foreign ownership, along with other auditor and client related determinants.

$$\begin{aligned} kamNum = {} & \beta_0 + \beta_1 ownRoy + \beta_2 ownFam + \beta_3 ownForgn + \beta_4\, ownBlock + \\ & + \beta_5 audBig4 + \beta_6\, audRot + \beta_7\, ln\_firmSize + \beta_8 firmAge + \beta_9\, liquidity\ + + \beta_{10} levg\ + \\ & \beta_{11} grw + \beta_{12} roa + + yearFixedEffects + countryFixedEffects + \\ & IndustryFixedEffects + \mathcal{E} \end{aligned} \tag{1}$$

Following previous EAR research (Abdelfattah et al., 2021; Bédard et al., 2019; Bepari et al., 2022; Duboisée De Ricquebourg & Maroun, 2023), the dependent variable is measured in model 1 (*kamNum)* as the KAM issues reported by the external auditor in one audit.

The primary independent variables of interest are royal ownership ($OwnRoy$), family ownership ($OwnFam$), and foreign ownership ($ownForgn$). Like Al Nasser (2020), ($OwnRoy$) represents the percentage of total shares held by the royal family. Royal family names for the six GCC countries are hand-collected from the governance reports to identify royal owners. Additionally, keywords are used to identify royal names (e.g., "Sheikh," "Prince," etc.). Following Al-Hadi et al. (2019), Arouri et al. (2014), Eulaiwi et al. (2016), Hsu et al. (2018), and Wu et al. (2023), ($OwnFam$) represents the percentage of total shares held by a family. In line with family firm studies conducted by Anderson & Reeb (2003), Chen et al. (2013), Eulaiwi et al. (2016), and Villalonga & Amit (2006), owners are recognised as family when the founder is a board member or when family members jointly control 5% or more of company shares. Firms' annual reports and official websites are searched to examine corporate history and confirm family ownership. Consistent with Abdallah & Ismail (2017), Alnabsha et al. (2018), Guedhami et al. (2009), and Haniffa & Cooke (2002), ($ownForgn$) represents the percentage of total shares held by foreign investors. Non-national individuals or companies are classified as foreign.

Ownership concentration is controlled in line with previous studies (Al-Hadi et al., 2016b; Al-Shammari et al., 2008). Block ownership ($ownBlock$) is measured as the percentage of shares held by block holders with at least 5% of the firm's shares (Ntim et al., 2013; Ntim & Soobaroyen, 2013). GCC firms usually have limited controlling shareholders with a high ownership concentration (Arouri et al., 2014; Queiri et al., 2021).

Model 1 also applies a variety of control variables used in auditing research and EAR literature to express audit client and auditor related characteristics (Bédard et al., 2019; Duboisée De Ricquebourg & Maroun, 2023; Gutierrez et al., 2018; Lennox et al., 2023; Liang et al., 2023; Sierra-García et al., 2019; Zeng et al., 2021). Audit client variables involve controls for audited firm attributes that could affect the number of KAMs reported. Audit client specific variables include firm size ($ln\ \_firmSize$) natural logarithm of firm total assets, firm age ($firmAge$) number of years since establishment, leverage ($levg$) ratio of total debt to total assets, liquidity ($liquidity$) ratio of total current assets to total current liabilities, growth (grw) ratio of sales during the year relative to the previous year, and return on assets (roa) ratio of net income to total assets. Extant literature considers larger and leveraged firms prone to aggressive financial reporting and so potentially to more reported KAMs (Camacho-Miñano et al., 2023; Pinto & Morais, 2019; Sierra-García et al., 2019). Older firms are positively associated with the number of KAMs disclosed (Rahaman et al., 2023).

Following Abdelfattah et al. (2021), Baatwah (2023), Kitiwong & Sarapaivanich (2020), and Velte (2020), external auditor specific variables are controlled such as auditor type ($audBig4$) - an indicator variable equal to 1 if the firm is audited by a Big 4 audit firms, otherwise 0 - and audit firm rotation ($audRot$) - an indicator variable equal to 1 if the audit firm is changed, otherwise 0. Furthermore, year, country, and industry fixed effects are included to control for differences in the number of KAM disclosed across the six years, six GCC countries, and ten industries.

3.4.1.2 Research model specification for governance

The second set of hypotheses evaluate the association between different director types on the board (royal, family, and foreign) and the number of KAMs reported by the external auditor. In line with the ownership model, it is anticipated that there is a negative association between the independent variables (royal directors and family directors) and the dependent variable, and a positive association between the independent variable (foreign directors) and the level of KAMs reported by the external auditor. To test these hypotheses, model 2 is used to associate the number of KAMs reported by the external auditor with royal, family, and foreign directors along governance characteristics and other auditor and audit client related determinants.

$$kamNum = \beta_0 + \beta_1 royalDirRat + \beta_2 familyDirRat + \beta_3 forgnDirRat + \beta_4 boardSize + \beta_5 \, indepDirRat + \beta_6 \, boardDirectships + \beta_7 audBig4 + \beta_8 \, audRot + \beta_9 \ln \_firmSize + \beta_{10} firmAge + \beta_{11} liquidity + \beta_{12} levg + \beta_{13} grw + \beta_{14} roa + yearFixedEffects + countryFixedEffects + IndustryFixedEffects + \varepsilon \quad (2)$$

Like model 1, the dependent variable (*kamNum)* in model 2 is measured as the number of KAMs reported by the external auditor in one audit. The main independent variables of interest for model 2 are royal directors ($royalDirRat$), family directors ($familyDirRat$) and foreign directors ($forgnDirRat$). Following Arayssi & Jizi (2024), Al-Hadi et al. (2016b) and Al Nasser (2020), ($royalDirRat$) is used for the ratio of royal directors to the total number of board members. In line with Chen et al. (2013), Haniffa & Cooke (2002), and Wan-Hussin (2009), ($familyDirRat$) is measured as the ratio of family directors to the total number of board members. Similar to Yatim et al. (2016), ($forgnDirRat$) is used for the ratio of foreign directors to the total number of board members. Director types are identified from governance reports in a similar way as ownership types.

Compared to model 1, model 2 incorporates additional control variables related to governance attributes required to evaluate the relationship between different types of board directors and the number of KAMs disclosed. This is to control for board structure and governance mechanisms. These include board size ($boardSize$), board independence ($indepDirRat$), and board directorships ($boardDirectships$). It has been proposed that board structure characteristics are associated with the effectiveness of monitoring, disclosures, and financial reporting quality (Allam, 2018; Alnabsha et al., 2018; Alshbili et al., 2020; J. Cohen et al., 2002; Grove et al., 2011; Pillai & Al-Malkawi, 2018). Accordingly, they can influence KAMs reported by the external auditor (Elmarzouky et al., 2022b, 2023; Fera et al., 2022; Wuttichindanon & Issarawornrawanich, 2020).

Following Alnabsha et al. (2018), Arayssi & Jizi (2024), Elmarzouky et al. (2023), Elmarzouky et al. (2022), and Wan-Hussin (2009), ($boardSize$) is measured as the number of board members and ($indepDirRat$) as the ratio of independent board members to total board members. Consistent with Al-Hadi et al. (2019) and Eulaiwi et al. (2016), ($boardDirectships$) is captured as a proxy for board busyness. Moreover ($boardDirectships$) is measured as the number of directorships and involvement of board members.

Model 2 also employs auditor and audit client related characteristics as control variables anticipated to influence the dependent variable ($kamNum$). Auditor specific variables include auditor type ($audBig4$) and audit firm rotation ($audRot$). Audit client specific characteristics include firm size ($ln\_firmSize$), firm age ($firmAge$), leverage ($levg$), liquidity ($liquidity$), growth (grw), and return on assets (roa). Like model 1, year, country, and industry fixed effects are controlled for to mitigate year, country, and industry level differences.

3.4.2 Sample selection and distribution

Data has been hand collected for 430 firms listed in the GCC stock exchanges over a six-year period (refer to Appendix 1 for the list of sampled firms' names). Collection involved (1) data gathering and (2) data entry. Data gathering consisted of downloading auditor reports for KAM disclosure and auditor related control variables, corporate governance reports for variables related to ownership and governance, and financial statements for firm specific control variables. Whenever governance reports were not available on a company's official website, copies were obtained by contacting public relations and corporate governance representatives via email, telephone, or LinkedIn. Data entry involved manually extracting data from downloaded reports and typing these into the relevant data fields. A quality control review was conducted for all variables prior to data analysis.

The period of the sample is from 2016-2021 for five out of the six GCC countries (Oman, UAE, Kuwait, Qatar, and Bahrain). This is because KAM became mandatory in these countries from 2016 as per ISA 701. However, the sample for KSA is from 2017-2021 since the Saudi Organisation for Certified Public Accountants (SOCPA) endorsed ISA 701 in 2017.

Table 3.4, Panel A illustrates that originally, there were 4,375 firm-years observations. The sample excluded financial firms (1,719 firm-year observations) due to differences in regulation, firms with missing governance reports (448 firm-year observations), delisted, suspended, or liquidated firms (59 firm-year observations) and dual listed firms in other GCC stock exchanges (42 firm-year observations). This yields a final sample of 2,107 firm-year observations representing 430 companies in the GCC. Panel B indicates the sample distribution country and year. KSA represents the maximum firm-year observations with 727 (35%), while Oman, Kuwait, and UAE represent 406 (19%), 393 (19%), and 309 (15%) firm-year observations respectively. Qatar and Bahrain represent the lowest numbers of firm-year observations at 166 (8%) and 106 (5%) respectively. Panel C shows the sample break-down per industry based on the Global Industry Classification Standard (GICS) (refer to Appendix 2 for the details). The highest industry is industrials with 415 (20%) firm-year observations, followed by materials, with 382 (18%). The lowest industry is Information Technology with 25 (1%) firm-year observations.

Table 3.5 illustrates the frequency and percent of KAM issues (dependent variable). For 37% of firms, external auditors reported two issues. The most KAM issues reported for 1 year-firm observation is seven; the lowest is zero where 68 firm-year observations did not report any KAMs.

Table 3.4 Sample selection and distribution

Panel A: Sample selection

GCC Country	KSA	UAE	Kuwait	Oman	Qatar	Bahrain	Grand Total
Total Population	1225	966	948	690	294	252	4375
Total Exclusion (Less)	(498)	(657)	(555)	(284)	(128)	(146)	(2268)
Financials	(315)	(510)	(378)	(252)	(120)	(144)	(1719)
Governance report not available	(178)	(87)	(159)	(14)	(8)	(2)	(448)
Delisted, suspended/ liquidated	(5)	(30)	(6)	(18)	-	-	(59)
Dual Listing	-	(30)	(12)	-	-	-	(42)
Total Observations	**727**	**309**	**393**	**406**	**166**	**106**	**2107**

Panel B: Sample distribution country and year

GCC Country	2016	2017	2018	2019	2020	2021	Total	Percent
Kingdom of Saudi Arabia	-	128	134	141	146	178	727	35%
Sultanate of Oman	65	66	68	69	69	69	406	19%
State of Kuwait	60	62	69	68	68	66	393	19%
United Arab Emirates	48	51	50	49	50	61	309	15%
State of Qatar	26	27	27	28	29	29	166	8%
Kingdom of Bahrain	17	17	18	18	18	18	106	5%
Total Observations	**216**	**351**	**366**	**373**	**380**	**421**	**2107**	**100%**

Note: KSA did not have any firm year observations in 2016 as KAM was endorsed in 2017 by SOCPA.

Panel C: Sample distribution industry and year

GCC Country	2016	2017	2018	2019	2020	2021	Total	Percent
Industrials	46	69	71	72	73	84	415	20%
Materials	27	68	68	70	71	78	382	18%
Consumer Discretionary	32	55	58	59	59	62	325	15%
Real Estate	40	52	57	56	56	56	317	15%
Consumer Staples	28	42	44	44	48	54	260	12%
Communication Services	15	21	20	20	20	22	118	6%
Utilities	14	17	20	21	22	23	117	6%
Health Care	6	13	14	15	15	20	83	4%
Energy	6	11	11	12	12	13	65	3%
Information Technology	2	3	3	4	4	9	25	1%
Total Observations	**216**	**351**	**366**	**373**	**380**	**421**	**2107**	**100%**

Table 3.5 KAMs frequency for the sample

kamNum	**Freq.**	**Percent**	**Cum.**
0	68	3.23	3.23
1	578	27.43	30.66
2	784	37.21	67.87
3	422	20.03	87.90
4	187	8.88	96.77
5	48	2.28	99.05
6	19	0.90	99.95
7	1	0.05	100.00
Total	**2107**	**100.00**	

3.5 Empirical Results

3.5.1 Descriptive statistics results

Table 3.6 shows the descriptive statistics of the variables used in the regression models. The mean value for (kamNum) is 2.146, with a standard deviation of 1.14. This indicates that auditors disclosed an average of two KAMs for GCC firms. This is consistent with numbers in most developing economies (Baatwah, 2023; Baatwah et al., 2022; L. Chen et al., 2023; Liu et al., 2022; Wuttichindanon & Issarawornrawanich, 2020). By contrast, four KAMs are reported on average in the UK (Gutierrez et al., 2018) and one CAM on average for US large-accelerated filers (Burke et al., 2023). Concerning ownership structure, average royal ownership is 1.3%, family ownership 12.3%, and foreign investor ownership 3.9%. The maximum values are 70.4%, 99.6%, and 92.1% respectively. The sample is dominated by family ownership and almost half of the firm year observations have holders with at least 5% of shares. With respect to board director representation, the mean value for royal directors is 3.9%, family directors 13.3%, and foreign directors 9.7%. The maximum values are 83% for royal directors and 100% for both family and foreign directors.

Regarding board structure variables, the mean value of board size is approximately 7 members, the average percentage of independent directors on the board is 46%, and the mean value of the number of directorships for board members collectively is 20. Regarding auditor control variables, 58% of the firm year observations in the sample utilise the services of Big Four. 20.7% of the firm year observations switched their audit firms during the sample period. For the firm characteristics control variables, the mean value for firm size is 18.85 (natural logarithm of total assets), leverage 44.4%, liquidity 250.9%, sales growth 27.3%, and return on assets 2.7%. Overall, the descriptive summary shows substantial diversity between sample firms.

3.5.2 Correlation results

Table 3.7 demonstrates the univariate (correlation) results for the independent variables. The correlation matrix shows the correlation between ownership types (model 1) and KAMs as well as the correlations between the other auditor and firm control variables. Moreover, it indicates the correlation between director types (model 2) and KAMs including the correlations among the other governance, auditor, and firm control variables. They appear aligned with the literature. For model 1 there is a negative correlation between the independent variables (royal and family ownership) and the number of KAMs disclosed, while there is a positive correlation between foreign ownership and the number of KAMs disclosed. Similarly for model 2 there is a negative correlation between the independent variables (royal and family directors) and the level of KAMs reported, while there is a positive correlation between foreign directors and the level of KAMs reported. The correlation signs for the independent variables are consistent with expectations.

Correspondingly, there is a positive correlation between the three board structure variables in model 2 (board size, the ratio of independent directors and number of directorships) and the number of KAMs. Accordingly, boards with bigger size, more independent directors, and members having multiple directorships are associated with more KAMs.

For auditor control variables, there is a negative correlation between Big Four audit firms and audit firm rotation and the number of KAMs disclosed. This indicates that when firms are audited by Big Four or there is a switch in the auditor, there are fewer KAMs. This is not consistent with research in relation to auditor type in either developed economies (Honkamäki et al., 2022; Kend & Nguyen, 2020; Tušek & Ježovita, 2018) or developing economies (Abdullatif & Al-Rahahleh, 2020; Ferreira & Morais, 2020; Rahaman et al., 2023; Suttipun, 2022; Wuttichindanon & Issarawornrawanich, 2020). This could be due to the GCC's regionally specific characteristics. Moreover, for firm control variables, the correlation matrix provides a negative correlation between liquidity, return on assets, and sales growth, whereas it provides a positive correlation with firm size, firm age, and leverage. This is consistent with findings in existing literature that larger, older, and highly leveraged firms report more KAMs (Bepari et al., 2022; Mah'd & Mardini, 2022; Rahaman et al., 2023; Sierra-García et al., 2019; Wuttichindanon & Issarawornrawanich, 2020).

Table 3.8 displays the variance inflation factor (VIF) analysis. The VIF is used to identify multicollinearity (correlation among independent variables) in the regression models (Daoud, 2017). There is no indication of any multicollinearity issues since the VIF results are less than 10 for all the variables included in both models.

Table 3.6 Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
kamNum	2107	2.146	1.14	0	7
ownRoy	2107	.013	.063	0	.704
ownFam	2107	.123	.19	0	.996
ownForgn	2107	.039	.124	0	.921
ownBlock	2107	.491	.264	0	1
royalDirRat	2098	.039	.105	0	.833
familyDirRat	2107	.133	.199	0	1
forgnDirRat	2098	.097	.187	0	1
boardSize	2098	7.556	1.801	3	14
indepDirRat	2091	.464	.251	0	1
boardDirectships	1630	20.229	19.1	0	139
audBig4	2107	.581	.494	0	1
audRot	2107	.207	.406	0	1
ln_firmSize	2107	18.854	2.349	11.834	27.081
firmAge	2107	29.317	15.392	1	139
liquidity	2107	2.509	4.39	.005	77.811
levg	2107	.444	.418	.003	9.017
grw	2088	.273	5.732	-1	195.647
roa	2107	.027	.109	-1.641	.736

Note: The table shows the summary statistics for the variables in both models.

Table 3.7 Matrix of correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
(1) kamNum	1.000																		
(2) ownRoy	-0.075	1.000																	
(3) ownFam	-0.024	-0.026	1.000																
(4) ownForgn	0.022	-0.001	-0.172	1.000															
(5) ownBlock	-0.206	0.103	0.201	0.225	1.000														
(6) royalDirRat	-0.036	0.544	-0.104	-0.005	0.021	1.000													
(7) familyDirRat	-0.008	0.224	0.545	-0.178	-0.038	0.210	1.000												
(8) forgnDirRat	0.002	-0.045	-0.070	0.551	0.307	-0.025	-0.208	1.000											
(9) boardSize	0.100	0.008	-0.186	0.122	-0.100	0.049	-0.165	0.072	1.000										
(10) indepDirRat	0.066	-0.032	-0.026	-0.056	0.003	-0.071	-0.116	-0.021	-0.065	1.000									
(11) boardDirectships	0.134	-0.018	0.001	-0.017	-0.186	-0.074	-0.075	-0.017	0.348	-0.115	1.000								
(12) audBig4	-0.164	0.062	-0.105	0.141	0.235	0.090	-0.168	0.196	0.164	-0.013	0.142	1.000							
(13) audRot	-0.069	0.008	0.005	-0.058	-0.072	0.001	0.047	-0.060	-0.034	0.049	-0.040	-0.117	1.000						
(14) ln_firmSize	0.184	0.103	-0.153	0.003	-0.206	0.191	-0.083	-0.009	0.375	-0.088	0.360	0.353	-0.042	1.000					
(15) firmAge	0.017	0.032	0.071	-0.174	-0.181	-0.065	0.100	-0.241	0.076	0.007	0.035	-0.116	0.010	-0.093	1.000				
(16) liquidity	-0.030	-0.029	0.038	-0.067	-0.015	-0.028	0.048	-0.122	-0.077	-0.023	-0.083	-0.106	0.015	-0.132	0.032	1.000			
(17) levg	0.008	-0.077	-0.025	0.066	0.023	-0.071	-0.049	0.094	0.024	0.005	0.045	0.069	0.000	0.086	-0.134	-0.337	1.000		
(18) grw	-0.008	0.002	-0.033	0.031	0.016	0.010	-0.020	0.006	-0.015	-0.004	-0.004	0.006	-0.027	0.010	0.009	0.006	-0.013	1.000	
(19) roa	-0.106	0.031	0.052	0.035	0.101	0.007	0.044	0.040	0.023	-0.039	0.080	0.163	-0.069	0.127	0.032	0.158	-0.152	0.030	1.000

Table 3.8 Variance inflation factor

Variable (Model 1)	VIF (Model 1)	Variable (Model 2)	VIF (Model 2)
ownRoy	1.09	royalDirRat	1.53
ownFam	1.35	familyDirRat	1.38
ownForgn	1.28	forgnDirRat	1.38
ownBlock	1.78	boardSize	1.60
audBig4	1.45	indepDirRat	1.54
audRot	1.10	boardDirectships	1.45
ln_firmSize	3.40	audBig4	1.56
firmAge	1.27	audRot	1.11
liquidity	1.18	ln_firmSize	4.20
levg	1.18	firmAge	1.36
grw	1.02	liquidity	1.30
roa	1.13	levg	1.21
year	included	grw	1.02
country	included	roa	1.16
industry	included	year	included
Mean VIF	**2.75**	country	included
		industry	included
		Mean VIF	**2.92**

3.5.3 Multivariate analysis

Ordinary least squares (OLS), Tobit, Robust, and Poisson regression models are used. Collective cross-sectional regression with year, country, and industry fixed effect are employed. Since the dependent variable ($kamNum$) in model 1 and model 2 is absolute, there is no negative or less than zero value for the number of KAMs.

Tobit regression (censored regression) is used to measure linear relationships among variables when censoring exists (either left or right) only in the measured variable (Winship & Western, 2016). Robust regression is also employed to reduce outlier impact. This type of regression is used when data is expected to have many outliers or for revealing dominant observations (Rousseeuw & Leroy, 2005). Finally, Poisson regression is used consistent with (Bepari et al., 2022; Lennox et al., 2023; Pinto & Morais, 2019) since the dependent variable ($kamNum$) is a count variable.

Table 3.9 provides the regression results for both models, with number of KAMs as the dependent variable. Panel A provides results for the constructed ownership model (model1) and Panel B provides results for the constructed corporate governance model (model 2). A collective cross-sectional regression with year, country, and industry fixed effect is used.

Panel A shows the regression analysis for the different ownership types ($ownRoy, ownFam,$ $ownForgn$) and the number of KAMs disclosed. The adjusted R2 is 0.23.

The regression analysis reveals that at 99% confidence intervals, there is a significant negative relationship between royal ownership and KAM disclosure by the external auditor. The coefficient between the royal ownership and the number of KAMs disclosed is -1.299 which indicates that every additional unit of royal ownership decreases external auditors KAM disclosure by 1.299 units. The results strongly support the hypothesis 1(a): royal ownership is negatively associated with the number of KAMs reported by the external auditor. Results indicate that royal ownership has significantly decreased KAM reporting. This supports the royal ownership effect, which posits that royal owners tend to be more protective, to avoid negative market attention, and to prioritize short term performance over monitoring (Al Nasser, 2020).

On the other hand, the regression estimates demonstrate that at 95% confidence intervals, there is a significant positive association between both family ownership ($ownfam$) and foreign ownership ($ownForgn$) and the dependent variable. The coefficient between the family ownership and KAM reporting is 0.271 which indicates that every additional unit of family ownership increases external auditor KAM disclosure by 0.271 units. The coefficient between the foreign ownership and KAMs is

0.454 which indicates that every additional unit of foreign ownership increases external auditor KAM disclosure by 0.454 units. The findings suggest that both family and foreign ownerships have substantially increased the number of KAM reported by the external auditor. The findings for foreign ownership are aligned with hypothesis 1(c) and support the foreign effect evidence reported in prior corporate disclosure studies (Alhazaimeh et al., 2014; Alnabsha et al., 2018; R. M. Haniffa & Cooke, 2002). The requirement for disclosure is larger when a high ratio of shares are owned by foreign investors, possibly owing to the geographic division between management and foreign owners (Craswell & Taylor, 1992; Schipper, 1981). However, the findings for ($ownfam$) contradict hypothesis 1(b): family ownership is negatively associated with the number of KAMs reported by the external auditor by the external auditor. The positive association could be explained in light of Wang (2006) and Demsetz & Lehn's (1985) suggestion that family firms mitigate the owner-manager conflict and tend to have low information asymmetry. High family concentration could encourage family owners to enhance monitoring and provide more accounting information. Another possible explanation lies in the reputational issues faced by family owned firms to sustain their long term presence (Anderson & Reeb, 2003). This could likewise motivate transparency and lead external auditors to disclose more KAMs.

The above findings concerning ownership types' ($ownRoy$, $ownFam$, $ownForgn$) connection with the volume of KAMs disclosed by the external auditor contributes to the extant research on extended audit reporting, especially as the first study to explore this connection. The study covers six countries in a region with highly unique ownership characteristics. Overall, the findings support ownership ($ownRoy\ and\ ownForgn$) and disclosure studies that propose negative effects for royal ownership and positive effects for foreign ownership. In this regard, the findings complement this stream of research and provide evidence that ownership structure plays a significant part in external auditors' reporting. This can assist scholars, regulators (both local and international), and policymakers in understanding the consequences of KAM reporting in the Gulf region.

Finally, in relation to the control variables, it is learned that ($ownBlock$), ($audBig4$), ($audRot$), ($liquidity$), ($levg$), and (roa) are statistically significant and negatively connected to the number of KAMs disclosed. This suggests that GCC firms with elevated levels of these variables probably get fewer KAMs. On the other hand, ($ln\_firmSize$) is statistically significant and positively connected to the number of KAMs disclosed. This is aligned with previous EAR studies (Bepari et al., 2022; Ferreira & Morais, 2020; Kend & Nguyen, 2020; Mah'd & Mardini, 2022; Pérez et al., 2021; Rahaman et al., 2023; Sierra-García et al., 2019; Wuttichindanon & Issarawornrawanich, 2020). Control variable results are robust as they did not change substantially and generally remain significant across all the models (OLS, Tobit, Robust, and Poisson).

Various regressions (OLS, Tobit, Robust, and Poisson) are employed to lower the standard deviation. The findings for ($ownRoy$) continue to be consistent with a coefficient that is negative and significant at a 99% confidence level. This confirms the robustness of the results for the independent variable ($ownRoy$) and indicates a strong negative connection between royal ownership and the number of KAMs disclosed by the external auditor. Similarly, the results for ($ownForgn$) remain unchanged with a positive and significant coefficient at 95% confidence level for all models except the Poisson regression model. The findings for ($ownFam$) do not differ significantly; the coefficient is positive and significant except for the Poisson regression model.

Panel B shows the regression analysis for the different director types ($royalDirRat,$ $familyDirRat,$ $forgnDirRat$) and the number of KAMs disclosed. The adjusted R2 is 0.22.

The regression analysis shows that at 90% confidence intervals, there is a significant negative relationship between royal directors and KAM disclosure by the external auditor. The coefficient between royal directors and the number of KAMs disclosed by the external auditor is -0.559 which indicates that every additional unit of royal directors decreases external auditor KAM disclosure by 0.559 units. The findings support the hypothesis 2(a): the ratio of royal directors on the board is negatively associated with the number of KAMs reported by the external auditor. The results indicate that royal directors on the board influenced external auditors to disclose fewer KAMs, in support of the royal directors' presence effect reported in prior corporate governance and disclosure studies (Al-Hadi et al., 2016b). This is in addition to the power, status, and political connections associated with royal board members (Al Nasser, 2020). The results correspond with the idea that disclosures are negatively associated with the increasing proportion of royal family members on the board. It also squares with the predictions of Sidani & Al Ariss (2014), Chaney et al. (2011), and Piotroski et al. (2015) that royal members' general lack of accounting transparency, expectation of complete obedience, and reluctance to be questioned, influencing external auditors to report fewer KAMs.

The regression estimates also demonstrate that at 95% confidence intervals, there is a positive association between foreign directors ($forgnDirRat$) and the dependent variable. The coefficient between foreign directors and the number of KAMs disclosed by the external auditor is 0.389 which indicates that every additional unit of foreign directors increases external auditor KAM disclosure by 0.389 units. The results suggest that foreign directors have considerably influenced the increase in the number of KAMs reported by the external auditor. These findings align with hypothesis 2(c) and support the foreign effect evidence reported in prior corporate governance and disclosure studies (e.g. Yatim et al., 2016) suggesting that foreign investors seek high quality audits. However, evidence could not be found for association between family directors ($familyDirRat$) and the dependent variable. Therefore, hypothesis 2(b): family directors are negatively associated with the number of KAMs reported, cannot be proven.

The above findings regarding director types' ($royalDirRat,\ familyDirRat,\ forgnDirRat$) connection with KAM disclosure contribute to the extant research on extended audit reporting, particularly given the scarcity of studies addressing corporate governance in relation to KAMs (Elmarzouky et al., 2022, 2023; Fera et al., 2022; Jaffar et al., 2023; Wuttichindanon & Issarawornrawanich, 2020). This study covers the special corporate governance characteristics predominant in the GCC region. Overall, the findings of this research support corporate governance ($royalDirRat,\ forgnDirRat$) and disclosure studies that propose negative effects for royal directors and positive effects for foreign directors. It is expected for royal members to be included in boards in the GCC's monarchical political context. The GCC has also recently attracted global investors consistent with substantial changes in corporate governance, including better transparency and audit quality. The findings add to this stream of research by providing evidence that corporate governance plays a significant part in external auditors' reporting. This study endeavour to help academics, regulators (both local and global), and policymakers to recognise the influence of KAM reporting in a region like the Gulf with specific common corporate governance characteristics.

Finally, regarding the corporate governance control variables, it is learned that ($indepDirRat$) and ($boardDirectships$) are statistically significant at the 95% confidence level and positively connected to the number KAMs reported. This suggests that boards with these corporate governance characteristics will have more KAMs reported. By implication, boards with a high independent director ratio will have more KAMs reported (Elmarzouky et al., 2023; Wuttichindanon & Issarawornrawanich, 2020). In line with previous studies, the number of board directorships is also associated with better monitoring capabilities (Fama & Jensen, 1983) and lesser accounting conservatism (Ahmed & Duellman, 2007). This could lead to more avenues for disclosures.

Like model 1, the auditor control variables (roa, $audBig4$, and $audRot$) are statistically significant and negatively connected to the number of KAMs disclosed. This suggests that GCC firms with these variables possibly get fewer KAMs. On the other hand, ($ln\_firmSize$) is statistically significant and positively connected to the number KAMs disclosed, in alignment with model 1 and previous EAR studies. Control variables results are robust as they did not change substantially and generally remain significant across all models (OLS, Tobit, Robust, and Poisson).

Various regressions (OLS, Tobit, Robust, and Poisson) are employed to lower the standard error. The findings for ($royalDirRat$) remain unchanged in Tobit regression with a coefficient that is negative and significant at 90% confidence level. Moreover, the results for ($forgnDirRat$) remain consistently positive and significant in all regressions. This confirms the robustness of the results for the independent variable ($forgnDirRat$) and suggests a strong positive association between foreign directors and the number of KAMs reported by the external auditor.

Table 3.9 Regression results and robustness checks

Panel A: regression results for model 1

Model (1)	OLS	Tobit	Robust	Poisson
	kamNum	kamNum	kamNum	kamNum
ownRoy	-1.299***	-1.299***	-1.299***	-0.761***
	(-3.60)	(-3.63)	(-5.11)	(-2.60)
ownFam	0.271**	0.271**	0.271*	0.148
	(2.01)	(2.03)	(1.92)	(1.59)
ownForgn	0.454**	0.454**	0.454**	0.223
	(2.26)	(2.28)	(2.24)	(1.64)
ownBlock	-0.408***	-0.408***	-0.408***	-0.189**
	(-3.67)	(-3.70)	(-3.66)	(-2.47)
audBig4	-0.587***	-0.587***	-0.587***	-0.275***
	(-10.96)	(-11.05)	(-10.91)	(-7.51)
audRot	-0.183***	-0.183***	-0.183***	-0.075*
	(-3.23)	(-3.25)	(-3.25)	(-1.91)
ln_firmSize	0.187***	0.187***	0.187***	0.089***
	(10.77)	(10.86)	(10.46)	(7.51)
firmAge	0.001	0.001	0.001	0.000
	(0.45)	(0.45)	(0.49)	(0.39)
liquidity	-0.011**	-0.011**	-0.011**	-0.007
	(-1.99)	(-2.01)	(-2.38)	(-1.58)
levg	-0.137**	-0.137**	-0.137**	-0.086*
	(-2.30)	(-2.32)	(-2.44)	(-1.69)
grw	-0.001	-0.001	-0.001	-0.001
	(-0.32)	(-0.33)	(-0.36)	(-0.26)
roa	-1.115***	-1.115***	-1.115***	-0.490***
	(-4.98)	(-5.02)	(-4.48)	(-3.40)
_cons	-0.953**	-0.953**	-0.953**	-0.744***
	(-2.44)	(-2.46)	(-2.42)	(-2.77)
year	included	included	included	included
country	included	included	included	included
industry	included	included	included	included
var(e.kamNum)		0.988***		
		(32.31)		
N	2088	2088	2088	2088
R-sq	0.24		0.24	
adj. R-sq	0.23		0.23	

t statistics in parentheses ="* p<0.10 ** p<0.05 *** p<0.01"

Panel B: regression results for model 2

Model (2)	OLS	Tobit	Robust	Poisson
	kamNum	kamNum	kamNum	kamNum
royalDirRat	-0.559*	-0.559*	-0.559	-0.256
	(-1.78)	(-1.80)	(-1.54)	(-1.25)
familyDirRat	0.085	0.085	0.085	0.050
	(0.56)	(0.57)	(0.54)	(0.51)
forgnDirRat	0.389**	0.389**	0.389**	0.177*
	(2.35)	(2.37)	(2.22)	(1.66)
boardSize	0.005	0.005	0.005	0.002
	(0.27)	(0.28)	(0.29)	(0.16)
indepDirRat	0.268**	0.268**	0.268*	0.131
	(1.98)	(2.00)	(1.94)	(1.47)
boardDirectships	0.004**	0.004***	0.004**	0.002*
	(2.58)	(2.61)	(2.43)	(1.73)
audBig4	-0.717***	-0.717***	-0.717***	-0.321***
	(-10.94)	(-11.06)	(-10.69)	(-7.58)
audRot	-0.150**	-0.150**	-0.150**	-0.060
	(-2.31)	(-2.33)	(-2.36)	(-1.39)
ln_firmSize	0.169***	0.169***	0.169***	0.077***
	(7.40)	(7.48)	(7.26)	(5.28)
firmAge	0.002	0.002	0.002	0.001
	(1.07)	(1.08)	(1.17)	(0.80)
liquidity	0.017	0.017	0.017	0.007
	(1.39)	(1.40)	(1.21)	(0.92)
levg	-0.018	-0.018	-0.018	-0.017
	(-0.26)	(-0.26)	(-0.21)	(-0.33)
grw	-0.001	-0.001	-0.001	-0.001
	(-0.29)	(-0.29)	(-0.30)	(-0.27)
roa	-1.251***	-1.251***	-1.251***	-0.516***
	(-4.77)	(-4.82)	(-4.20)	(-3.36)
_cons	-0.888*	-0.888*	-0.888*	-0.658**
	(-1.73)	(-1.75)	(-1.73)	(-1.99)
year	included	included	included	included
country	included	included	included	included
industry	included	included	included	included
var(e.kamNum)		1.053***		
		(28.35)		
N	1608	1608	1608	1608
R-sq	0.24		0.24	
adj. R-sq	0.22		0.22	

t statistics in parentheses ="* p<0.10 ** p<0.05 *** p<0.01"

3.5.4 Endogeneity

Various sensitivity tests are conducted to assess the robustness of the results. Two Stage Least Square (2SLS) and Generalized Method of Moments (GMM) are employed to address endogeneity issues. These methods are particularly effective for mitigating the influence of endogeneity. They provide robustness against omitted variables and bias in variable selection, ensure consistency in parameter estimates, offer efficient estimates compared to OLS and are considered more sophisticated techniques due to their ability to incorporate instrumental variables (Ullah et al., 2018, 2021).

The 2SLS method uses lagged levels of the variables as instruments, thus helping to isolate the exogenous components of the independent variables influencing the dependent variable (Winship & Western, 2016). Ownership types in model 1 are expected to have an impact on the number of KAMs by external auditors. Therefore, the variables $(ownRoy)$, $(ownFam)$ and $(ownForgn)$ are employed as instrumental variables. Directorship types in model 2 are expected to have an impact on the number of KAMs by external auditors. Therefore, the variables $(royalDirRat)$, $(familyDirRat)$ and $(forgnDirRat)$ are used as instrumental variables. Sargan and Hansen tests used for 2SLS validity checks are both significant. GMM goes further by incorporating both the variable's lagged levels and the possibility of time-variant influences, aiming to minimize standard deviations and maximize the use of exogenous variation as part of the instrumentation (Winship & Western, 2016). Sargan, Hansen and Arellano-Bond tests used for GMM validity checks are all significant.

Table 3.10 shows that the findings generally remain significant for both models. In model 1 (Panel A), royal ownership is negatively associated with the number of KAMs disclosed by the external auditor at a 99% confidence level (the coefficient is negative for 2SLS and GMM are 1.526 and 1.827, respectively) while foreign ownership is positively associated with the number of KAMs disclosed by the external auditor (the coefficient is positive for 2SLS and GMM are 0.537 and 1.300, respectively). Family ownership is also positively associated with the number of KAMs disclosed by the external auditor (the coefficient is positive for 2SLS and GMM are 0.336 and 0.685, respectively). Overall, the results are significant and generally consistent with the main model. In model 2 (Panel B), royal directorship is negatively associated with the number of KAMs disclosed by the external auditor at a 99% confidence level (the coefficient is negative for 2SLS and GMM are 1.031 and 2.377, respectively). On the other hand, foreign directorship is positively associated with the number of KAMs disclosed by the external auditor at 99% confidence level, with coefficient 0.548 and 0.529 for 2SLS and GMM respectively. For family directorship the results are insignificant for 2SLS similar to the main model but significant for GMM indicating that family directorship is positively associated with the number of KAMs disclosed by the external auditor.

Table 3.10 Endogeneity test results

Panel A: Endogeneity test results for model 1

Model 1	**2SLS**	**GMM**
	kamNum	kamNum
l.kamNum		0.060***
		(7.80)
ownRoy	-1.526***	-1.827***
	(-3.77)	(-6.78)
ownFam	0.336**	0.685***
	(2.25)	(5.31)
ownForgn	0.537**	1.300***
	(2.34)	(6.85)
ownBlock	-0.286***	-0.443***
	(-2.60)	(-4.40)
audBig4	-0.570***	-0.385***
	(-9.87)	(-12.16)
audRot	-0.104*	-0.070***
	(-1.84)	(-4.81)
ln_firmSize	0.155***	0.101***
	(12.07)	(10.18)
firmAge	-0.000	-0.018***
	(-0.29)	(-8.78)
liquidity	-0.010*	-0.005***
	(-1.73)	(-3.48)
levg	-0.133**	-0.253***
	(-2.25)	(-23.33)
grw	-0.002	-0.022***
	(-0.07)	(-3.57)
roa	-0.819***	-0.259***
	(-3.08)	(-4.36)
year	included	included
country	included	included
industry	included	included
N	1602	1665

t statistics in parentheses ="* p<0.10 ** p<0.05 *** p<0.01"

Panel B: Endogeneity test results for model 2

Model 2	**2SLS**	**GMM**
	kamNum	kamNum
l.kamNum		0.034***
		(8.09)
royalDirRat	-1.031***	-2.377***
	(-3.27)	(-24.70)
familyDirRat	0.270	0.330***
	(1.55)	(5.41)
forgnDirRat	0.548***	0.529***
	(3.01)	(8.60)
boardSize	-0.001	0.007
	(-0.03)	(1.04)
indepDirRat	0.358***	0.171***
	(2.86)	(8.03)
boardDirectships	0.004**	-0.003***
	(2.18)	(-4.14)
audBig4	-0.678***	-0.457***
	(-10.19)	(-19.62)
audRot	-0.106*	-0.116***
	(-1.65)	(-21.01)
ln_firmSize	0.154***	0.138***
	(9.69)	(40.78)
firmAge	0.002	-0.014***
	(0.75)	(-12.80)
liquidity	0.017	0.011***
	(1.38)	(7.11)
levg	-0.049	-0.169***
	(-0.73)	(-24.17)
grw	-0.000	-0.029***
	(-0.01)	(-10.32)
roa	-0.928***	-0.368***
	(-2.96)	(-10.99)
year	included	included
country	included	included
industry	included	included
N	1247	1280

t statistics in parentheses ="* p<0.10 ** p<0.05 *** p<0.01"

3.5.5 Additional Analysis

3.5.5.1 Alternative measure of KAM

Following extant literature (Abdelfattah et al., 2021; Chen et al., 2023; Duboisée De Ricquebourg & Maroun, 2023; Rahaman et al., 2023), the total number of words used in KAM disclosures ($kamLeng$) is used as the dependent variable. Table 3.11 illustrates the regression analysis for both models. Several regressions (OLS, Tobit, Robust, and Poisson) are utilised to lower the standard error. The findings are generally consistent with the main model.

In model 1, royal ownership ($ownRoy$) continues to be steady with a coefficient that is negative and significant. Similarly, foreign ownership ($ownForgn$) remains consistent with a coefficient that is positive and significant. This indicates that firms owned by royalty generally have lower number of words in their KAMs, whereas firms with foreign ownership tend to have higher number words in their KAMs. In the Poisson regression only, Family ownership ($ownFam$) is positive and significant at 99% confidence interval. Poisson regression is used when the dependent variable is a count variable. The ownership control variable ($ownBlock$) remains negative and significant at 99%. This implies that firms with high concentration of block ownership tend to have fewer words in their KAMs.

In model 2, royal directors ($royalDirRat$) in all four regression tests are negative and significant at 99% confidence interval. This implies a very strong and negative relationship between the ratio of royal directors on the board and KAM length; in the presence of royal directors, KAM length is reduced. Similarly, foreign directors ($forgnDirRat$) is positive in all four regression tests and significant at 99% confidence interval. This indicates a very strong and positive relationship between the ratio of foreign directors on the board and KAM length; in the presence of foreign directors, KAM length increases. In the Poisson regression only, the family directorship ratio ($familyDirRat$) is positive and significant at 99% confidence interval. Poisson regression is used since the measured variable is a count variable. The governance control variable ($boardDirectships$) remains positive and significant at 99%.

Table 3.11 Alternative measure of KAM

Panel A: Alternative measure of KAM for model 1

Model (1)	OLS	Tobit	Robust	Poisson
	kamLeng	kamLeng	kamLeng	kamLeng
ownRoy	-141.426**	-141.426**	-141.426**	-0.470***
	(-2.26)	(-2.28)	(-2.51)	(-20.06)
ownFam	29.762	29.762	29.762	0.137***
	(1.27)	(1.28)	(1.28)	(16.99)
ownForgn	68.216*	68.216**	68.216*	0.267***
	(1.95)	(1.97)	(1.85)	(23.28)
ownBlock	-62.628***	-62.628***	-62.628***	-0.238***
	(-3.24)	(-3.27)	(-3.26)	(-36.80)
audBig4	-6.491	-6.491	-6.491	-0.014***
	(-0.70)	(-0.70)	(-0.74)	(-4.37)
audRot	-30.246***	-30.246***	-30.246***	-0.090***
	(-3.08)	(-3.10)	(-3.21)	(-26.81)
ln_firmSize	46.625***	46.625***	46.625***	0.151***
	(15.49)	(15.61)	(14.68)	(151.05)
firmAge	-0.289	-0.289	-0.289	-0.001***
	(-1.03)	(-1.04)	(-1.21)	(-5.98)
liquidity	-0.464	-0.464	-0.464	-0.007***
	(-0.49)	(-0.50)	(-0.77)	(-15.85)
levg	-11.817	-11.817	-11.817	-0.050***
	(-1.14)	(-1.15)	(-1.06)	(-12.57)
grw	-0.124	-0.124	-0.124	-0.000
	(-0.18)	(-0.19)	(-0.26)	(-1.57)
roa	-264.884***	-264.884***	-264.884***	-0.802***
	(-6.82)	(-6.87)	(-6.71)	(-67.40)
_cons	-667.149***	-667.149***	-667.149***	2.512***
	(-9.82)	(-9.90)	(-9.51)	(109.29)
year	included	included	included	included
country	included	included	included	included
industry	included	included	included	included
var(e.kamNum)		3.0e+04***		
		(32.31)		
N	2088	2088	2088	2088
R-sq	0.28		0.28	
adj. R-sq	0.27		0.27	

t statistics in parentheses ="* p<0.10 ** p<0.05 *** p<0.01"

Panel B: Alternative measure of KAM for model 2

Model (2)	OLS	Tobit	Robust	Poisson
	kamLeng	kamLeng	kamLeng	kamLeng
royalDirRat	-148.554***	-148.554***	-148.554**	-0.428***
	(-2.68)	(-2.71)	(-2.40)	(-24.35)
familyDirRat	10.060	10.060	10.060	0.036***
	(0.38)	(0.38)	(0.41)	(4.30)
forgnDirRat	89.216***	89.216***	89.216***	0.264***
	(3.05)	(3.08)	(2.75)	(30.32)
boardSize	2.412	2.412	2.412	0.006***
	(0.72)	(0.73)	(0.66)	(6.10)
indepDirRat	-12.010	-12.010	-12.010	-0.035***
	(-0.50)	(-0.51)	(-0.49)	(-4.64)
boardDirectships	0.922***	0.922***	0.922***	0.003***
	(3.20)	(3.24)	(2.97)	(33.21)
audBig4	-31.756***	-31.756***	-31.756***	-0.089***
	(-2.75)	(-2.78)	(-2.87)	(-24.94)
audRot	-24.748**	-24.748**	-24.748**	-0.071***
	(-2.15)	(-2.18)	(-2.27)	(-19.41)
ln_firmSize	48.651***	48.651***	48.651***	0.147***
	(12.04)	(12.17)	(11.08)	(123.88)
firmAge	-0.004	-0.004	-0.004	0.001***
	(-0.01)	(-0.01)	(-0.01)	(6.39)
liquidity	3.081	3.081	3.081*	0.007***
	(1.47)	(1.48)	(1.65)	(9.59)
levg	-0.755	-0.755	-0.755	-0.015***
	(-0.06)	(-0.06)	(-0.05)	(-3.58)
grw	-0.101	-0.101	-0.101	-0.001**
	(-0.14)	(-0.14)	(-0.24)	(-2.27)
roa	-298.580***	-298.580***	-298.580***	-0.840***
	(-6.45)	(-6.52)	(-6.26)	(-66.31)
_cons	-760.081***	-760.081***	-760.081***	2.408***
	(-8.40)	(-8.49)	(-7.75)	(87.38)
year	included	included	included	included
country	included	included	included	included
industry	included	included	included	included
var(e.kamNum)		3.3e+04***		
		(28.35)		
N	1608	1608	1608	1608
R-sq	0.28		0.28	
adj. R-sq	0.27		0.27	

t statistics in parentheses ="* p<0.10 ** p<0.05 *** p<0.01"

3.5.5.2 *Alternative measure for royal directors*

As an additional test for the main analysis in model 2, ($royalChariman$) is used as an alternative measure of ($royalDirRat$). Similar to Al-Hadi et al. (2016b), more than one measure of royal family members is relied upon in this research since firms disclosed the full family names of board members in their yearly governance report. Royal chairman ($royalChariman$) is measured as an indicator variable, equal to 1 if the firm has a board chair from a royal family, otherwise 0. The royal chairman is anticipated to possess greater authority in relation to the proportion of royal members in the previous model. Table 3.12 illustrates the regression analysis in model 2 with ($royalChariman$) as an alternative variable for ($royalDirRat$). Various regressions (OLS, Tobit, Robust, and Poisson) are employed to lower the standard error. The results remain considerably unchanged. Findings show that at 99% confidence intervals, there is a significant negative relationship between royal chairman and KAM disclosure by the external auditor. The coefficient between royal chairman and the number of KAMs disclosed by the external auditor is -0.280 which indicates that every additional unit of royal chairman decreases external auditor KAM disclosure by 0.280 units. The results imply a very strong negative relation between the presence of a royal chairman and the number of KAMs disclosed by the external auditor. This demonstrates the impact of having a monarch as the chairman of the board.

Table 3.12 Alternative measure for royal directors

Model (2)	**OLS**	**Tobit**	**Robust**	**Poisson**
	kamNum	kamNum	kamNum	kamNum
royalChariman	-0.280***	-0.280***	-0.280***	-0.121**
	(-3.04)	(-3.07)	(-2.90)	(-1.99)
familyDirRat	0.076	0.076	0.076	0.047
	(0.52)	(0.52)	(0.50)	(0.49)
forgnDirRat	0.375**	0.375**	0.375**	0.172
	(2.27)	(2.29)	(2.16)	(1.62)
boardSize	0.008	0.008	0.008	0.004
	(0.42)	(0.43)	(0.44)	(0.28)
indepDirRat	0.276**	0.276**	0.276**	0.134
	(2.04)	(2.06)	(2.01)	(1.51)
boardDirectships	0.004**	0.004**	0.004**	0.002
	(2.35)	(2.38)	(2.22)	(1.56)
Auditor control variables	included	included	included	included
Firm control variables	included	included	included	included
_cons	-0.934*	-0.934*	-0.934*	-0.673**
	(-1.83)	(-1.85)	(-1.83)	(-2.04)
year	included	included	included	included
country	included	included	included	included
industry	included	included	included	included
var(e.kamNum)		1.049***		
		(28.35)		
N	1608	1608	1608	1608
R-sq	0.24		0.24	
adj. R-sq	0.22		0.22	

t statistics in parentheses ="* p<0.10 ** p<0.05 *** p<0.01"

Auditor and firm control variables have been included but are not presented for purposes of brevity.

3.5.5.3 Country and Industry

In the breakdown by country, the dataset involves the six GCC countries. The results, as illustrated in Table 3.13, show that Royal ownership ($ownRoy$) in model 1 has a negative and significant effect at a 99% confidence level with the number of KAMs disclosed by the external auditor in Qatar and Bahrain. This could be attributed to the relatively high percentage of royal ownership in these countries, which are the highest among GCC countries. The average royal ownership is 41% and 15% with maximum values of 70% and 16% in Qatar and Bahrain respectively. Similarly, family ownership ($ownfam$) has a positive and significant association at a 90% confidence levels with the number of KAMs reported by the external auditor in KSA and Oman. This can be related to the high proportion of family ownership in these countries, which are the largest among GCC countries. The average family ownership is 17% and 12% with maximum values of 99.6% and 76% for KSA and Oman respectively. Finally, foreign ownership ($ownForgn$) in model 1 and foreign directors ($forgnDirRat$) in model 2 have a positive and significant association at 99% confidence level with the number of KAMs reported by the external auditor in UAE. The average values for ($ownForgn$) and ($forgnDirRat$), are 5.3% and 14% respectively, with maximum values of 70% and 100%.This could be attributed to the characteristics and nature of the stock exchanges in UAE, including Abu Dhabi Securities Exchange, Dubai Financial Market, and Nasdaq. Firms that are listed on the Nasdaq stock exchange have the ability to trade their securities on a global scale. This presents prospects for overseas investment and offers rapid international exposure and recognition.

The dataset is broken down into ten sectors based on the Global Industry Classification Standard (GICS). The results, as presented in Table 3.14, reveal that both royal ownership ($ownRoy$) in model 1 and royal directors ($royalDirRat$) in model 2 have negative and significant effects at a 90% confidence level with the number of KAMs disclosed by the external auditor in the Communication Services sector. This sector accounts for 6% of the sample, reflecting the nature of its functioning in the GCC region. On the other hand, both foreign ownership ($ownForgn$) in model 1 and foreign directors ($forgnDirRat$) in model 2 have a positive and significant association with the number of KAMs reported by the external auditor in the Industrials and Health Care sectors. The Industrials sector accounts for 20% of the sample, indicating its significant contribution to the economic landscape of the GCC. The positive findings in this sector are significant at a 99% confidence level, suggesting that the presence of foreign ownership/directors in the Industrials sector may necessitate more extensive disclosure of KAMs by the external auditor due to the industry's complexity and operational nature.

Table 3.13 Per country

Panel A: Model 1	**Qatar**	**Bahrain**	**Kuwait**	**Oman**	**UAE**	**KSA**
	kamNum	kamNum	kamNum	kamNum	kamNum	kamNum
ownRoy	-2.062***	-11.778***	-1.169*	2.956	-0.885	0.117
	(-2.63)	(-5.30)	(-1.82)	(0.86)	(-1.09)	(0.10)
ownFam	1.412	-1.726*	0.325	0.499*	-0.430	0.432*
	(1.41)	(-1.96)	(1.18)	(1.96)	(-0.92)	(1.70)
ownForgn	-1.076	-1.367**	-0.293	0.518	2.407***	0.753
	(-0.85)	(-2.53)	(-0.68)	(1.63)	(4.66)	(1.17)
ownBlock	0.753	-0.469	0.600***	-0.348	-1.788***	-0.454**
	(1.19)	(-1.25)	(2.71)	(-1.23)	(-5.19)	(-2.03)
Auditor control variables	Included	Included	Included	Included	Included	Included
Firm control variables	Included	Included	Included	Included	Included	Included
_cons	-4.519***	6.225***	-0.833	3.168***	-1.018	-2.602***
	(-2.85)	(3.62)	(-1.18)	(4.16)	(-0.86)	(-3.51)
year	Included	Included	Included	Included	Included	Included
industry	Included	Included	Included	Included	Included	Included
N	163	105	392	397	307	724
R-sq	0.53	0.67	0.23	0.27	0.45	0.26
adj. R-sq	0.44	0.59	0.18	0.23	0.40	0.24

Panel B: Model 2	**Qatar**	**Bahrain**	**Kuwait**	**Oman**	**UAE**	**KSA**
	kamNum	kamNum	kamNum	kamNum	kamNum	kamNum
royalDirRat	1.351**	-1.765	0.455	-0.851	-0.124	1.458*
	(2.21)	(-0.90)	(0.20)	(-0.36)	(-0.20)	(1.83)
familyDirRat	-2.665***	-0.614	0.591	0.841**	1.076**	0.103
	(-4.26)	(-0.15)	(1.10)	(2.44)	(2.30)	(0.45)
forgnDirRat	1.222*	-2.517**	-1.554	0.331	1.811***	-0.149
	(1.74)	(-2.25)	(-0.64)	(1.42)	(4.45)	(-0.34)
boardSize	-0.037	-0.001	-0.207**	-0.006	0.033	0.008
	(-0.68)	(-0.01)	(-2.13)	(-0.19)	(0.53)	(0.23)
indepDirRat	-0.064	1.206***	-0.389	-0.473**	0.042	0.482*
	(-0.15)	(3.09)	(-0.35)	(-1.99)	(0.14)	(1.81)
boardDirectships	-0.013*	-0.011	-0.005	-0.001	0.017**	0.002
	(-1.78)	(-1.12)	(-0.52)	(-0.09)	(2.45)	(0.94)
Auditor control variables	Included	Included	Included	Included	Included	Included
Firm control variables	Included	Included	Included	Included	Included	Included
_cons	-4.236**	4.785**	0.472	3.153***	-1.482	-2.753***
	(-2.35)	(2.17)	(0.30)	(4.10)	(-1.11)	(-3.33)
year	Included	Included	Included	Included	Included	Included
industry	Included	Included	Included	Included	Included	Included
N	127	89	97	309	269	717
R-sq	0.66	0.67	0.54	0.37	0.42	0.27
adj. R-sq	0.57	0.55	0.39	0.31	0.35	0.24

t statistics in parentheses ="* p<0.10 ** p<0.05 *** p<0.01"

Auditor and firm control variables have been included in both models but are not presented for purposes of brevity.

Table 3.14 Per industry

Panel A: Model 1	**Energy**	**Materials**	**Industrials**	**Consumer Staples**	**Consumer Discretionary**	**Health Care**	**Communication Services**	**Utilities**	**Information Technology**	**Real Estate**
	kamNum	kamNum	kamNum	kamNum	kamNum	kamNum	kamNum	kamNum	kamNum	kamNum
ownRoy	-78.092	-0.701	-1.263*	-0.119	-1.043	-0.076	-7.320*	16.882	0.000	-1.326*
	(-1.04)	(-0.33)	(-1.93)	(-0.09)	(-1.05)	(-0.02)	(-1.68)	(0.99)	(.)	(-1.89)
ownFam	2.907	0.407	0.153	0.440	0.521	-0.238	-2.785	-3.049***	5.764	-0.450
	(0.77)	(1.19)	(0.50)	(1.21)	(1.56)	(-0.32)	(-0.59)	(-3.23)	(1.75)	(-1.15)
ownForgn	-2.636	-0.019	1.175**	4.130**	0.054	4.887***	0.521	1.116**	1.807	-1.423
	(-1.46)	(-0.03)	(2.38)	(2.53)	(0.08)	(3.32)	(0.67)	(2.60)	(0.31)	(-1.63)
ownBlock	-0.297	-0.007	-0.619**	-0.381	-0.992***	-1.155	-0.741	1.382***	-3.381*	-0.054
	(-0.45)	(-0.03)	(-2.03)	(-1.06)	(-3.41)	(-1.19)	(-0.85)	(2.66)	(-2.29)	(-0.21)
Auditor control variables	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included
Firm control variables	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included
_cons	3.441	0.189	-3.753***	-0.229	-1.509	-2.876	-7.229***	-0.459	-7.096	-0.839
	(1.57)	(0.21)	(-3.13)	(-0.19)	(-1.29)	(-1.08)	(-4.29)	(-0.28)	(-1.55)	(-0.83)
year	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included
country	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included
N	65	374	415	256	321	83	118	117	25	314
R-sq	0.60	0.23	0.26	0.30	0.41	0.61	0.54	0.38	0.95	0.35
adj. R-sq	0.41	0.19	0.22	0.23	0.37	0.49	0.43	0.24	0.78	0.30

Panel B: Model 2	**Energy**	**Materials**	**Industrials**	**Consumer Staples**	**Consumer Discretionary**	**Health Care**	**Communication Services**	**Utilities**	**Information Technology**	**Real Estate**
	kamNum	kamNum	kamNum	kamNum	kamNum	kamNum	kamNum	kamNum	kamNum	kamNum
royalDirRat	3.897	2.177**	-0.028	2.954**	-4.915***	-0.172	-6.430*	5.752	27.295	0.421
	-0.65	-2.04	(-0.05)	-2.28	(-4.35)	(-0.13)	(-1.71)	-0.51	(.)	(0.53)
familyDirRat	3.757	0.124	-0.359	0.553	0.732*	-0.255	0.484	-0.235	-14.414	-1.182**
	-0.87	-0.37	(-1.07)	-1.45	-1.91	(-0.36)	-0.17	(-0.15)	(.)	(-2.04)
forgnDirRat	-1.813	-0.107	1.490***	0.632	0.118	1.782**	-3.103**	-0.14	0	0.877
	(-0.69)	(-0.18)	-4.14	-1.2	-0.29	-2.46	(-2.09)	(-0.25)	(.)	(0.95)
boardSize	0.225	-0.068	-0.161***	0.141**	0.078	0.103	-0.264	0.024	-4.624	0.143**
	-0.79	(-1.55)	(-3.48)	-2.45	-1.39	-0.62	(-1.43)	-0.38	(.)	(2.35)
indepDirRat	-2.193	-0.185	-0.12	-0.187	0.798**	0.823	0.179	0.656	8.159	0.596*
	(-1.65)	(-0.60)	(-0.38)	(-0.49)	-1.98	-1.07	-0.21	-0.62	(.)	(1.72)
boardDirectships	0.003	0.007*	0.004	-0.004	0.004	0.002	-0.005	-0.013	0.477	-0.003
	-0.17	-1.71	-1.16	(-0.78)	-0.85	-0.25	(-0.46)	(-1.29)	(.)	(-0.53)
Auditor control variables	Included	Included	Included	Included	Included	Included	Included	Included	Included	-0.796***
Firm control variables	Included	Included	Included	Included	Included	Included	Included	Included	Included	(-3.89)
_cons	-1.198	0.143	-2.752*	1.241	-1.424	-1.686	-8.102***	-5.413	52.927	-3.017***
	(-0.20)	-0.14	(-1.80)	-0.89	(-0.85)	(-0.49)	(-3.04)	(-1.15)	(.)	(-2.66)
year	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included
country	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included
N	47	317	333	209	263	74	80	83	13	189
R-sq	0.76	0.31	0.33	0.4	0.43	0.59	0.58	0.32	1	0.48
adj. R-sq	0.54	0.26	0.28	0.32	0.38	0.42	0.41	0.07	.	0.41

t statistics in parentheses ="* p<0.10 ** p<0.05 *** p<0.01"

Auditor and firm control variables have been included in both models but are not presented for purposes of brevity.

3.5.5.4 *Other: firm size, audit firm type, and covid period*

Table 3.15 presents the robustness check data using the sub-sampling method. The purpose of employing a sub-sampling test is to eliminate bias in the OLS regression results and to ascertain the reliability of the model (Camponovo et al., 2012; Fidler et al., 2006).

The mean for firm size is calculated as the natural logarithm of the firm's total assets. The sample is separated into two sets: large firms those with a natural logarithm of total assets comprising more than the mean of 18.5 and small firms comprising less than or equal to the mean. The purpose is to evaluate how ownership and directorship types could impact KAM disclosure by the external auditor while taking into account firm size. OLS regression is employed for both sets independently. In model 1, the results indicate that royal ownership for larger firms has a negative and significant correlation at 99% confidence intervals with the number of KAMs disclosed by the external auditor in comparison with royal ownership for smaller firms. On the other hand, foreign ownership for larger firms has positive and significant correlation at 99% confidence intervals with the level of KAMs reported by the external auditor in comparison to foreign ownership for smaller firms. In model 2, it is observed that foreign directorship in large firms is positive and significant at a 95% confidence interval with KAM reporting by the external auditor in comparison to foreign directorship in smaller firms. The findings suggest that both the significant level and the coefficient are greater when the firm size is larger than the average (18.5). The results could be attributed to the nature of large firms, since they are more prone to taking risks and more ready to engage in assertive financial reporting.

Similarly, the sample is split into two sets based on auditor type: Big Four audit firms and non-Big Four audit firms. This is to estimate how ownership and director types could influence KAMs reported by the external auditor when considering the auditor type. Royal owned ($ownRoy$) firms in model 1 and the ratio of royal directors ($royalDirRat$) in model 2 when audited by Big Four firms are negative and significant at 99% and 90% confidence intervals, respectively. This suggests that Big Four firms could be conservative and cautious when disclosing KAMs proportionate to the percentage of royal ownership or ratio of royal directors on the board. Moreover, family ownership ($ownFam$) and family directors ($familyDirRat$) when audited by Non-Big Four audit firms are positive and significant at 95% and 90% confidence intervals, respectively. When audited by non-Big Four audit firms, foreign ownership ($ownForgn$) firms are positive and significant at 99% confidence intervals with the dependent variable. This implies that non-Big Four audit firms disclose more KAMs when the firms are family or foreign owned. Finally, in line with previous studies (Hategan et al., 2022; Hegazy et al., 2022; Kend & Nguyen, 2022; Murphy et al., 2023), it is anticipated that the covid period could impact the of the results. Therefore, the sample is divided into two categories: covid period and non-covid period. Covid period is an indicator variable, 1= if audit period was during the time covid (2020-2021), otherwise 0. Overall, for the two models the significant level, the coefficient, and R2 values are smaller during the covid period. This indicates that covid period with its accompanied uncertainties weakened the relationship between the dependent and independent variables. This is since the COVID-19 outbreak had the potential to result in firm bankruptcies and the manipulation of earnings in a period of economic downturn and significant fluctuations in markets (Kend & Nguyen, 2022), especially since electronic mediums have been the primary source of communication during this period.

Table 3.15 Other additional tests: firm size, audit firm type and covid period

Panel A: Model 1	**Small Firms**	**Big Firms**	**audBig4==1**	**audBig4==0**	**covidPer==1**	**covidPer=0**
	kamNum	kamNum	kamNum	kamNum	kamNum	kamNum
ownRoy	-0.596	-1.406***	-1.267***	-0.842	-1.062*	-1.410***
	(-1.09)	(-2.85)	(-3.38)	(-0.87)	(-1.92)	(-3.00)
ownFam	0.169	0.248	0.162	0.440**	-0.110	0.545***
	(1.13)	(0.89)	(0.92)	(2.08)	(-0.58)	(2.95)
ownForgn	0.092	1.070***	0.178	1.647***	0.435	0.513*
	(0.40)	(2.79)	(0.84)	(3.04)	(1.46)	(1.91)
ownBlock	-0.157	-0.963***	-0.613***	-0.262	-0.376**	-0.415***
	(-1.14)	(-4.87)	(-4.47)	(-1.34)	(-2.34)	(-2.76)
Auditor control variables	Included	Included	Included	Included	Included	Included
Firm control variables	Included	Included	Included	Included	Included	Included
_cons	0.548	-2.697***	-1.312***	-1.113	-0.189	-1.870***
	(1.05)	(-3.02)	(-2.59)	(-1.61)	(-0.33)	(-3.55)
year	Included	Included	Included	Included	Included	Included
country	Included	Included	Included	Included	Included	Included
industry	Included	Included	Included	Included	Included	Included
N	1307	781	1217	871	796	1292
R-sq	0.19	0.33	0.29	0.24	0.20	0.25
adj. R-sq	0.17	0.30	0.27	0.21	0.17	0.24

Panel B: Model 2	**Small Firms**	**Big Firms**	**audBig4==1**	**audBig4==0**	**covidPer==1**	**covidPer=0**
	kamNum	kamNum	kamNum	kamNum	kamNum	kamNum
royalDirRat	-0.583	-0.349	-0.638*	-0.034	-0.073	-0.848**
	(-1.12)	(-0.83)	(-1.67)	(-0.06)	(-0.16)	(-2.00)
familyDirRat	0.194	-0.232	-0.145	0.393*	-0.477**	0.453**
	(1.05)	(-0.94)	(-0.68)	(1.75)	(-2.26)	(2.18)
forgnDirRat	-0.072	0.570**	0.315*	0.569	0.092	0.569***
	(-0.34)	(2.05)	(1.71)	(1.56)	(0.36)	(2.62)
boardSize	-0.024	0.044	0.057**	-0.096***	0.014	-0.002
	(-1.02)	(1.28)	(2.39)	(-2.98)	(0.51)	(-0.06)
indepDirRat	0.006	0.694***	0.242	0.152	0.252	0.346*
	(0.03)	(2.98)	(1.47)	(0.63)	(1.22)	(1.91)
boardDirectships	0.006**	0.002	0.001	0.008***	0.001	0.007***
	(2.08)	(0.69)	(0.56)	(2.94)	(0.26)	(3.11)
Auditor control variables	Included	Included	Included	Included	Included	Included
Firm control variables	Included	Included	Included	Included	Included	Included
_cons	1.769**	-2.211**	-1.535**	-1.415	-0.676	-1.581**
	(2.26)	(-2.30)	(-2.42)	(-1.51)	(-0.93)	(-2.25)
year	Included	Included	Included	Included	Included	Included
country	Included	Included	Included	Included	Included	Included
industry	Included	Included	Included	Included	Included	Included
N	884	724	936	672	629	979
R-sq	0.21	0.32	0.28	0.24	0.20	0.24
adj. R-sq	0.18	0.29	0.25	0.20	0.16	0.21

t statistics in parentheses ="* p<0.10 ** p<0.05 *** p<0.01"
Auditor and firm control variables have been included in both models but are not presented for purposes of brevity

3.6 Conclusion

ISA 701 requires external auditors to disclose KAMs. These are the most significant matters and risks in the audit requiring professional judgment in relation to complex and subjective matters. Our study shows that both ownership structure and director type influence KAM reporting by the external auditor in the GCC. This research investigates the association between ownership structure (royal, family, and foreign) as well as board director types (royal, family, and foreign) and the level of KAMs disclosed by the external auditor. The study applied to 430 non-financial listed firms in the six GCC countries from 2016 until 2021.

The findings show a strong negative association between royal ownership and the number of KAMs disclosed by the external auditor. They also show a positive association for both family and foreign ownerships. This implies that external auditors disclose fewer KAMs in the presence of royal owners, suggesting the latter's aversion to negative attention that may follow the disclosure of significant and complex matters. The regression results for royal ownership remain negative and significant at a 99% confidence interval for all regression models used (OLS, Tobit, Robust, and Poisson) including robustness checks that control for endogeneity. The results for family ownership indicate that external auditors disclose more KAMs. This contradicts with the expectation of a negative relationship rooted in agency related issues. The findings for foreign ownership, however, were consistent with the expectation that foreign investors require more disclosure and transparency to address information asymmetry due to their separation from management.

The findings regarding governance structure (type of directors on the board) show a negative association between royal directors and the number of KAMs disclosed by the external auditor. There was also a strong negative association between royal chairman (alternative measure for royal directors) and the number of KAMs disclosed by the external auditor. The regression results for royal chairman remain negative and significant for all regression models used (OLS, Tobit, Robust, and Poisson). Results for foreign directors indicate a strong positive association between presence on the board and the number of KAMs disclosed by the external auditor. The regression results for foreign directors remain positive and significant for all models used (OLS, Tobit, Robust, and Poisson) including robustness checks that control for endogeneity. No evidence was found for an association between family directors on the board and the number of KAMs disclosed by the external auditor.

Concerning the additional analysis conducted for alternative measure of KAM where the dependent variable was altered from the number of KAMs disclosed to the length of KAMs, findings were generally consistent with the main models. Royal ownership and directors were significant and negatively associated with KAM length, whereas foreign ownership and directors were significant and positively associated with KAM length. Moreover, the results from the additional tests conducted for firm size and auditor type generally aligned with the main model for large firms and Big Four audit firms. The Covid period weakened the association between the dependent and independent variables as it reduced the significant level, the coefficient, and R2 results considering the risks and uncertainties during this period.

This study has implications for recent auditing reforms mandating KAM disclosure. It informs audit firms and regulators of potential differences in audit reporting based on audit client ownership structure and board representation. It also assists regulators and helps policymakers assess regulatory changes and audit reform. Finally, this study attracts the attention of investors, shareholders, board members, regulators, and scholars affected by this recent auditing reform.

Though this paper applies rigorous methods to investigate the relationship between ownership structure, corporate governance (director types), and KAMs it also has several limitations. These must be acknowledged in the interest of future research opportunities. First, data and regulatory limitations constrained this research to non-financial listed firms in the GCC region. As such, the findings would not be appropriate to financial firms. Future research could seek to examine KAMs in the GCC region for financial listed companies. Second, further research can consider additional ownership or director types in the GCC that may impact KAM disclosure by the external auditor such as government ownership or institutional ownership and their corresponding directors on the board. Future research could also study the impact of ownership structure on KAM disclosure in other regions (developed or developing) to support the generalisation of outcomes. This is especially desirable since this is the first study to explore such a relationship. Finally, in acknowledgement of the limited number of cross-country studies in developing economies, more studies are recommended to understand the results for regions sharing similar cultures, beliefs, legal systems, and corporate governance structures, especially that mandatory KAM disclosure has become global.

<u>Chapter 4</u>

Essay 3

Audit Partner Tenure and Key Audit Matters in the Gulf Cooperation Council: The Moderating Effect of Culture

Abstract

This study investigates the relationship between audit partner tenure and the reporting of Key Audit Matters (KAMs) and whether the Hofstede cultural dimensions effect this relationship. This study is based on a data sample collected from 456 non-financial firms across all six Gulf Cooperation Council (GCC) countries during the 2016–2021 period. The findings offer strong evidence that partner tenure is positively associated with KAMs disclosure. Moreover, regression results for partner tenure remain positive and significant across all regression models used, including robustness checks that control for endogeneity. The study also found that long-tenured partners disclose KAMs with more detail and produce more readable audit reports, and, interestingly, found that long-tenured auditors tend towards boilerplate reporting. The findings on the effect of Hofstede culture moderators suggest that the relationship between partner tenure and KAMs is relatively high when power distance and uncertainty avoidance are moderating factors, while the relationship is relatively low when individualism is considered. There was no evidence on the moderating role of masculinity. The study provides fresh insight into the extended audit reporting literature on the factors that can influence the disclosure of KAM such as partner tenure and cultural values.

Keywords*:* key audit matters; extended audit reporting; audit partner tenure; Hofstede; national culture; Gulf Cooperation Council (GCC).

4.1 Introduction

Extended Audit Reporting (EAR) has been introduced by standard setters and regulators as an enhancement to the audit reporting model with the aim of reducing information asymmetry and improving transparency (Mock et al., 2013; Vanstraelen et al., 2012). In 2015, the International Auditing and Assurance Standards Board (IAASB) required the adoption of the International Standard of Auditing (ISA) 701 to include the disclosure of Key Audit Matters (KAMs), a form of EAR. KAMs are defined as the most significant matters and risks that require an auditor's professional judgement and attention, with specific respect to complex, challenging, and subjective matters. The purpose of the newly required disclosures is to improve communicative value and enhance the decision usefulness of audit reports.

ISA 701 was adopted and implemented by Gulf Cooperation Council (GCC) countries in 2016 and, in the case of Saudi Arabia, in 2017. The GCC was established in 1981 to promote economic collaboration and development among the six Arab states bordering the Persian Gulf: The Kingdom of Saudi Arabia (KSA), The Sultanate of Oman, The United Arab Emirates (UAE), The State of Kuwait, The State of Qatar, and The State of Bahrain. The culture of this region generally displays strong social ties with a significant appreciation for family and personal relations, hierarchical structures, and religion (Baatwah, 2023 et al.; Haniffa & Hudaib, 2007; Patai, 1952). Although GCC countries share several common features distinct to the region – all six are monarchies whose populations are mostly Arab Muslims with similar customs, traditions, and laws – this study treats each member of the GCC individually since they each differ in degree of cultural values (Akhter et al., 2023; At-Twaijri & Al-Muhaiza, 1996). The GCC countries have high Gross Domestic Product (GDP) per capita, a very high Human Development Index, and are largely considered oil-rich countries. This economic wealth has attracted audit partners to the region as well as provided an opportunity for the GCC region to utilise their expertise in audit reporting.

This study is motivated by the recent developments in audit reforms mandating the reporting of KAMs in audit reports. This is to improve disclosure, strengthen oversight and safeguard shareholders. The purposes of this paper are twofold. First, it will examine the relationship between partner tenure and KAMs. Second, it will explore the moderating effect of Hofstede's national culture dimensions, namely the impact that power distance, individualism, masculinity, and uncertainty avoidance have on the relationship between partner tenure and KAMs. Current EAR literature has not investigated tenure at an audit partner level. However, tenure at the audit firm level has been examined with diverse results (Elshafie, 2023; Hussin et al., 2022; Pinto & Morais, 2019; Rahaman & Karim, 2023). There is an inadequate body of knowledge concerning the factors that influence the disclosure of KAMs using data from the GCC. Moreover, earlier literature concerning extended audit reporting has covered a limited number of countries in the GCC, such as Oman, the UAE, and Bahrain (Al Lawati & Hussainey, 2022; Baatwah, 2023; Baatwah et al., 2022; Barghathi et al., 2021; Mah'd & Mardini, 2022). Other GCC countries such as KSA, Kuwait and Qatar are yet to be explored. To address this gap, this research is the initial attempt to explore KAMs across all six GCC countries. The rationale for selecting national culture dimensions as moderators between partner tenure and audit disclosure is that the variations in cultural values across countries can substantially affect the accounting and auditing practices (Haniffa & Cooke, 2002; Khlif, 2016; Neu, 1992). Moreover, differences in workplace behaviour can be explained by cultural differences (e.g. Gray, 1988; Hofstede, 1980). Therefore, this study aims to use the variations in cultural values across countries to explain the differences in the behaviour of long-tenured auditors towards the disclosure of KAMs. Furthermore, Hofstede's national culture dimensions are selected based on their wide utilisation in the disclosure and auditing literature (Chan et al., 2003; Gray & Vint, 1995; Hope, 2003; Hope et al., 2008; Jaggi & Low, 2000; Zarzeski, 1996). The study also responds to Bédard et al. (2019) and Pinto & Morais (2019) calls for further research into the impact that national culture has on auditors' behaviour with regard to EAR reporting.

The six countries comprising the GCC offer an ideal context for this study. First, the GCC represents six developing countries whose markets are rapidly growing and flourishing (Al-Shammari et al., 2008). Second, the ISA 701 standard is established for use in countries that have adopted ISA all over the world, regardless of their culture or the degree of their economic development. In the GCC region, corporate governance principles and practices are unique and distinct, in view of the complexities of their institutional and cultural contexts compared to those in other developing and developed economies (Baydoun et al., 2013; Bley & Chen, 2006). Third, the majority of the GCC countries are considered central locations in the region for international trade, as they made significant efforts to expand their economies and attract foreign investments to reduce petroleum dependence (Al-Matari et al., 2021; Al Ani & Chavali, 2023). This internationalisation has exposed listed firms to more scrutiny from regulators and international investors concerned with governance, transparency, accountability, objectivity, and reporting of significant risks (Abu-Nassar & Rutherford, 1996; Al-Hadi et al., 2016a; Al-Hadi et al., 2016b).

The process of judgement and choice is complex as it relies on differing components, methods, and tasks (Einhorn & Hogarth, 1981). Audit partners are entrusted to apply their judgements when determining KAMs. The ISA 701 standard offers a description of KAMs and outlines the procedures that can be used to identify KAMs, and the issues communicated to those charged with governance. However, ISA 701's standard does not completely indicate how KAMs are selected or the exact issues that are required to be disclosed. Its principle-based approach takes into consideration the most significant issues and risks of material misstatement in audits due to their complex nature and subjectivity, depending on both context and the audit partner's professional assessment. This paper utilises Hogarth's (1980) decision behaviour theory to measure the effect that tenure has on an audit partner's judgement and choice with regard to KAM reporting.

With respect to variability in audit outcomes, literature is oftentimes concerned with audit partner idiosyncrasies (Lennox & Wu, 2018), suggesting additional insights into KAM disclosures. It is assumed that partner attributes – particularly tenure – and the moderating role of culture are key drivers of the level of KAMs reported. The recently implemented ISA 700 standard requires the disclosure of engagement partner names, which promotes accountability and transparency, thereby prompting partners to be more attentive. Moreover, it has opened new avenues for further investigation, such as the impact of age, tenure, race, ethnicity, social ties, ethics, and joint audit participation. Furthermore, researchers are currently studying whether partner-specific attributes such as gender (Abdelfattah et al., 2021; Bepari et al., 2022; Boonlert-U-Thai & Suttipun, 2023; Hussin et al., 2022; Wuttichindanon & Issarawornrawanich, 2020), rotation (Chen et al., 2023; Duboisée De Ricquebourg & Maroun, 2023; Lin & Yen, 2022), and industry specialisation (Bepari et al., 2022; Y. Liu et al., 2022) affect KAM disclosure. This study delves into the effect of tenure, an attribute that has not been explored at the partner level on KAM reporting. Longer auditor–client relationships are known to have a negative impact on audit quality (Carey & Simnett, 2006; Ye et al., 2011) as the established relationship can compromise the independence and objectivity of reports, resulting in partners disclosing fewer KAMs in order to sustain their relationships. However, longer auditor–client relationships have also been shown to have a positive impact on audit quality (Baatwah, 2016; Chi et al., 2017; Manry et al., 2008) as partners accumulate knowledge about their clients and clients' industry (Lennox & Wu, 2018) resulting in more KAMs being disclosed. Moreover, long-tenured partners may be more inclined to take their reputations into account and exert efforts to identify significant matters as KAMs (Rahaman & Karim, 2023). Overall, the diverse results could reflect the various institutional and cultural features and differences of the jurisdictions examined.

The cultural dimensions of GCC's setting are characterised by high power distance and uncertainty avoidance and low individualism (Gray, 1988; Hofstede, 1980). High power distance countries are associated with a concentration of power at the highest level, hierarchical structures, and limited information exchange. Past studies (S. J. Gray & Vint, 1995; Orij, 2010) have documented that power distance is negatively associated with accounting disclosures. The society in the region is considered less individualistic (more collectivist), with members demonstrating the importance of commitment, loyalty, and cohesiveness as a group. Literature further documents that individualism is positively associated with disclosures (Gray & Vint, 1995; Hope, 2003; Jaggi & Low, 2000; Zarzeski, 1996) as members look after themselves and less secretive. High uncertainty avoidance countries are associated with being uncomfortable in ambiguous environments and more cautious about taking risks.

Empirical studies document that uncertainty avoidance is, in general, associated with improved disclosure practices (Gray & Vint, 1995; Hope, 2003; Khlif, 2016).

Using a hand-collected data sample of 2,415 firm-year observations (456 firms) from listed non-financial firms in the GCC region from 2016-2021, this paper argues that partner tenure is positively associated with KAM reporting. Consistent with expectations, evidence is offered that longer tenure influences partner disclosure of more KAMs. This suggests that audit partners will gradually acquire more knowledge about the audit client and expertise about its industry over the long tenure period. Furthermore, extant research suggests that the marketplace appreciates partners who possess industry expertise (Lennox & Wu, 2018). These findings support Hogarth's (1980) theory that client-specific knowledge and industry expertise attained over a long tenure period can assist partners in determining whether a matter is a significant risk or not, resulting in the identification of more KAMs. It is also posited that Hofstede's cultural dimensions on power distance and uncertainty avoidance strengthen the relationship between partner tenure and KAMs, while individualism weakens the relationship. It is unclear whether the extent of masculinity can moderate the relationship. In alignment with assumptions, evidence is provided that an increase in power distance and uncertainty avoidance as moderators is associated with an increase in the relationship between the partner tenure and KAMs, while an increase in individualism is associated with a decrease in the relationship. Evidence is not provided for the role of masculinity as a moderator as the results were insignificant. As an additional analysis, this study also examines whether Hofstede's cultural dimensions influence the disclosure of KAMs. The finding indicate that power distance and uncertainty avoidance are associated with less KAM reporting, while individualism is associated with more KAM reporting. Results are consistent with existing literature in the context of disclosures (Gray & Vint, 1995; Hope, 2003; Jaggi & Low, 2000; Orij, 2010; Zarzeski, 1996) and with Gray’s (1988) hypothesis that societies with higher power distance and high levels of uncertainty avoidance are secretive, resulting in less disclosure, and individualist societies are less secretive, resulting in more disclosure.

This study provides several contributions to complement existing literature and offers insights into previous studies on both developed and developing economies. First, it presents unprecedented evidence regarding the impact of tenure at the partner level on KAM reporting, an area that has not been explored in prior research. Specifically, it indicates that long-tenured partners disclose greater numbers of KAMs, more detailed KAMs, and more readable KAMs, which can enhance audit reporting. Interestingly, long-tenured partners are also associated with boilerplate reporting. Second, this study is the first attempt to assess the content of KAMs (type and theme) in the GCC region, filling a considerable gap in related literature. Third, first-time evidence is provided on how national culture values, using Hofstede's cultural dimensions, can influence the behaviour of long-tenured partners’ KAM reporting. Thus, addressing calls for further investigation towards the influence of culture on auditors' identification of KAMs. Fourth, as part of the additional analysis, strong evidence is provided to support existing literature on the positive impact of audit firm tenure on KAM reporting. Fifth, this study offers novel findings that reflect the context of auditing and accounting in the GCC region. It is important that listed firms have proper disclosures in their audit reports. This is to provide transparency and protect shareholders, considering the complexities of their institutional and cultural contexts that can potentially impact KAM disclosure by external auditors. Lastly, the study reveals how partner tenure can drive audit reporting, therefore allowing regulators and scholars to better assess the implications of long-tenured partners on audit reporting and consequently produce regulations and research accordingly.

The paper progresses as follows: Section 2 reviews the extant literature and develops hypotheses. Section 3 covers research design, including empirical models, sample selection, and distribution. Section 4 discusses the empirical results, including multivariate analysis, endogeneity, robustness checks, and additional analysis. Section 5 concludes the paper and outlines the limitations and avenues for future research.

4.2 Theoretical framework, literature review and hypotheses development

4.2.1 The theoretical framework

The present study considers the effect of audit partner tenure (auditor characteristics) on the level of KAMs disclosed in audit reports. Similar to previous archival literature concerning external auditor characteristics as a determinant of KAM reporting (Bepari et al., 2022; Ferreira & Morais, 2020; Honkamäki et al., 2022; Pinto & Morais, 2019; Sierra-García et al., 2019), Hogarth's (1980) theory is utilised on information assimilation for reasoning and decision making. Hogarth's theory is used to describe how audit partners exercise judgements to determine which significant matters and risks should be considered KAMs in their audit reports. Hogarth's theory states that judgements are determined by the person, the task environment where decisions are made, and the resulting outcome. In the context of extended audit reporting, the audit partner represents the person, while the decision to report or not report a significant risk as a KAM represents the outcome. Culture may be interpreted as the environment wherein the client operates, affecting accounting practices and disclosures (Hope, 2003; Mueller et al., 1991).

Einhorn & Hogarth's (1981) behavioural decision theory is concerned with the process of judgement and choice. In their estimation, actual decision-making stems from the negotiation of conflicting goals or criteria. Accordingly, it is assumed that the inherent conflict in taking action (reporting a KAM or not) is distinct from the inherent conflict in judgement (deeming a matter to be a significant risk or not) because action implies greater commitment. For example, KAM reporting could be guided by an audit partner's perception of an economic trade-off between exposure to litigation risk and reputation loss (viz. for not reporting a significant risk as a KAM) versus the expected cost of losing a client (Pinto & Morais, 2019). The possibility that reporting too many KAMs could reduce their signalling significance may further add to the decision conflict (Sierra-García et al., 2019). To resolve this, audit partners can address the trade-off through avoidance or compensatory strategies. Applying conflict avoidance implies that audit partners will either not report or postpone reporting a significant risk as a KAM. Avoidance is assumed when the audit partner foresees less liability or a cost of not reporting. Applying compensatory strategies implies that the auditor confronts the conflict and takes action through compromise (e.g., trade-offs and accommodations). For instance, if they are under pressure to take action instead of avoiding action.

4.2.2 Key audit matters literature in the GCC

Previous literature on EAR focused on three out of the six GCC countries, namely Oman, UAE, and Bahrain (Al Lawati & Hussainey, 2022; Baatwah, 2023; Baatwah et al., 2022; Barghathi et al., 2021; Mah'd & Mardini, 2022). The existing literature on EAR in the GCC mostly concentrated on examining the relationship between auditor characteristics, mainly their type and KAM disclosure. Baatwah (2023) archival study on Oman examined the KAMs for Big Four audit companies and confirmed heterogeneity in both the number and style of KAMs disclosed, both at the firm and partner levels. Mah'd & Mardini's (2022) archival cross-country study on the Middle East, covering Oman, the UAE, Bahrain, and Jordan, observed a significant positive association between auditor types (Big Four and non-Big Four firms) with KAM disclosure in the majority of sampled countries. Barghathi et al. (2021) conducted a qualitative study in UAE using semi-structured interviews with auditors from both Big Four and non-Big Four firms. Their findings confirmed from Big Four auditors that KAM decreased earnings management, as demonstrated by their reluctance to conceal earnings management attempts. Contrarily, non-Big Four firms conveyed concerns that pressure to suppress earnings management is connected to the possibility of losing the audit client. These findings could be related to the cultural context of the Gulf region and the comparatively weak authority possessed by non-Big Four firms.

4.2.3 Audit partner tenure and key audit matters

Past studies have weighed the impact of audit firm characteristics on the level of KAMs disclosed in audit reports. These characteristics include: type (Bepari et al., 2022; Dwyer et al., 2024; Ferreira & Morais, 2020b; Honkamäki et al., 2022; Kend & Nguyen, 2020; Rahaman et al., 2023; Sierra-García et al., 2019), rotation/switch (Boonlert-U-Thai & Suttipun, 2023; Chen et al., 2023; Duboisée De Ricquebourg & Maroun, 2023; Suttipun, 2022), and tenure (Elshafie, 2023; Hussin et al., 2022; Pinto & Morais, 2019; Rahaman & Karim, 2023). While these studies predominantly focused on audit firm attributes, emerging research is now delving into how audit partner-specific characteristics such as gender (Abdelfattah et al., 2021; Bepari et al., 2022; Boonlert-U-Thai & Suttipun, 2023; Hussin et al., 2022; Wuttichindanon & Issarawornrawanich, 2020), rotation/switch (Chen et al., 2023; Duboisée De Ricquebourg & Maroun, 2023; Lin & Yen, 2022), and industry specialisation (Bepari et al., 2022; Y. Liu et al., 2022), might influence KAM disclosure.

This paper considers the effect of partner-level tenure on the number of KAMs disclosed. Per the author's knowledge, tenure has not been explored as an audit partner characteristic in EAR literature thus far. However, audit firm tenure has been examined in prior literature with mixed results. Neither Elshafie's (2023) study of the USA nor Pinto & Morais' (2019) cross-country study (UK, France, and Netherlands) found evidence to suggest that audit firm tenure affected KAM disclosure. Using data from Bangladesh, Rahaman & Karim (2023) found that audit firm tenure is positively associated with KAM disclosure. By contrast, Hussin et al. (2022) found a negative association between firm tenure and KAM disclosure in Malaysia. These cultural inconsistencies suggest that a multitude of aspects (e.g., regulations, cultural or legal factors) influence these relationships.

Prior research examining tenure at an audit firm level has revealed that, in general, longer auditor–client relationships improve audit quality (e.g., Myers et al., 2003; Johnson et al., 2002; Stanley & DeZoort, 2007). Since the audit partner is considered the principal connector between firms and clients, literature has explored the influence of tenure on audit quality at the partner level. Research documents mixed evidence. From one perspective, a longer tenure period could impair audit quality since the key attributes of an audit partner, such as independence and objectivity, may be compromised when the audit partner maintains a close bond with client management. The audit partner could potentially report fewer KAMs at the request of the client to maintain this close relationship. Carey & Simnett (2006) and Ye et al. (2011), using data from Australia, documented that longer auditor–client relationships lowered an audit partner's tendency to issue going concern opinions, indicating lower audit quality. By contrast, from another perspective, longer tenure may improve audit quality given the accumulation of an audit partner's client-specific knowledge and industry expertise over the long tenure period (Lennox & Wu, 2018). This accumulated knowledge has the potential to help audit partners identify more significant risks as KAMs. Moreover, auditors with longer tenure may be more inclined to take their reputation and their audit firm's reputation into account. One may surmise that longer-term auditors therefore exert more effort to improve audit quality, and hence disclose more KAMs (Rahaman & Karim, 2023). Furthermore, Manry et al. (2008) and Chi et al. (2017), using data from the USA and Taiwan respectively, documented that longer auditor–client relationships are associated with smaller discretionary accruals, indicating improvements in audit quality over time. In the same vein, Baatwah's (2016) study of Oman reported that long-tenured audit partners are positively associated with issuing modified audit opinions and are negatively associated with high discretionary accruals, thus indicating higher audit quality. To conclude, the mixed results of existing literature may reflect the diverse institutional attributes of the jurisdictions investigated. Considering the above discussion, the positive relationship between audit partner tenure and KAM reporting generally outweighs the negative association. Therefore, it is hypothesised that:

H1. Ceteris paribus, there is a positive relationship between audit partner tenure and KAMs disclosure.

4.2.4 Hofstede's cultural dimensions and the association between audit partner tenure and key audit matters

Geert Hofstede defines culture as, "the collective programming of the mind which distinguishes the members of one human group from another (Hofstede, 1980, p.25)." In the 1970s, Hofstede developed an attitude survey of IBM personnel using a database covering approximately 66 different countries. Country-based indices relating to dimensions of national culture were established. Hofstede (1980) originally offered four cultural dimensions to distinguish between countries, including power distance, individualism, masculinity, and uncertainty avoidance. Hofstede (1991) later suggested long-term distance as a fifth dimension. Cultural consequences and differences in values among nations can considerably influence the conduct of accounting and auditing (Haniffa & Cooke, 2002; Khlif, 2016; Neu, 1992). Moreover, prior literature documents that national culture can affect the decision of auditor choice (Hope et al., 2008), the level of audit detected accounting errors (Chan et al., 2003), differences in accounting standards (Ding et al., 2005) and accounting disclosures (Gray & Vint, 1995; Hope, 2003; Jaggi & Low, 2000; Zarzeski, 1996). As such, in this study, in addition to using Hogarth's theory of judgement and choice as the theoretical framework, Hofstede's national cultural framework is utilised to examine the role of Hofstede's cultural dimensions in the relationship between audit partner tenure and KAM disclosure. Professional judgement and decision-making are further influenced by social-cognitive elements (Salter et al., 2013), with cultural values and characteristics being effective drivers that can influence a person's cognition, personality, and behaviour (Markus & Kitayama, 1991). In this regard, it is attempted to integrate the variations across cultures by explaining the behaviour of long-tenured auditors with regard to the disclosure of KAMs.

In the next sections, hypotheses are developed about the moderating role of the original four Hofstede cultural dimensions on the relationship between audit partner tenure and KAM reporting.

4.2.4.1 Power distance

Hofstede (1980) defines power distance as the distribution of power in a society where members accept that power is unequally distributed. Accordingly, cultures associated with high power distance display a concentration of power, vertical communication, limited information exchange, and hierarchical decision-making structures where members of society are more conservative. On the other hand, cultures associated with low power distance display dispersion of power, horizontal communication, unbounded information exchange, and decentralisation in decision-making.

Empirical studies reported mixed findings in relation to power distance and its effect on disclosure. Gray & Vint (1995) and Orij (2010) found that high power distance is negatively associated with accounting disclosure and corporate social disclosure, respectively. This is consistent with the expectation that high power distance countries will disclose less information. High power distance cultures are attributed with being hierarchically structured, less dispersion of power to preserve inequalities, and restricted information sharing, suggesting a negative association with disclosure. Conversely, Jaggi & Low (2000), using data from 28 civil and common law countries, found that power distance is positively associated with disclosure, while Zarzeski (1996) documented that power distance is not significantly associated with disclosure.

In the field of auditing, Chan et al. (2003), using data from 22 countries, examined the influence of national culture on accounting errors detected by audits and found that the possibility of overriding controls is greater in cultures with high power distance, resulting in an increase in material misstatements and accounting errors. This is consistent with Haskins (1987) who reported that when power is concentrated among members, there is a higher risk of material misstatements in the financial statements. In high power distance countries, accounting systems are mostly viewed as instruments to explain their decision-making by depicting their desired image (Hofstede 2001, 383) which, in turn, encourages the circumvention of existing controls.

In consideration, it is surmised that an increase in power distance can be associated with a positive relationship between audit partner tenure and KAM reporting, as the elevated level of power distance could influence long-tenured audit partners to disclose more KAMs as they gain more credibility and authority over time. This allows auditors to better identify risks as KAMs since high power distance is attributed to higher fraud risk exposure and a higher possibility of overriding existing controls. Therefore, it is hypothesised that:

$\boldsymbol{H_{2a}. Ceteris\ paribus, power\ distance\ positively\ moderates\ the\ association\ between\ partner\ tenure\ and\ KAMs\ disclosure}$

4.2.4.2 Individualism

Hofstede (1980) defines individualism as the extent to which individuals are detached from groups. Individualistic societies promote individual independence and decision-making through individual efforts, endeavours, and achievements. In collectivistic societies, however, individuals are considered a part of an integrated group that focuses on collective and shared interests.

Empirical results report that individualism has a positive influence on both accounting (Gray & Vint, 1995; Hope, 2003; Jaggi & Low, 2000; Zarzeski, 1996) and corporate social disclosures (Orij, 2010). In individualistic cultures, individuals are independent and less secretive, suggesting a positive effect on disclosures. In the field of auditing, Chan et al. (2003) found that individualism is positively associated with a high level of accounting errors, as individualism in the workplace is attributed to low staff loyalty and higher staff turnover. Thus, frequent staff changes result in an increase in accounting errors due to a lack of experience. Further studies report mixed results on the impact of individualism on corruption. Kimbro (2002) found that individualism is positively associated with corruption because individuals are expected to look after themselves and prioritise their own needs and goals in individualistic cultures. Mihret (2014), however, did not find a significant association with fraud risk.

Grounded on the above discussion, it is assumed that individualism as a moderator is associated with weakened relationships between audit partner tenure and KAM reporting. This is because the region is collectivistic, where individuals value being in strong unified groups and prioritise common interests. Long-tenured partners who care more about themselves, their own goals, and their independence are not expected to fit within the group over the length of their tenure. Therefore, it is hypothesised that:

$\boldsymbol{H_{2b}. Ceteris\ paribus, individualism\ negatively\ moderates\ the\ association\ between\ partner\ tenure\ and\ KAMs\ disclosure}$

4.2.4.3 Masculinity

Hofstede's (1980) cultural dimension of masculinity reflects virtues that are considered as being masculine, including assertiveness, strength, remunerations, achievements, and competitiveness, whereas virtues including modesty, care, reliance, and the settlement of conflict by compromise and negotiation are considered feminine.

Empirical evidence indicates mixed findings regarding the influence masculinity has on disclosure. Hope (2003) and Jaggi & Low (2000) report that masculinity is negatively associated with disclosure, while Zarzeski (1996) reports that masculinity is positively associated with disclosure, stating that individuals in masculine societies are more likely to value accomplishments, recognition, competition, and settlement of conflict by demonstrations of strength or fighting. Other scholars regard the connection between masculinity and disclosures as doubtful or less significant (e.g., Gray, 1988).

Considering the above discussion, it is unclear whether the extent of masculinity positively or negatively moderates the relationship between audit partner tenure and KAMs disclosure. Therefore, this hypothesis is non-directional as follows:

$\boldsymbol{H_{2c}. Ceteris\ paribus, masculinity\ moderates\ the\ association\ between\ partner\ tenure\ and\ KAMs\ disclosure}$

4.2.4.4 Uncertainty avoidance

Hofstede (1980) cultural dimension of uncertainty avoidance reflects a society's acceptance of ambiguity, unfamiliar risks, and uncertainty. It shows the degree to which members of society feel comfortable in ambiguous environments. Workplace cultures characterised by high uncertainty avoidance attempt to prevent uncertainty through formal and informal rules, internal regulations, and strict laws.

Empirical studies report that uncertainty avoidance is, in general, associated with enhanced disclosure practices (Khlif, 2016). For example, Gray & Vint (1995) report that uncertainty avoidance positively impacts disclosure. Similarly, Jaggi & Low (2000) and Hope (2003) report that uncertainty avoidance is associated with a higher degree of disclosure in civil law countries where law systems are founded on written legislation and specify a baseline standard (as opposed to common law countries where law systems are based on judicial decisions and professional judgement).

Reflecting on the discussion above, in uncertainty-avoiding cultures like those of GCC countries, individuals tend to be hesitant, less tolerant, and uncomfortable with change. Individuals in workplace environments with a high level of uncertainty avoidance are more hesitant to take risks and more cautious about loss (Zhang et al., 2016). Therefore, it is expected that long-tenured partners will disclose more KAMs to avoid litigation risk and are also more prone to consider their reputation, especially after ISA 7001 mandated the disclosure of auditors' identities in audit reports. From this, it is hypothesised that:

$\boldsymbol{H_{2d}. Ceteris\ paribus, uncertainty\ avodiance\ positively\ moderates\ the\ association\ between\ partner\ tenure\ and\ KAMs\ disclosure}$

4.3 Research Design

4.3.1 Empirical Model

Table 4.1 contains a list and description of the variable measurements for the models used in this study. Regression analyses are used to evaluate the association between measured and independent variables. The regression model employed to assess the hypotheses utilises non-financial listed firms in the GCC from the period 2016-2021. Partner tenure is used as the main independent variable. To the best of the author's knowledge, partner tenure has not been studied as a main independent variable in EAR literature to date. The first model H_1examines the relationship between audit partner tenure and KAMs reporting. The models H_{2a} to H_{2d} evaluate the moderating effects of each of the four Hofstede national cultural dimensions (power distance H_{2a}, individualism H_{2b}, masculinityH_{2c}, and uncertainty avoidance H_{2d}) on the relationship between audit partner tenure and KAMs reporting.

Table 4.1 List and description of variables

Abbreviated Name	Full Name	Description
Measured variable		
kamNum	KAMs number	Number of KAMs disclosed by the audit partner.
Independent variable		
EA_partTen	Partner tenure	Number of years of audit partner tenure (base year is 2016).
Control variables		
EA_audLag	Audit report lag	The time lag between fiscal year of a company and its audit report date.
EA_partnFem	Female partner	Indicator variable, 1= if audit partner is a female, otherwise 0.
EA_audBig4	Auditor type	Indicator variable, 1= if firm is audited by a Big 4 audit firm, otherwise 0.
EA_GCO	Going concern	Indicator variable, 1= if there is a going concern related matter disclosed in the audit report, otherwise 0.
ln_firmSize	Firm size	Natural logarithm of firm total assets.
loss	Loss	Indicator variable, 1= if firm reported a net loss for the year, otherwise 0.
liquid	Liquidity	Ratio of total current assets to total current liabilities.
roa	Return on assets	Ratio of operating profit to total assets.
levg	Leverage	Ratio of total debt to equity.
Country-level variables		
*Inst_gdp**	GDP per capita	Gross domestic product (in U.S. dollars).
*Inst_inflation**	Inflation	The annual ratio changes in the price to the average consumer obtaining goods and services.
*H_PD_Cntr***	Power distance	The extent of power distribution in the society which includes the degree of equality/inequality between individuals.
*H_IDV_Cntr***	Individualism	The extent to which individuals are detached from groups.
*H_MAS_Cntr***	Masculinity	The extent to which masculine society values competitiveness, strength and assertiveness.
*H_UAV_Cntr***	Uncertainty avoidance	The extent of society's acceptance and tolerance with regards to uncertainty and ambiguity.

*Source: Data is obtained from the World Bank Development Indicators
**Source: Data is obtained from Hofstede Insights.

4.3.1.1 Research model specification for audit partner tenure

The first set of hypotheses evaluates the relationship between audit partner tenure and the number of KAMs reported. Longer tenure supports the audit partner in accumulating client-specific knowledge and industry expertise over the long tenure period (Lennox & Wu, 2018), as contextual knowledge could help audit partners identify more risks as KAMs. Therefore, it is assumed that there is a positive relationship between the independent variable (audit partner tenure) and the dependent variable (the level of KAMs disclosed). To test this hypothesis, Model 1 is employed to associate the number of KAMs disclosed with audit partner tenure, along with other auditor and client-related determinants. Thus, the main regression model is recognised as follows:

$$kamNum = \beta_0 + \beta_1 EA\_partTen + \beta_2 EA\_audLag + \beta_3 EA\_partnFem + \beta_4 EA\_audBig4 + \beta_5 EA\_GCO + \beta_6 ln\_firmSize + \beta_7 loss + \beta_8 liquid + \beta_9 roa + \beta_{10} levg + \beta_{11} Inst\_gdp + \beta_{12} Inst\_inflation + yearFixedEffects + industryFixedEffects + \varepsilon \quad (1)$$

Following previous EAR research (Abdelfattah et al., 2021; Bédard et al., 2019; Bepari et al., 2022; Duboisée De Ricquebourg & Maroun, 2023; Rahaman & Karim, 2023; Sierra-García et al., 2019;), the dependent variable is measured in Model 1 (*kamNum)* as the total number of matters reported by an external auditor in the KAM section of the audit report.

In line with audit partner tenure studies conducted by Manry et al. (2008), Baatwah's (2016) and Ye et al. (2011), ($EA\_partTen$) represents the number of years of audit partner tenure. Audit partner names are hand-collected from audit reports from all six GCC countries. The recently implemented ISA 700 mandate has facilitated the recognition of audit partner identification.

Furthermore, Model 1 applies several control variables used in auditing literature and EAR research to convey auditor and client-related attributes. External auditor-specific variables include audit report lag (EA_audLag), gender ($EA\_partnFem$), auditor type ($EA\_audBig4$), and going concern opinion (EA_GCO). Following Al-mulla & Bradbury (2022), Baatwah et al. (2022), Bédard et al. (2019), Elsayed et al. (2023), Li & Luo (2023), Lin & Yen (2022) and Reid et al., (2019), (EA_audLag) represents the time lag between the fiscal year of a company and its audit report date. Similar to Abdelfattah et al. (2021), Bepari et al. (2022), Hussin et al. (2022) and Wuttichindanon & Issarawornrawanich (2020), ($EA\_partnFem$) is an indicator variable equal to 1 if the audit partner is a female, otherwise 0. Like Abdelfattah et al. (2021), Chang et al. (2022), Elmarzouky et al. (2023), Velte (2018) and Velte (2020), auditor type ($EA\_audBig4$) is an indicator variable equal to 1 if the firm is audited by a Big 4 audit firms, otherwise 0, and going concern opinion (EA_GCO) is an indicator variable equal to 1 if there is a going concern related matter disclosed in the audit report, otherwise 0.

Client-specific variables involve firm size ($ln\_firmSize$) natural logarithm of the firm's total assets, ($loss$) is indicator variable, 1= if the firm reported a net loss for the year, otherwise 0, liquidity ($liquid$) ratio of total current assets to total current liabilities, return on assets (roa) ratio of operating profit to total assets, leverage ($levg$) ratio of total debt to equity. Extant literature regards larger leveraged firms running at a loss as inclined to aggressive financial reporting and consequently disclose more KAMs (Abdelfattah et al., 2021; Camacho-Miñano et al., 2023; Pinto & Morais, 2019; Sierra-García et al., 2019).

Country-level variables are controlled in line with previous studies conducted in the GCC region (Al-Hadi et al., 2015, 2019; Bley & Saad, 2011; Boubakri et al., 2021; Elamer et al., 2020; Gerged et al., 2021; Martinez-Garcia et al., 2022). GDP per capita ($Inst\_gdp$) is used as gross domestic product in US dollars and inflation ($Inst\_inflation$) is used as the annual ratio changes in the price to the average consumer obtaining goods and services. The source of these variables is obtained from World Bank Development Indicators. Moreover, year and industry-fixed effects are included as controls for variation in the number of KAMs reported across the six years and ten industries.

4.3.1.2 Research model specification for Hofstede's cultural dimensions moderators

The second set of hypotheses assesses the moderating effects of the four original Hofstede national cultural dimensions (power distance H_{2a}, individualism H_{2b}, masculinity H_{2c}, and uncertainty avoidance H_{2d}) on the relationship between audit partner tenure and KAMs reporting. Hofstede's cultural model is adopted to measure the country's cultural values. Differences in cultural values across countries can significantly affect accounting and auditing practices (Haniffa & Cooke, 2002; Khlif, 2016; Neu, 1992). Past literature provides empirical evidence for using Hofstede's cultural values in the disclosure (Gray & Vint, 1995; Hope, 2003; Jaggi & Low, 2000; Zarzeski, 1996) and auditing contexts (Chan et al., 2003; Hope et al., 2008). Therefore, it is attempted to integrate the differences across national cultures to explain the actions of long-tenured auditors towards the disclosure of KAMs.

This paper considers four out of Hofstede's five cultural values for their moderating roles in the association between audit partner tenure and KAMs: power distance, individualism, masculinity, and uncertainty avoidance. The long-term orientation cultural value is not included because of a lack of GCC country-level data. The scores for each of the Hofstede cultural values range from 0 to 100. Changes in cultural values are expected as countries advance economically, which can potentially impact a country's index on Hofstede's dimensions (Beugelsdijk et al., 2015; Orij, 2010). Similar to (Akhter et al., 2023), the scores for each of the four Hofstede cultural values are obtained from the Hofstede Insights website (refer to Appendix 3). This is mainly due to the availability of scores for GCC countries as well as recently updated scores for Arab countries.

The cultural value of power distance (H_PD_Cntr) focuses on the degree of power distribution and hierarchy between members within society, where high power distance implies that less powerful members acknowledge and assume power is unequally distributed. The cultural value of individualism (H_IDV_Cntr) reflects the extent to which individuals are detached from groups, whereas individualistic societies encourage independence and individual achievements. The cultural value of masculinity (H_MAS_Cntr) captures the virtues that are considered as being masculine, such as assertiveness, strength, and competitiveness, in contrast to virtues that are regarded as being feminine, such as modesty, care, and reliance. Finally, the cultural value of uncertainty avoidance (H_UAV_Cntr) captures the degree of acceptance of uncertainty within a society, where nations with high uncertainty avoidance are considered more risk-averse in comparison to nations with low uncertainty avoidance where people feel more comfortable in unfamiliar environments.

Similar to the first model for H_1, the main dependent and independent variables in the second model set (H_{2a} to H_{2d}), (*kamNum)* is measured as the number of KAMs disclosed by an external auditor in an audit, and ($EA\_partTen$) as the number of years of audit partner tenure. Moreover, the same control variables used in the first model are employed to express auditor and client-related characteristics.

To test the hypotheses, Model 2 is employed to assess the impact of each of Hofstede's original four cultural values on the relationship between audit partner tenure and KAMs reporting, along with other auditor and client-related determinants. Thus, the regression models are determined as follows:

Power distance cultural value moderates the association between audit partner tenure and KAMs.

$$kamNum = \beta_0 + \beta_1 EA\_partTen + \beta_2 H\_PD\_Cntr + \beta_1 c.EA\_partTen\#\beta_2 c.H\_PD\_Cntr + \beta_3 EA\_audLag + \beta_4 EA\_partnFem + \beta_5 EA\_audBig4 + \beta_6 EA\_GCO + \beta_7 ln\_firmSize + \beta_8 loss + \beta_9 liquid + \beta_{10} roa + \beta_{11} levg + \beta_{12} Inst\_gdp + \beta_{13} Inst\_inflation + yearFixedEffects + industryFixedEffects + \varepsilon \quad \text{2 (a)}$$

Individualism cultural value moderates the association between audit partner tenure and KAMs.

$$kamNum = \beta_0 + \beta_1 EA\_partTen + \beta_2 H\_IDV\_Cntr + \beta_1 c.EA\_partTen\#\beta_2 c.H\_IDV\_Cntr + \beta_3 EA\_audLag + \beta_4 EA\_partnFem + \beta_5 EA\_audBig4 + \beta_6 EA\_GCO + \beta_7 ln\_firmSize + \beta_8 loss + \beta_9 liquid + \beta_{10} roa + \beta_{11} levg + \beta_{12} Inst\_gdp + \beta_{13} Inst\_inflation + yearFixedEffects + industryFixedEffects + \varepsilon \quad \text{2 (b)}$$

Masculinity cultural value moderates the association between audit partner tenure and KAMs.

$$kamNum = \beta_0 + \beta_1 EA\_partTen + \beta_2 H\_MAS\_Cntr + \beta_1 c.EA\_partTen\#\beta_2 c.H\_MAS\_Cntr + \beta_3 EA\_audLag + \beta_4 EA\_partnFem + \beta_5 EA\_audBig4 + \beta_6 EA\_GCO + \beta_7 ln\_firmSize + \beta_8 loss + \beta_9 liquid + \beta_{10} roa + \beta_{11} levg + \beta_{12} Inst\_gdp + \beta_{13} Inst\_inflation + yearFixedEffects + industryFixedEffects + \varepsilon \quad \text{2 (c)}$$

Uncertainty avoidance cultural value moderates the association between audit partner tenure and KAMs.

$$kamNum = \beta_0 + \beta_1 EA\_partTen + \beta_2 H\_UAV\_Cntr + \beta_1 c.EA\_partTen\#\beta_2 c.H\_UAV\_Cntr + \beta_3 EA\_audLag + \beta_4 EA\_partnFem + \beta_5 EA\_audBig4 + \beta_6 EA\_GCO + \beta_7 ln\_firmSize + \beta_8 loss + \beta_9 liquid + \beta_{10} roa + \beta_{11} levg + \beta_{12} Inst\_gdp + \beta_{13} Inst\_inflation + yearFixedEffects + industryFixedEffects + \varepsilon \quad \text{2 (d)}$$

4.3.2 Sample selection and distribution

Data has been hand-collected for 456 non-financial firms listed in the GCC stock exchanges (refer to Appendix 1 for the list of sampled firms' names). Data gathering, involved downloading auditor reports for KAM disclosure and auditor-related control variables, and financial statements for firm-specific control variables. A quality control review was performed for all variables preceding to data analysis. The data sample period covers 2016-2021 for Oman, UAE, Kuwait, Qatar, and Bahrain, as KAM disclosure became required in these countries from 2016 as per ISA 701. The sample for KSA is from 2017-2021 as ISA 701 was adopted in 2017.

Table 4.2 Panel 1-A demonstrates that there were initially 4,235 firm-years observation. The sample excludes financial firms (1,719 firm-year observations) due to variations in regulation, delisted, suspended, or liquidated firms (59 firm-year observations), and dual-listed firms in other GCC stock exchanges (42 firm-year observations). This provides a final sample of 2,415 firm-year observations from 456 companies in the GCC.

Table 4.2 Panel 1-B shows the sample distribution by country and year. KSA represents the maximum firm-year observations with 830 (34%), whereas Kuwait, Oman, and UAE represent 548 (23%), 409 (17%), and 356 (15%) firm-year observations respectively. Qatar and Bahrain represent the lowest numbers of firm-year observations at 166 (7%) and 106 (4%) respectively.

Table 4.2 Panel 1-C shows the sample breakdown per industry based on the Global Industry Classification Standard (GICS) (refer to Appendix 2 for the details). The highest industry is Industrials with 472 (20%) firm-year observations, followed by Materials with 407 (17%). The lowest industry is Information Technology with 39 (2%) firm-year observations.

Table 4.2 Sample selection and distribution

Panel A: Sample selection

GCC Country	KSA	UAE	Kuwait	Oman	Qatar	Bahrain	Grand Total
Total Population	1150	926	944	679	286	250	4235
Total Exclusion (Less)	(320)	(570)	(396)	(270)	(120)	(144)	(1820)
Financials	(315)	(510)	(378)	(252)	(120)	(144)	(1719)
Delisted, suspended/ liquidated	(5)	(30)	(6)	(18)	-	-	(59)
Dual Listing	-	(30)	(12)	-	-	-	(42)
Total Observations	**830**	**356**	**548**	**409**	**166**	**106**	**2415**

Panel B: Sample distribution country and year

GCC Country	2016	2017	2018	2019	2020	2021	Total	Percent
Kingdom of Saudi Arabia	-	146	158	165	180	181	830	34%
State of Kuwait	90	91	91	92	92	92	548	23%
Sultanate of Oman	66	67	68	69	69	70	409	17%
United Arab Emirates	52	53	57	63	65	66	356	15%
State of Qatar	26	27	27	28	29	29	166	7%
Kingdom of Bahrain	17	17	18	18	18	18	106	4%
Total Observations	**251**	**401**	**419**	**435**	**453**	**456**	**2415**	**100%**

Note: KSA did not have any firm year observations in 2016 as KAM was endorsed in 2017 by SOCPA.

Panel C: Sample distribution industry and year

Industry	2016	2017	2018	2019	2020	2021	Total	Percent
Industrials	54	78	79	82	89	90	472	20%
Materials	28	71	73	77	79	79	407	17%
Consumer Discretionary	54	66	67	69	70	70	396	16%
Real Estate	35	60	62	64	66	66	353	15%
Consumer Staples	31	47	53	54	57	57	299	12%
Communication Services	16	22	23	24	24	24	133	6%
Utilities	15	21	22	23	23	24	128	5%
Health Care	8	18	19	20	22	22	109	5%
Energy	8	14	14	14	14	15	79	3%
Information Technology	2	4	7	8	9	9	39	2%
Total Observations	**251**	**401**	**419**	**435**	**453**	**456**	**2415**	**100%**

Table 4.3 Panel A shows the distribution of KAMs by unique audit partner and country. A total of 4,792 KAMs were disclosed by 221 unique partners within the final sample's 2415 firm-year observations. KSA represents the highest number of disclosed KAMs reported (1782, 37%) and the greatest number of unique partners (71, 32%). Bahrain represents the lowest number of disclosed KAMs reported (209, 4%) and the smallest number of unique partners (17, 8%).

Panel B shows the distribution of KAMs by industry and generally follows a similar distribution of firm-year observations by industry as Table 4.3 Panel C. The average number of newly added KAMs (1.66) is almost equivalent to the average number of dropped KAMs (1.49). The number of KAMs added is highest in 2016 as it is the year that ISA 701 mandated the disclosure of KAMs in the audit reports. Similarly, the number of KAMs added is also high in 2017 as it is the year KSA adopted ISA 701 and because KSA had the highest firm-year observations in the data sample (34%). In later years, the average number of dropped KAMs is slightly higher than the number of newly added KAMs.

Panel C demonstrates the types of all 4,792 manually collected KAMs in the data sample. Following Lennox et al. (2023), KAMs are categorised into two types: entity-level KAMs (EL-KAMs), which are concerned with the overall audit client risks, and account-level KAMs (AL-KAMs), which are concerned with accounting entries and particular items on the financial statements. From the comparison between both types, AL-KAMs (4,431, 92.5%) are predominantly being reported compared to EL-KAMs (361, 7.5%). This is in line with the audit partners concentrating on the financial statement accounts, which display the inherent risks to the audit client. There is a total of 861 revenue recognition related KAMs, which represent the most commonly disclosed KAMs with 18% overall and 19.4% amongst AL-KAMs. This is consistent with past literature (Bepari et al., 2022; Camacho-Miñano et al., 2023; Kend & Nguyen, 2020; Pérez et al., 2021; Sierra-García et al., 2019) since revenue recognition can involve complex contract arrangements, extended commitments, and considerable management judgement and estimation. Amongst EL-KAMs, IFRS (General) related KAMs are the most commonly disclosed (74, 20.5%), which relates to the first-time adoption of IFRS in KSA. This was followed by going concern related KAMs (56, 15.5%) for firms in financial distress, with half of these firms recording losses in the same year as the going concern related KAM disclosure.

Table 4.3 Distribution of KAMs

Panel 3-A: Distribution of KAMs by unique audit partner and country

GCC Countries	2016				2017				2018				2019				2020				2021				Total Unique Partners	% Partners	# KAMs (Partner name not disclosed)	Total KAMs	% KAMs
	# Unique Partners	% Unique Partners	# KAMs	% KAMs	# Unique Partners	% Unique Partners	# KAMs	% KAMs	# Unique Partners	% Unique Partners	# KAMs	% KAMs	# Unique Partners	% Unique Partners	# KAMs	% KAMs	# Unique Partners	% Unique Partners	# KAMs	% KAMs	# Unique Partners	% Unique Partners	# KAMs	% KAMs					
Kingdom of Saudi Arabia					46	36%	410	45%	51	37%	344	40%	47	35%	355	43%	40	30%	335	41%	40	31%	336	43%	**71**	32%	2	**1782**	37%
State of Kuwait	16	22%	164	30%	24	19%	153	17%	21	15%	151	18%	23	17%	143	17%	22	17%	146	18%	21	16%	139	18%	**32**	14%	0	**896**	19%
United Arab Emirates	24	33%	145	27%	23	18%	138	15%	26	19%	144	17%	31	23%	121	15%	29	22%	132	16%	27	21%	133	17%	**46**	21%	0	**813**	17%
Sultanate of Oman	15	21%	147	27%	18	14%	126	14%	20	14%	130	15%	18	13%	109	13%	20	15%	117	14%	20	16%	98	12%	**39**	18%	39	**766**	16%
State of Qatar	9	12%	51	9%	10	8%	51	6%	10	7%	59	7%	10	7%	61	7%	12	9%	55	7%	11	9%	49	6%	**18**	8%	0	**326**	7%
Kingdom of Bahrain	9	12%	35	6%	8	6%	35	4%	11	8%	31	4%	7	5%	36	4%	9	7%	35	4%	9	7%	33	4%	**17**	8%	4	**209**	4%
Total	**73**	**100%**	**542**	**100%**	**128**	**100%**	**913**	**100%**	**138**	**100%**	**859**	**100%**	**135**	**100%**	**825**	**100%**	**132**	**100%**	**820**	**100%**	**128**	**100%**	**788**	**100%**	**221**	100%	**45**	**4792**	**100%**

Note 1: KSA did not have any firm-years observations in 2016 as KAM was endorsed in 2017 by SOCPA.
Note 2: There are 28 Observations (45 KAMs) where the partner's name has not been disclosed.
Note 3: The "Total unique Partners" is not the sum of partners from different years as the same partners may be repeated across the years. Moreover, two partners conducted audits in two different countries.

Panel 3-B: Distribution of the total number of KAMs disclosed, added and dropped by industry and year

Industry sector	**KAM_NUM (Total number of KAMs)**								**KAM_ADD (Total number of KAMs added)**								**KAM_DROP (Total number of KAMs dropped)**							
	2016	2017	2018	2019	2020	2021	Total	%	2016	2017	2018	2019	2020	2021	**Total**	%	2016	2017	2018	2019	2020	2021	**Total**	%
Industrials	127	194	188	162	169	171	1011	21%	127	86	69	49	52	50	433	21%	0	19	75	75	45	48	262	21%
Materials	60	168	149	147	146	143	813	17%	60	128	76	49	58	31	402	19%	0	20	95	52	59	34	260	20%
Real Estate	112	133	138	121	124	121	749	16%	112	39	46	19	25	12	253	12%	0	18	41	36	22	15	132	10%
Consumer Discretionary	68	130	121	130	111	102	662	14%	68	85	40	42	30	27	292	14%	0	24	49	33	49	36	191	15%
Consumer Staples	70	118	109	110	101	90	598	12%	70	69	37	44	24	21	265	13%	0	21	46	43	33	32	175	14%
Communication Services	44	60	62	61	64	59	350	7%	44	22	17	14	22	5	124	6%	0	6	15	15	19	10	65	5%
Utilities	31	32	32	31	39	39	204	4%	31	13	17	11	18	11	101	5%	0	12	17	12	10	11	62	5%
Health Care	14	43	32	36	35	41	201	4%	14	33	15	16	13	16	107	5%	0	4	26	12	14	10	66	5%
Energy	17	32	26	24	26	28	153	3%	17	21	12	13	12	7	82	4%	0	6	18	15	10	5	54	4%
Information Technology	4	7	9	8	9	14	51	1%	4	4	4	3	2	7	24	1%	0	1	2	4	1	2	10	1%
Total	**547**	**917**	**866**	**830**	**824**	**808**	**4792**	**100%**	**547**	**500**	**333**	**260**	**256**	**187**	**2083**	**100%**	**0**	**131**	**384**	**297**	**262**	**203**	**1277**	**100%**
Average	**2.30**	**2.51**	**2.27**	**2.17**	**2.08**	**1.85**	**2.20**		**2.30**	**2.62**	**1.52**	**1.38**	**1.49**	**1.30**	**1.66**		**-**	**1.34**	**1.68**	**1.58**	**1.40**	**1.43**	**1.49**	

Panel 3-C: Distribution of KAMs based on their type and theme

Entity KAM	Total	Entity KAM %	Overall KAM %	Description of classification
IFRS (General)	74	20.5%	1.5%	First time adoption of IFRS in KSA (2017 and 2018 observations).
Going concern	56	15.5%	1.2%	Related to going concern, discontinued operation and disposal of subsidiary.
Acquisition & joint venture	45	12.5%	0.9%	Related to acquisition, business combination, merger and joint venture.
Financial statements	41	11.4%	0.9%	Matters related to major changes to or restatement of financial statements.
Controls	40	11.1%	0.8%	Related to internal control gaps or audit issues.
Tax	34	9.4%	0.7%	Related to recognition or measurement of tax and zakat.
Related party	33	9.1%	0.7%	Related party issues, management fees, and subsidiary matters.
Litigation	23	6.4%	0.5%	Realised and unrealised risks from litigation and legal damages.
IT	7	1.9%	0.1%	Risks in relation to the company's information technology assets.
Inflation & translation adjustment	7	1.9%	0.1%	Financial statement adjustments related to currency inflation and/or translation.
Covid	1	0.3%	0.0%	Related to business risks arising from covid-19 and Corona.
Total Entity KAM	**361**	**100%**	**7.5%**	

Account Level KAM	Total	Account KAM %	Overall KAM %	Description of classification
Revenue recognition	861	19.4%	18.0%	Related to revenue, sales, and discounts.
Investment	775	17.5%	16.2%	Related to investments, convertible bonds, and assets held for sale.
Property, Plant, & Equipment	559	12.6%	11.7%	Related to property, plant, equipment as identified by keywords project, lease, capitalize, fixed asset, useful life, depreciate, machine.
Inventories	471	10.6%	9.8%	Related to inventory.
Intangibles	379	8.6%	7.9%	Related to intangible assets as identified by key words intangible, stripping, goodwill, copyright, intellectual property, patent, and right of use.
Impairment of Assets	369	8.3%	7.7%	Related to impairment of assets, both current and non-current.
Receivables	304	6.9%	6.3%	Matters related to accounts and trade receivables.
Valuation	260	5.9%	5.4%	Valuation issues with the following key words: value, discount, allowance, recoverability, reassessment, rebate, measurement, recognition, net profit, credit loss, cost of completion and provision.
Financial Assets	235	5.3%	4.9%	Equity, financial instrument, financial asset, derivative, investment, marketable security, share, receivable.
IFRS (Specific)	125	2.8%	2.6%	IFRS 1, 3, 9, 10, 11, 15, 16, and 28; IAS 8, 16, 17, 29, and 39.
Liabilities	92	2.1%	1.9%	Loan, debt, borrowing, employee benefit, obligation, claim, refinance, defer and liability.
Supplier Rebates	1	0.0%	0.0%	Related to contractor, supplier, vendor and rebate.
Total Account Level KAM	**4431**	**100%**	**92.5%**	
Total KAM	**4792**		**100%**	

Panel 3-C describes the themes that reflect the 23-items codification of the collected KAMs data categorised into two types: entity-level KAMs (EL-KAMs) and account-level KAMs (AL-KAMs). The type and theme of the KAM are shown in the first column. The following columns display the total number of KAMs reported, percentages for EL-KAMs and AL-KAMs, and percentages for the overall percentage of KAMs. KAMs are classified into 11 themes in the EL-KAMs section and into 12 themes in the AL-KAMs section. For the classification of themes, it is referred to studies by (Camacho-Miñano et al., 2023; Sierra-García et al., 2019).

4.4 Empirical Results

4.4.1 Descriptive statistics results

Table 4.4 presents the descriptive statistics of the variables used in the regression models. For the dependent variable ($kamNum$), the greatest number reported is seven, while the lowest is zero where audit partners did not report any KAMs. The mean value is 1.984 with a standard deviation of 1.21. This shows that audit partners reported an average of approximately two KAMs. This is consistent with the number of KAMs disclosed by audit partners in most developing countries (Baatwah, 2023; Baatwah et al., 2022; L. Chen et al., 2023; W. Liu et al., 2022; Wuttichindanon & Issarawornrawanich, 2020). Concerning the main independent variable ($EA\_partTen$), the duration of tenure during the period of the sample is between 1 and 6 years. The mean value for ($EA\_partTen$) is almost two years 1.785 with a standard deviation of 0.994.

External auditor control variables (EA_audLag), which is also called audit delay, range from 6 days to a maximum of 799 days, with 70 days mean. Female engagement partners represent 1.1% of the sample, which is not surprising for the GCC context. A further 57% of the sample is audited by Big Four audit firms. Going concern decisions are issued to 5.7% of the firms. For the firm characteristics control variables, the mean value for firm size is 18.89 (the natural logarithm of total assets), leverage 130.1%, liquidity 248.7%, loss 24%, and return on assets 2.8%. Overall, the descriptive summary shows substantial diversity between sample firms.

For country-level variables, the mean per capita value ($Inst\_gdp$) is \$28702.194 with an inflation rate ($Inst\_inflation$) of 118.2%. The high values reflect the GCC countries' wealth of natural resources and economic growth. The four Hofstede cultural dimensions power distance, individualism, masculinity and uncertainty avoidance have mean scores of 74, 39, 39, and 70 respectively. The scores are considered high for power distance and uncertainty avoidance, and low for individualism and masculinity.

Table 4.4 Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
kamNum	2415	1.984	1.208	0	7
EA partTen	2387	1.785	.994	1	6
EA audLag	2396	70.624	39.471	6	799
EA partnFem	2376	.011	.102	0	1
EA audBig4	2415	.571	.495	0	1
EA GCO	2415	.057	.231	0	1
ln firmSize	2415	18.887	2.314	11.834	27.929
loss	2415	.24	.427	0	1
liquid	2415	2.487	4.635	.005	87.463
roa	2415	.028	.166	-4.498	1.334
levg	2415	1.301	4.788	-65.078	160.039
Inst gdp	2323	28702.194	12194.091	16707.623	66838.357
Inst inflation	2349	1.182	1.862	-2.54	3.445
H PD Cntr	2415	74.649	12.31	46	93
H IDV Cntr	2415	39.869	10.719	18	52
H MAS Cntr	2415	39.66	13.414	12	55
H UAV Cntr	2415	70.951	6.8	64	80

Table 4.5 Pairwise correlation

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
(1) kamNum	1.000																
(2) EA_partTen	0.000	1.000															
(3) EA_audLag	-0.162***	-0.028	1.000														
(4) EA_partnFem	-0.074***	0.030	0.046**	1.000													
(5) EA_audBig4	-0.120***	0.009	-0.076***	-0.062***	1.000												
(6) EA_GCO	0.012	-0.014	0.104***	0.010	-0.077***	1.000											
(7) ln_firmSize	0.174***	0.089***	0.032	-0.056***	0.327***	-0.087***	1.000										
(8) loss	0.075***	0.033*	0.132***	0.029	-0.172***	0.303***	-0.190***	1.000									
(9) liquid	-0.070***	-0.016	-0.063***	0.145***	-0.109***	-0.081***	-0.168***	-0.019	1.000								
(10) roa	-0.071***	-0.017	-0.010	-0.026	0.136***	-0.132***	0.158***	-0.372***	0.022	1.000							
(11) levg	-0.042**	0.007	0.075***	-0.005	0.005	0.136***	0.016	0.073***	-0.074***	-0.003	1.000						
(12) Inst_gdp	0.024	0.071***	-0.105***	0.009	0.255***	-0.013	0.366***	-0.080***	0.013	-0.001	-0.013	1.000					
(13) Inst_inflation	-0.076***	0.000	0.011	0.034*	-0.019	0.006	-0.082***	-0.011	0.015	0.026	0.015	-0.105***	1.000				
(14) H_PD_Cntr	-0.076***	0.062***	0.079***	0.085***	0.040*	-0.003	0.164***	0.012	0.053***	-0.007	0.038*	0.534***	0.169***	1.000			
(15) H_IDV_Cntr	0.079***	-0.081***	0.067***	-0.089***	-0.170***	0.016	-0.072***	0.024	-0.074***	0.026	-0.023	-0.776***	-0.069***	-0.786***	1.000		
(16) H_MAS_Cntr	0.074***	0.102***	0.096***	0.020	0.143***	-0.034*	0.532***	-0.040**	0.029	0.037*	-0.027	0.612***	0.002	0.413***	-0.554***	1.000	
(17) H_UAV_Cntr	-0.165***	0.038*	-0.160***	0.091***	0.065***	-0.007	-0.408***	-0.001	0.084***	-0.054***	0.041**	0.298***	0.105***	0.472***	-0.726***	-0.089***	1.000

*** $p<0.01$, ** $p<0.05$, * $p<0.1$

4.4.2 Correlation results

Table 4.5 displays the pairwise correlation results for the measured variable and independent variables to support assessing the statistical relationship between these variables. It demonstrates the correlations between the number of KAMs reported and the audit partner tenure (main independent variable), in addition to other correlations between the other control variables. It is found that the correlations with ($ln\_firmSize$) and ($loss$) are significantly positive. The correlations between these variables are consistent with both the predictions and existing literature that suggest larger and loss-making firms are inclined to undertake aggressive financial reporting and potentially disclose more KAMs disclosed (Abdelfattah et al., 2021; Camacho-Miñano et al., 2023; Pinto & Morais, 2019; Sierra-García et al., 2019). In contrast, the correlations with (EA_audLag), ($EA\_partnFem$), ($EA\_audBig4$), ($liquid$), (roa), ($levg$), and ($Inst\_inflation$) are significantly negative. This indicates that when firms are audited by Big Four or female audit partners, there are fewer KAMs disclosed. Moreover, the correlations between ($EA\_partTen$), (EA_GCO), and ($Inst\_gdp$) are not significant.

For the four Hofstede national cultural dimensions, it is found that the correlations with individualism and masculinity are significantly positive, while the correlations with power distance and uncertainty avoidance are significantly negative at a 99% confidence level. This shows an initial indication of the nature of the relationship between KAM disclosure and Hofstede's cultural dimensions, which are further examined in section 4.4.3.4. Table 4.5 further shows strong correlations between the four Hofstede cultural dimensions, suggesting a possible risk of multicollinearity. This risk was overcome by testing the effect of each dimension separately in the multivariate analysis. The variance inflation factor (VIF) analysis (not presented for purposes of brevity) is also tested to discover multicollinearity in the regression models (Daoud, 2017). This includes the main model and the four Hofstede cultural dimensions moderators' models. There is no indication of any multicollinearity concerns as the VIF results are less than 10 for all independent variables.

4.4.3 Multivariate analysis

In this section, the regression models' empirical findings are explained. Various regression models are used including ordinary least squares (OLS), Tobit, robust, Poisson, and fixed effects. OLS is employed to examine the relationship between the variables since the sample includes panel data (Winship & Western, 2016). To mitigate heteroscedasticity issues, collective cross-sectional regression is employed with year and industry fixed effects. Given that the measured variable ($kamNum$) is censored, as it is absolute where there is a non-negative value for the number of KAMs, Tobit regression is used. The Tobit model, also named censored regression, is employed to measure linear relationships between variables when censoring exists (either left or right) only in the measured variable (Winship & Western, 2016). Moreover, robust regression is used to mitigate the outlier effect. This type of regression is used when data is assumed to have many outliers and for revealing influential observations (Rousseeuw & Leroy, 2005). Additionally, Poisson regression is employed consistent with Bepari et al. (2022), Lennox et al. (2023), and Pinto & Morais (2019) since the dependent variable ($kamNum$) is a count variable. Finally, fixed effect is used as proposed by the outcomes of the Hausman test since the p-value is <0.05.

Table 4.6 shows the regression analysis, endogeneity test results, and robustness checks for Model 1, the main model. Panel A shows the regression results. Panel B provides results for the endogeneity test where stage least square (2SLS) and generalised method of moments (GMM) are used. Finally, Panel C shows the robustness check performed using sub-sampling. A collective cross-sectional regression with year and industry fixed effects is employed.

4.4.3.1 Audit partner tenure and KAM reporting

Table 4.6 Panel A provides the regression results for the constructed audit partner tenure (Model 1) with the number of KAMs as the measured variable. The adjusted R2 is 0.19.

The regression estimates for the main independent variable, audit partner tenure ($EA\_partTen$), suggest that the coefficient of audit partner tenure is 0.078, which is positive and significant at a 99% confidence level. The results indicate that audit partner tenure has significantly increased KAM reporting. This strongly supports hypothesis 1: audit partner tenure is positively associated with the number of KAMs disclosed. The findings also support longer tenure, which suggests that longer tenure partners progressively acquire more knowledge about the auditor's client and a greater understanding of the client's industry over longer periods (Lennox & Wu, 2018). Sierra-García et al. (2019) emphasise that the audit partner experience is a key factor in the decision-making process for the identification and proper assessment of KAMs. Thus, it can be argued that the longer the tenure an audit partner has with a client, the more the audit partner is familiar with the context and audit client's characteristics. The findings relate to Hogarth's (1980) theory that longer tenure leads audit partners to exercise better judgement based on client-specific knowledge and industry expertise obtained over the long tenure period, resulting in more KAM disclosures.

The findings suggest that longer tenure can have a positive effect despite the possibility that the close relationship maintained with client management during the long tenure period can also impair audit partner independence and objectivity. Prior audit partner studies report that longer auditor–client relationships are associated with smaller discretionary accruals (Manry et al. 2008; Chi et al. 2017) and issuance of modified opinion (Baatwah's, 2016) suggesting improvements in audit quality. Auditors with longer tenure are expected to be more likely to take their reputation into consideration, including that of their audit firm, and exercise more effort to improve audit quality, thus reporting more KAMs (Rahaman & Karim, 2023). This relates to Einhorn & Hogarth's (1981) behavioural decision theory that considers the process of judgement and choice and suggests that inherent conflict in taking action (reporting a KAM or not) could be guided by an audit partner's consideration of the economic trade-off between exposure to litigation risk and reputation loss versus the projected cost of losing a client (Pinto & Morais, 2019).

Various regressions (OLS, Tobit, robust, Poisson, and fixed effect) are used to lower the standard deviation. The findings for ($EA\_partTen$) continue to be consistent with a coefficient that is positive and significant. The coefficient between the audit partner tenure and KAMs is 0.078, 0.078, 0.078, 0.038, and 0.048 for OLS, Tobit, robust, Poisson, and fixed effect regression respectively. This coefficient indicates that every additional year of audit partner tenure increases KAM disclosure by 0.078 units, 0.078 units, 0.078 units, 0.038 units, and 0.048 using OLS, Tobit, robust, Poisson, fixed effect appropriately. This confirms the robustness of the results for the independent variable ($EA\_partTen$) and further indicates a strong positive association between audit partner tenure and the number of KAMs reported.

The findings above on the audit partner tenure ($EA\_partTen$) connection with the number of KAMs disclosed contribute to extant research on extended audit reporting, particularly as it is the first study to explore this connection (per the author's knowledge). Overall, the findings provide evidence of a positive effect of audit partner tenure and that tenure plays a significant part in external auditors' reporting. This can assist scholars, regulators, and policymakers in understanding the determinants of KAM reporting.

In relation to the auditor control variables, it is learned that (EA_audLag), ($EA\_partnFem$), and ($EA\_audBig4$) are both statistically significant and negatively associated with the number of KAMs reported. The results are significant in almost all regression models employed. With regards to audit report lag, the findings indicate that KAMs have decreased audit report lag, a result consistent with the findings reported in the Baatwah et al. (2022) study using data from Oman. The authors interpreted findings as audit firms already being aware of the requirements to disclose KAM and that therefore they had allocated experienced and qualified auditors to prepare timely reports. Moreover, results suggest that female audit partners report fewer KAMs. There are differences in studies in developed countries (Abdelfattah et al., 2021; Bepari et al., 2022) which documented female audit partners as reporting more KAMs, and studies in developing countries (Hussin et al., 2022; Wuttichindanon & Issarawornrawanich, 2020) which found a negative or no association between female auditors and KAM disclosure. These differences could be due to cultural, legal, or governance factors. The findings also indicate that when firms are audited by a Big Four firm, fewer KAMs are reported. This is not consistent with research about auditor type, which generally shows a positive relationship between Big 4 audit firms and increased KAM reporting. This is explained by their superior expertise, reputation, and credibility. The differences in the results could be due to the GCC's regionally-specific characteristics.

Finally, in relation to the firm-related control variables, it is found that ($ln\_firmSize$) and ($loss$) are statistically significant and positively connected to the number of KAMs disclosed. This means that larger and loss-making firms will have more KAMs. This is in line with extant literature. On the other hand, (roa), ($levg$), ($Inst\_gdp$), and ($Inst\_inflation$) are statistically significant and negatively associated with the number of KAMs disclosed. This suggests that firms with elevated levels of these variables are likely to find fewer KAMs. The control variables' results remain robust as they did not change substantially and generally remain significant across all the models.

4.4.3.2 Endogeneity

Two Stage Least Square (2SLS) and Generalized Method of Moments (GMM) are used to address endogeneity concerns: 2SLS to lessen the endogeneity influence in regression models by employing the lagged levels as the potential instruments and GMM to address the concern with minimum standard deviation while employing comprehensive exogenous variations and lagged levels as the instruments (Winship & Western, 2016). These techniques are effective in reducing the impact of endogeneity. They provide robustness against omitted variables and bias in variable selection, promote consistency in parameter estimates, offer efficient estimates compared to OLS and are considered more advanced methods due to their capability to include instrumental variables (Ullah et al., 2018, 2021).

In this study, the audit partner tenure ($EA\_partTen$) is posited as a potential source of endogeneity, as it might be influenced by or influence the number of KAMs disclosed. Therefore, $EA\_partTen$ is used as an instrumental variable in our analyses. The results, presented in Panel B of Table 4.6, confirm the robustness of the relationship between audit partner tenure and the number of KAMs reported. Moreover, validity checks run by Sargan and Hansen are significant for the techniques employed. Specifically, the findings from both 2SLS and GMM analyses indicate that longer audit partner tenure is positively associated with an increased number of KAMs. The coefficients obtained, 0.243 for 2SLS and 0.127 for GMM, are positive and statistically significant at the 99% confidence level. These results underscore the validity of our model specifications and the effectiveness of the chosen econometric techniques in addressing endogeneity, ensuring that the observed relationships are more likely to reflect true causal interactions rather than spurious correlations driven by omitted variable bias or reverse causality.

4.4.3.3 Robustness Check

Table 4.6 Panel C presents the robustness check data using the sub-sampling method. This method, endorsed by Camponovo et al. (2012) and Fidler et al. 2006), helps to reduce any potential bias inherent in OLS regression analyses and confirms the reliability of the model's results. Specifically, the sample was divided based on firm size—calculated as the natural logarithm of the firm's total assets—into two distinct subsets: large firms and small firms. The first set is for firms with a size less than or equal to the average of 18.5 (small firms), representing 49.6% of the sample, and the second set is for firms with a size greater than the average, which represents 50.3% of the sample. The analysis yielded positive and statistically significant relationships between audit partner tenure and KAM disclosure for both subsets.

The findings were robust at the 99% confidence level for small firms and at the 90% confidence level for large firms. Notably, the coefficient was higher for small firms, with an estimated increase of 0.089 units in KAM reporting per additional year of tenure, compared to a 0.078 unit increase for large firms. This suggests that for every additional year in audit partner tenure, KAM reporting is likely to increase by 0.089 units (small firms) and 0.078 units (large firms). These results highlight the influence of audit partner tenure on KAM disclosure across different firm sizes, affirming the initial findings from the primary OLS model. The consistency of the positive relationship across both subsets of firm size reinforces the robustness of our findings, suggesting that the effect of audit partner tenure on KAM reporting is significant and pervasive, irrespective of firm size.

Table 4.6 Regression analysis, endogeneity test results, and robustness check

	Panel A: Regression results					**Panel B:** Endogeneity test results		**Panel C:** Robustness check	
Model (1)	OLS	Tobit	Robust	Poisson	Fixed	2SLS	GMM	Small firms	Large firms
	kamNum	kamNum	kamNum	kamNum	kamNum	kamNum	kamNum	kamNum	kamNum
l. kamNum							0.003		
							(0.20)		
EA_partTen	0.078***	0.078***	0.078***	0.038**	0.048**	0.243***	0.127***	0.089***	0.078*
	(2.87)	(2.88)	(3.01)	(2.14)	(2.12)	(2.70)	(6.86)	(2.62)	(1.91)
EA_audLag	-0.006***	-0.006***	-0.006***	-0.005***	-0.002***	-0.006***	-0.005***	-0.005***	-0.006***
	(-9.81)	(-9.87)	(-8.21)	(-7.90)	(-3.73)	(-6.64)	(-10.67)	(-6.22)	(-6.64)
EA_partnFem	-0.610**	-0.610**	-0.610*	-0.479**	0.370	-0.815***	0.585*	-0.757***	-0.361
	(-2.26)	(-2.27)	(-1.86)	(-2.00)	(1.22)	(-2.84)	(1.86)	(-3.02)	(-0.50)
EA_audBig4	-0.602***	-0.602***	-0.602***	-0.305***	-0.386***	-0.585***	-0.186**	-0.578***	-0.644***
	(-11.30)	(-11.37)	(-11.49)	(-8.96)	(-4.88)	(-9.90)	(-2.49)	(-9.44)	(-7.22)
EA_GCO	0.113	0.113	0.113	0.074	0.101	0.181	0.312***	-0.041	0.420**
	(1.01)	(1.02)	(0.98)	(1.06)	(0.91)	(1.56)	(9.95)	(-0.34)	(2.13)
ln_firmSize	0.169***	0.169***	0.169***	0.085***	-0.213***	0.155***	-0.047*	0.127***	0.226***
	(13.69)	(13.77)	(12.74)	(10.76)	(-3.10)	(11.40)	(-1.89)	(5.07)	(7.29)
loss	0.325***	0.325***	0.325***	0.173***	0.199***	0.299***	0.306***	0.294***	0.269**
	(5.08)	(5.11)	(4.88)	(4.39)	(3.38)	(4.43)	(7.36)	(4.09)	(2.43)
liquid	-0.009	-0.009	-0.009*	-0.006	-0.002	-0.006	-0.012***	-0.007	-0.027
	(-1.58)	(-1.59)	(-1.89)	(-1.41)	(-0.26)	(-0.99)	(-4.95)	(-1.39)	(-1.37)
roa	-0.426***	-0.426***	-0.426*	-0.186**	-0.233*	-0.314**	0.135**	-0.070	-1.609***
	(-2.84)	(-2.86)	(-1.94)	(-2.37)	(-1.91)	(-2.07)	(2.50)	(-0.49)	(-4.56)
levg	-0.018**	-0.018***	-0.018**	-0.009**	-0.015**	-0.015**	-0.023***	0.001	-0.047***
	(-2.57)	(-2.58)	(-2.04)	(-2.18)	(-2.49)	(-2.06)	(-15.64)	(0.18)	(-3.93)
Inst_gdp	-0.000***	-0.000***	-0.000***	-0.000***	0.000	-0.000***	0.000***	-0.000***	-0.000***
	(-4.42)	(-4.44)	(-4.27)	(-3.46)	(0.76)	(-2.77)	(7.57)	(-2.99)	(-2.86)
Inst_inflation	-0.057***	-0.057***	-0.057***	-0.025**	-0.035***	-0.013	-0.001	-0.080***	-0.021
	(-3.54)	(-3.56)	(-3.39)	(-2.38)	(-2.71)	(-0.72)	(-0.11)	(-3.66)	(-0.82)
_cons	0.021	0.021	0.021	-0.257	6.487***				
	(0.08)	(0.08)	(0.08)	(-1.43)	(4.83)				
year	included	included	included	included	included	included	included	included	included
industry	included	included	included	included	included	included	included	included	included
var(e.kamNum)		1.206***							
		(33.21)							
N	2206	2206	2206	2206	2206	1749	1762	1096	1110
R-sq	0.20		0.20		0.09			0.21	0.22
adj. R-sq	0.19		0.19		-0.16			0.19	0.20

t statistics in parentheses ="* p<0.10 ** p<0.05 *** p<0.01"

4.4.3.4 *Moderating effect of Hofstede's culture dimensions*

To test the second hypothesis (H_{2a} - H_{2d}), an empirical examination is conducted of how Hofstede's cultural dimensions (power distance, individualism, masculinity, and uncertainty avoidance) moderate the relation between audit partner tenure and KAM disclosure (Table 4.7 Panel A). It is found that power distance and uncertainty avoidance strengthen the relationship between audit partner tenure and KAM disclosure, with significant results showing at 90% and 95% confidence levels respectively, while individualism weakens the relation with a 95% confidence level. Results are insignificant for masculinity. All control variables continued to retain the same relationship with KAM disclosure.

Prior studies (S. J. Gray & Vint, 1995; Orij, 2010) have documented that power distance is negatively associated with accounting disclosures. High power distance cultures, such as the GCC cultures, show that the concentration of power at the highest levels and the limiting of information exchange results in less disclosure. This concentration of power can result in a greater risk of material misstatements in financial statements (Haskins, 1987). Therefore, using the empirical results, it is posited that longer-tenured audit partners can have greater influence over power structures and information as a result of acquiring more credibility and authority over time, leading them to disclose more significant matters as KAMs.

Furthermore, regarding the moderating role of uncertainty avoidance, it is found that a positive and significant role in the relationship between audit partner tenure and KAM disclosure. Empirical studies documented that uncertainty avoidance is, in general, associated with improved disclosure practices (Gray & Vint, 1995; Hope, 2003; Khlif, 2016). Countries in the GCC region are regarded as high uncertainty avoidance countries as members of its societies prefer to avoid uncertainty, feel uncomfortable in ambiguous environments, and are more cautious of risks, resulting in more KAM disclosures. Based on the results, it is argued that uncertainty avoidance influences long-tenured auditors to report more KAMs, thereby avoiding litigation risk and reputation loss.

In contrast, individualism negatively and significantly moderates the relationship between audit partner tenure and KAM reporting. Prior studies documented that, in general, individualism positively influences accounting disclosures (Gray & Vint, 1995; Hope, 2003; Jaggi & Low, 2000; Zarzeski, 1996). The GCC region’s culture is considered a collectivist society where members are part of an integrated group with strong commitment and loyalty to their societies. In this regard, the empirical results suggest that the interaction between individualism and long-tenured auditors likely decreases KAM reporting.

Finally, regarding the role of masculinity, the results are insignificant. This is consistent with scholars such as (Gray, 1988), who doubts the connection between masculinity and KAM disclosures. Other empirical studies reported mixed findings on masculinity's influence on disclosure (Gray & Vint, 1995; Hope, 2003; Jaggi & Low, 2000; Zarzeski, 1996). As per the empirical results, there is no evidence suggesting relationship between the moderating effect of masculinity and partner tenure with the disclosure of KAMs.

The robustness of the results is tested using the Hofstede measure for a partner's country as an alternate proxy for the Hofstede measures used earlier for GCC countries (refer to Appendix 3 for the Hofstede cultural dimensions scores by GCC country and partner country). The data sample comprises 221 unique audit partners from 20 different countries The majority of audit partners are Saudi (73, 33.3%), Kuwaiti (31, 14.2%), Indian (28, 12.8%), Lebanese (20, 9.1%), and British (18, 8.2%). Table 4.7 Panel B shows that results are negatively significant with a 95% confidence interval when the individualism dimension moderates the relationship between audit partner tenure and KAM reporting. This indicates that, for individualism, the earlier conclusion remains consistent regardless of whether Hofstede's specification is based on GCC's or the audit partner's nationality. Results are insignificant for Hofstede's other three dimensions. This could be due to the distribution of Hofstede scores for the partner's nationality. Control variables remained unchanged in terms of the relation with KAM reporting.

Lastly, a regression is employed using the Hofstede moderating variables used in previous models as control variables (Table 4.7 Panel C). This is to explore their impact on KAM reporting. Results suggest a negatively significant association between power distance, uncertainty avoidance, and KAM reporting with a significance level of 99%, while also suggesting a positively significant association between individualism and KAM reporting with a significance level of 99%. The results have opposite signs when compared to the results that use Hofstede's dimensions as moderators, which could be due to the nature of the relationship between audit partner tenure and KAM reporting. The findings are not surprising given that the GCC context is characterised by high power distance and uncertainty avoidance and low individualism, as evidenced by their Hofstede cultural scores (refer to Appendix 3).

The results of using Hofstede's dimensions as control variables are consistent with (Gray, 1988, p11) hypothesis that "the higher a country ranks in terms of uncertainty avoidance and power distance, and the lower it ranks in terms of individualism and masculinity, the more likely it is to rank highly in terms of secrecy." Our results suggest that greater power distance countries are secretive and restrict information sharing in order to sustain power inequalities, resulting in a negative association between power distance and KAM reporting. Moreover, individualism encourages competitiveness, which implies less secrecy and results in more KAM disclosure. Uncertainty avoidance is attributed to being uncomfortable with uncertainty, resulting in less KAM disclosure. Moreover, Gray (1988) regards the connection between masculinity and KAM disclosures to be less significant. Overall, the results show that the GCC region is associated with the dimension of secrecy that Gray (1988, p8) proposed: "preference for confidentiality and the restriction of disclosure of information about the business only to those who are closely involved with its management and financing as opposed to a more transparent, open, and publicly accountable approach."

Overall, the audit partner tenure analysis results provide strong evidence to support greater KAM disclosure from longer-tenured partners. Furthermore, results show that Hofstede's cultural dimensions' roles as moderators can influence the relationship between partner tenure and KAM disclosure. Power distance and uncertainty avoidance strengthen the relationship, while individualism weakens the relationship. The reported levels of moderation are explained by the nature of the relationship between partner tenure and KAM disclosure. Findings relate to Hogarth's theory that longer tenure can enhance an audit partner's judgement about whether a matter is a significant risk or not based on client-specific knowledge and industry expertise. The decision to disclose a KAM could be guided by a partner's desire to avoid litigation exposure and reputation loss in the event that a significant risk is not disclosed. Therefore, it is surmised that longer tenure leads to more KAMs being disclosed. Furthermore, when the effect of Hofstede's national culture dimensions on KAM disclosure is tested, the reversed signs supported Gray's secrecy hypothesis. These results look at the culture in the GCC, which is inclined towards more secrecy, suggesting less KAM disclosure. It could be interpreted that longer-tenured audit partners develop the ability to overcome cultural secrecy through the length of their tenure. This tenure could also help audit partners develop enough trust from the client to disclose more KAMs.

Table 4.7 Hofstede dimensions

	Panel A: Hofstede dimensions as moderators [6 GCC countries]				**Panel B:** Hofstede dimensions as moderators [20 Partner countries]				**Panel C:** Hofstede dimensions as control [6 GCC countries]			
Main Model	Including PD kamNum	Including IDV kamNum	Including MAS kamNum	Including UAV kamNum	Including PD kamNum	Including IDV kamNum	Including MAS kamNum	Including UAV kamNum	Including PD kamNum	Including IDV kamNum	Including MAS kamNum	Including UAV kamNum
EA_partTen	-0.156	0.284***	-0.042	-0.430*	-0.058	0.233***	-0.075	0.071	0.081***	0.089***	0.077***	0.091***
	(-1.09)	(3.17)	(-0.44)	(-1.75)	(-0.43)	(3.03)	(-0.59)	(0.55)	(3.02)	(3.29)	(2.86)	(3.36)
H_PD	-0.015***				-0.004				-0.009***			
	(-3.40)				(-1.20)				(-3.40)			
c.	0.003*				0.002							
	(1.69)				(1.04)							
H_IDV		0.026***				0.006*				0.017***		
		(4.42)				(1.74)				(3.89)		
c.		-0.005**				-0.004**						
		(-2.29)				(-2.16)						
H_MAS			-0.004				0.006				0.000	
			(-0.95)				(1.12)				(0.12)	
c.			0.003				0.003					
			(1.30)				(1.25)					
H_UAV				-0.035***				-0.010***				-0.021***
				(-4.23)				(-2.71)				(-4.10)
c.				0.007**				0.000				
				(2.13)				(0.09)				
EA_audLag	-0.006***	-0.006***	-0.006***	-0.006***	-0.006***	-0.006***	-0.006***	-0.006***	-0.006***	-0.006***	-0.006***	-0.006***
	(-9.29)	(-9.74)	(-9.68)	(-10.33)	(-9.75)	(-9.85)	(-9.58)	(-9.35)	(-9.30)	(-9.69)	(-9.71)	(-10.22)
EA_partnFem	-0.591**	-0.549**	-0.607**	-0.556**	-0.622**	-0.631**	-0.593**	-0.557**	-0.574**	-0.535**	-0.610**	-0.540**
	(-2.19)	(-2.04)	(-2.25)	(-2.07)	(-2.30)	(-2.34)	(-2.21)	(-2.07)	(-2.13)	(-1.98)	(-2.26)	(-2.00)
EA_audBig4	-0.625***	-0.593***	-0.606***	-0.564***	-0.609***	-0.605***	-0.628***	-0.593***	-0.622***	-0.590***	-0.601***	-0.566***
	(-11.68)	(-11.16)	(-11.28)	(-10.50)	(-11.32)	(-11.35)	(-11.77)	(-11.14)	(-11.63)	(-11.09)	(-11.21)	(-10.52)
EA_GCO	0.099	0.089	0.114	0.100	0.110	0.114	0.105	0.080	0.101	0.088	0.114	0.097
	(0.88)	(0.80)	(1.02)	(0.90)	(0.98)	(1.02)	(0.94)	(0.72)	(0.90)	(0.78)	(1.01)	(0.87)
ln_firmSize	0.170***	0.152***	0.169***	0.129***	0.169***	0.174***	0.169***	0.163***	0.169***	0.150***	0.169***	0.129***
	(13.78)	(11.38)	(12.10)	(8.14)	(13.61)	(13.26)	(13.72)	(13.14)	(13.73)	(11.25)	(12.09)	(8.11)
loss	0.334***	0.325***	0.324***	0.310***	0.326***	0.331***	0.341***	0.329***	0.330***	0.320***	0.324***	0.306***
	(5.23)	(5.10)	(5.07)	(4.86)	(5.10)	(5.18)	(5.35)	(5.18)	(5.17)	(5.02)	(5.07)	(4.79)
liquid	-0.008	-0.008	-0.009	-0.010*	-0.008	-0.008	-0.009	-0.008	-0.008	-0.008	-0.009	-0.010*
	(-1.50)	(-1.50)	(-1.58)	(-1.77)	(-1.54)	(-1.53)	(-1.64)	(-1.53)	(-1.54)	(-1.55)	(-1.59)	(-1.79)
roa	-0.422***	-0.419***	-0.436***	-0.401***	-0.430***	-0.437***	-0.380**	-0.409***	-0.415***	-0.413***	-0.425***	-0.406***
	(-2.82)	(-2.81)	(-2.91)	(-2.69)	(-2.86)	(-2.92)	(-2.54)	(-2.74)	(-2.78)	(-2.77)	(-2.84)	(-2.72)
levg	-0.017**	-0.016**	-0.017**	-0.015**	-0.017**	-0.018***	-0.017**	-0.016**	-0.016**	-0.015**	-0.017**	-0.015**
	(-2.43)	(-2.27)	(-2.55)	(-2.14)	(-2.55)	(-2.64)	(-2.45)	(-2.33)	(-2.42)	(-2.25)	(-2.56)	(-2.13)
Inst_gdp	-0.000*	0.000	-0.000***	-0.000*	-0.000***	-0.000***	-0.000***	-0.000***	-0.000*	0.000	-0.000***	-0.000
	(-1.82)	(0.59)	(-3.86)	(-1.67)	(-4.33)	(-4.42)	(-5.22)	(-4.95)	(-1.78)	(0.68)	(-3.80)	(-1.54)
Inst_inflation	-0.041**	-0.041**	-0.057***	-0.047***	-0.056***	-0.052***	-0.048***	-0.039**	-0.042**	-0.045***	-0.057***	-0.051***
	(-2.47)	(-2.48)	(-3.51)	(-2.89)	(-3.46)	(-3.23)	(-3.01)	(-2.42)	(-2.52)	(-2.74)	(-3.53)	(-3.19)
_cons	0.975**	-0.971***	0.220	3.177***	0.305	-0.277	-0.205	0.776**	0.541*	-0.601*	0.029	2.180***
	(2.41)	(-2.74)	(0.70)	(4.21)	(0.84)	(-0.90)	(-0.55)	(2.16)	(1.73)	(-1.91)	(0.10)	(3.68)
year	included	included	included	included	included	included	included	included	included	included	included	included
industry	included	included	included	included	included	included	included	included	included	included	included	included
N	2206	2206	2206	2206	2206	2206	2206	2206	2206	2206	2206	2206
R-sq	0.21	0.21	0.20	0.21	0.20	0.20	0.21	0.21	0.21	0.21	0.20	0.21
adj. R-sq	0.20	0.20	0.19	0.20	0.19	0.19	0.20	0.20	0.20	0.20	0.19	0.20

t statistics in parentheses ="* p<0.10 ** p<0.05 *** p<0.01"

4.4.4 Additional Analysis

4.4.4.1 Alternative measures for independent variable (partner tenure)

To rigorously test the robustness of the results from Model 1, where audit partner tenure ($EA\_partTen$) serves as the main independent variable, an alternative measure—audit firm tenure ($EA\_firmTen$) —is employed. This measure, used in prior EAR studies such as those by Elshafi (2023), Hussin et al. (2022), Pinto & Morais (2019) and Rahaman & Karim (2023), quantifies the consecutive years an audit firm has served the same client, encompassing situations where individual audit partners may change but the firm remains constant.

Table 4.8 presents the regression analysis in Model 1 using ($EA\_firmTen$) as an alternative variable for ($EA\_partTen$).Various regression techniques—including OLS, Tobit, robust, Poisson, and fixed effects—are applied to mitigate standard error and assess the consistency of the results across different statistical methodologies. The findings indicate that audit firm tenure, much like audit partner tenure, exhibits a robust positive relationship with KAMs disclosure. Specifically, the coefficients for ($EA\_firmTen$) in OLS, Tobit, and robust regression models are 0.074, significant at a 99% confidence interval, suggesting a strong and consistent positive influence. Similarly, the coefficients in the Poisson and fixed effects models are 0.038 and 0.036, respectively, significant at 95% and 90% confidence intervals. These results affirm the robustness of the association between the tenure of the audit entity—whether at the partner or firm level—and the extent of KAM disclosure. The consistency across different regression models underscores the stability of this relationship, echoing findings from Rahaman & Karim's (2023) study in Bangladesh, which likewise documented a positive impact of audit firm tenure on KAM disclosure. This suggests that prolonged engagements, whether at the partner or firm level, enhance the auditors' understanding of the client's business and risks, leading to more comprehensive disclosure in audit reports.

Table 4.8 Alternative measure for the main independent variable (audit partner tenure)

Main Model	OLS	Tobit	Robust	Poisson	Fixed
	kamNum	kamNum	kamNum	kamNum	kamNum
EA_firmTen	0.074***	0.074***	0.074***	0.038**	0.036*
	(3.27)	(3.29)	(3.49)	(2.50)	(1.72)
EA_audLag	-0.006***	-0.006***	-0.006***	-0.005***	-0.002***
	(-9.86)	(-9.92)	(-8.39)	(-7.92)	(-3.76)
EA_partnFem	-0.587**	-0.587**	-0.587*	-0.471**	0.347
	(-2.17)	(-2.19)	(-1.77)	(-1.96)	(1.15)
EA_audBig4	-0.627***	-0.627***	-0.627***	-0.317***	-0.401***
	(-11.56)	(-11.63)	(-11.75)	(-9.16)	(-5.00)
EA_GCO	0.116	0.116	0.116	0.076	0.100
	(1.04)	(1.04)	(1.00)	(1.09)	(0.90)
Firm control variables	included	included	included	included	included
Country level variables	included	included	included	included	included
_cons	-0.065	-0.065	-0.065	-0.303*	6.466***
	(-0.24)	(-0.24)	(-0.23)	(-1.68)	(4.81)
year	included	included	included	included	included
industry	included	included	included	included	included
var(e.kamNum)		1.204***			
		(33.21)			
N	2206	2206	2206	2206	2206
R-sq	0.20		0.20		0.09
adj. R-sq	0.19		0.19		-0.16

t statistics in parentheses ="* p<0.10 ** p<0.05 *** p<0.01"
Firm control and country level variables have been included in all models but are not presented for purposes of brevity.

4.4.4.2 Alternative measures for KAM

To further explore the robustness of the main analysis in Model 1, additional tests are conducted by varying the measure of the dependent variable, ($kamNum$).

4.4.4.2.1 Length of KAMs disclosed. Following extant literature (Abdelfattah et al., 2021; Chen et al., 2023; Duboisée De Ricquebourg & Maroun, 2023; Rahaman et al., 2023), the total number of words used in KAM disclosures ($kamLeng\_Tot$) is used as the dependent variable. Similar to Abdelfattah et al. (2021), to fully understand the data set and to tackle outliers, ($kamLeng\_Avg$) is used to represent the average number of words used in describing KAMs for the year. Table 4.9 Panel A presents the regression analysis for both models. Findings are generally consistent with the main model. Both ($kamLeng\_Tot$) and ($kamLeng\_Avg$) are positively associated with audit partner tenure with significance levels of 90% and 95%, respectively. This suggests that longer tenure partners report longer descriptions of KAMs.

4.4.4.2.2 KAMs added, dropped, or repeated. The number of KAMs being added ($kamAdd$), dropped ($kamDrop$), or repeated ($kamRecurr$) are considered to investigate the dynamics of KAM reporting and whether audit partner tenure influences the number of newly added KAMs, dropped KAMs, and year-on-year repeatedly reported KAMs. Table 4.9 Panel B illustrates the results ($kamAdd$), ($kamDrop$), and ($kamRecurr$) as the measured variables. The coefficients for the main independent variable ($EA\_partTen$) are negatively significant for ($kamAdd$) and ($kamDrop$) estimations, and positively significant with ($kamRecurr$) estimation. This shows that longer audit partner tenure is associated with fewer new KAMs being added and previously reported KAMs being removed. Interestingly, in comparison to the previous year, audit partner tenure is associated with KAMs being unchanged and repeated. Therefore, longer tenure leads to boilerplate reporting where more of the same KAMs are reported in subsequent years.

4.4.4.2.3 KAMs Readability. In accordance with ISA 701, auditors are required to report useful information in a fashion that is understandable by financial statement users. Readability has been deemed a considerable measure for communication and understandability in past accounting literature (De Franco et al., 2015; Loughran & Mcdonald, 2011; K. W. Smith, 2023). Readability can be generally improved by reducing the use of highly technical and complex words. Similar to EAR studies examining readability (Küster, 2024; Seebeck & Kaya, 2023), the following proxies are used to measure readability: Flesch Reading Ease ($FleschRead$), Flesch Kincaid Grade Level ($FleschKincaid$), and Gunning Fog Score ($GunningFog$). Results for the readability measures (Table 4.9 Panel C) suggest that audit partner tenure is significantly associated with KAM readability. This shows that long-tenured auditors tend to report more readable KAMs. This could be attributed to the learning curve as audit partners build more knowledge and familiarity with the client industry over years of tenure, resulting in improved communication and better explanation of KAMs over time.

4.4.4.3 Other Analysis

In the breakdown by industry, the dataset involves ten sectors categorized according to the Global Industry Classification Standard (GICS). The results, as presented in Table 4.10 Panel A, reveal that audit partner tenure ($EA\_partTen$) has a notably positive and statistically significant relationship with the number of KAMs disclosed particularly in the Industrials and Consumer Discretionary sectors. These sectors represent 20% and 16% of the sample, respectively, reflecting their significant role in the GCC's economic landscape. The positive findings in these sectors are significant at a 95% confidence level, suggesting that the complexity and operational nature of these industries may require more extensive disclosure of KAMs as auditors gain tenure and familiarity with industry-specific risks.

Further analysis is conducted to assess the impact of audit partner tenure across different geographic and economic contexts. Audit partners are categorized based on their regions of origin—Asia, Europe, Africa, Oceania, and the Americas. The nationality of each partner is determined through meticulous examination of auditor reports, supplemented by information from firm websites and professional profiles on LinkedIn. The results, detailed in Table 4.10 Panel B, show that audit partner tenure exhibits a positive and significant effect on KAM reporting particularly when the audit partners are from Asia, which is the most represented region among the sampled partners, and from developing economies. This relationship is statistically significant at a 99% confidence level.

These findings imply that audit partners from these regions may bring unique perspectives or adhere to distinct auditing standards that influence the thoroughness and depth of KAM disclosures. Additionally, the prominence of partners from developing economies in contributing to higher KAM disclosures may reflect different regulatory environments or professional practices that emphasize detailed reporting. The results from these extended analyses, as summarized in Table 4.10, reinforce the initial findings and provide nuanced insights into how audit partner tenure influences KAM reporting across various industries and regions. This comprehensive approach aids in understanding the broader implications of auditor experience in global and sector-specific contexts.

Table 4.9 Regression analysis for alternative measures of KAMs

	Panel A: Effect of partner tenure on KAMs length		**Panel B:** Effect of partner tenure on KAMs added, dropped or repeated			**Panel C:** Effect of partner tenure on readability		
Model (1)	**OLS** kamLeng_Tot	**OLS** kamLeng_Avg	**OLS** kamAdd	**OLS** kamDrop	**OLS** kamRecurr	**OLS** FleschRead	**OLS** FleschKincaid	**OLS** GunningFog
EA_partTen	8.381*	3.499**	-0.145***	-0.121***	0.207***	1.134***	0.314**	0.449***
	(1.84)	(2.04)	(-6.04)	(-6.21)	(8.80)	(3.64)	(2.51)	(2.98)
EA_audLag	-0.745***	-0.310***	-0.002***	-0.002***	-0.004***	-0.057***	-0.045***	-0.054***
	(-7.27)	(-8.03)	(-3.69)	(-3.88)	(-7.59)	(-8.02)	(-15.66)	(-15.73)
EA_partnFem	-72.735	-39.806**	0.102	-0.285	-0.737***	-6.480**	-4.814***	-6.367***
	(-1.60)	(-2.33)	(0.43)	(-1.47)	(-3.13)	(-2.13)	(-3.95)	(-4.33)
EA_audBig4	-14.201	30.273***	-0.375***	-0.077**	0.005	-1.675***	0.879***	0.828***
	(-1.58)	(8.97)	(-7.94)	(-2.01)	(0.10)	(-2.60)	(3.40)	(2.65)
EA_GCO	53.518***	22.712***	0.127	0.167**	-0.035	1.273	0.838	1.086*
	(2.84)	(3.20)	(1.28)	(2.07)	(-0.36)	(0.97)	(1.59)	(1.70)
ln_firmSize	41.452***	6.982***	0.172***	0.077***	-0.136***	-0.652***	-0.063	-0.104
	(19.92)	(8.91)	(15.72)	(8.68)	(-12.65)	(-4.46)	(-1.07)	(-1.47)
loss	62.443***	12.618***	0.158***	0.084*	-0.066	2.451***	0.154	0.283
	(5.81)	(3.12)	(2.80)	(1.82)	(-1.19)	(3.18)	(0.50)	(0.76)
liquid	-0.580	-0.003	-0.001	-0.001	-0.006	-0.119*	0.002	0.010
	(-0.63)	(-0.01)	(-0.14)	(-0.23)	(-1.21)	(-1.89)	(0.07)	(0.33)
roa	-80.958***	-17.860*	-0.401***	-0.124	-0.290**	-0.273	-2.135***	-2.538***
	(-3.22)	(-1.88)	(-3.03)	(-1.15)	(-2.22)	(-0.16)	(-3.12)	(-3.07)
levg	-2.573**	-0.349	-0.011*	-0.008	0.011*	-0.091	-0.015	-0.017
	(-2.24)	(-0.81)	(-1.74)	(-1.54)	(1.89)	(-1.18)	(-0.49)	(-0.45)
Inst_gdp	-0.003***	-0.001***	-0.000***	-0.000***	0.000***	0.000	0.000	0.000
	(-8.34)	(-4.70)	(-9.49)	(-2.61)	(7.82)	(1.43)	(1.65)	(1.35)
Inst_inflation	-7.878***	-1.009	-0.114***	0.076***	-0.039***	0.201	0.020	0.091
	(-2.92)	(-0.99)	(-7.99)	(6.60)	(-2.80)	(1.05)	(0.26)	(0.99)
_cons	-355.772***	7.140	0.547**	-1.051***	2.218***	38.926***	17.513***	21.798***
	(-7.75)	(0.41)	(2.26)	(-5.36)	(9.33)	(12.37)	(13.89)	(14.32)
year	included	included	included	included	included	included	included	included
industry	included	included	included	included	included	included	included	included
N	2206	2206	2206	2206	2206	1989	1989	1989
R-sq	0.21	0.15	0.34	0.17	0.44	0.10	0.18	0.19
adj. R-sq	0.20	0.14	0.33	0.16	0.43	0.09	0.17	0.18

t statistics in parentheses ="* p<0.10 ** p<0.05 *** p<0.01"

Table 4.10 Other analysis

Panel A: Per Industry

Model (1)	**Energy**	**Materials**	**Industrials**	**Consumer Staples**	**Consumer Discretionary**	**Health Care**	**Communication Services**	**Utilities**	**IT**	**Real Estate**
	kamNum	kamNum	kamNum	kamNum	kamNum	kamNum	kamNum	kamNum	kamNum	kamNum
EA_firmTen	-0.102	0.046	0.140**	0.111	0.144**	0.190	0.190	0.006	-0.108	-0.065
	(-0.67)	(0.80)	(2.28)	(1.36)	(2.12)	(1.49)	(1.49)	(0.04)	(-0.61)	(-0.94)
EA_audLag	-0.005	-0.006***	-0.008***	-0.005***	-0.002	-0.004	-0.004	-0.002	-0.004*	-0.005***
	(-0.84)	(-3.83)	(-4.08)	(-4.82)	(-0.61)	(-1.61)	(-1.61)	(-0.40)	(-2.03)	(-3.52)
EA_partnFem	0.000	-1.229**	0.139	0.000	0.000	0.000	0.000	0.000	0.000	-0.473
	(.)	(-2.12)	(0.20)	(.)	(.)	(.)	(.)	(.)	(.)	(-1.44)
EA_audBig4	-0.210	-0.753***	-0.582***	-1.035***	-0.592***	-0.826***	-0.826***	-0.579**	0.098	-0.347***
	(-0.63)	(-6.82)	(-4.48)	(-6.47)	(-4.44)	(-3.54)	(-3.54)	(-2.11)	(0.22)	(-2.60)
EA_GCO	0.000	0.132	0.163	-0.146	-0.365	1.099***	1.099***	-0.752	0.000	-0.162
	(.)	(0.46)	(0.52)	(-0.56)	(-1.08)	(2.91)	(2.91)	(-1.01)	(.)	(-0.68)
Firm control variables	included	included	included	included	included	included	included	included	included	included
Country level variables	included	included	included	included	included	included	included	included	included	included
_cons	-1.664	1.870***	-0.908	2.217***	-2.102***	-1.731	-1.731	1.341	4.214**	-0.008
	(-1.15)	(4.13)	(-1.20)	(3.52)	(-3.67)	(-0.86)	(-0.86)	(1.58)	(2.67)	(-0.01)
year	included	included	included	included	included	included	included	included	included	included
industry	included	included	included	included	included	included	included	included	included	included
N	70	383	427	274	326	102	102	118	38	346
R-sq	0.33	0.25	0.19	0.34	0.31	0.43	0.43	0.16	0.87	0.20
adj. R-sq	0.14	0.22	0.16	0.30	0.28	0.32	0.32	0.02	0.77	0.16

Panel B: Partner region

Model (1)	**Asia**	**Europe**	**Africa**	**Oceania**	**Americas**	**Developing**	**Developed**
	kamNum	kamNum	kamNum	kamNum	kamNum	kamNum	kamNum
EA_firmTen	0.074***	0.281	0.254	-0.461	0.471	0.075***	0.180
	(2.64)	(1.44)	(1.18)	(-1.38)	(.)	(2.70)	(1.20)
EA_audLag	-0.006***	-0.012***	-0.009	-0.024**	-0.014	-0.006***	-0.013***
	(-8.85)	(-3.49)	(-1.07)	(-2.25)	(.)	(-9.10)	(-4.85)
EA_partnFem	-0.573**	-1.893	0.000	0.000	0.000	-0.585**	-1.801*
	(-2.07)	(-1.63)	(.)	(.)	(.)	(-2.10)	(-1.83)
EA_audBig4	-0.566***	-0.899***	-1.390***	0.158	0.000	-0.585***	-0.925***
	(-10.05)	(-2.84)	(-2.92)	(0.24)	(.)	(-10.55)	(-3.87)
EA_GCO	0.035	0.273	-0.584	-1.238	0.000	0.034	0.160
	(0.29)	(0.56)	(-0.54)	(-0.82)	(.)	(0.29)	(0.42)
Firm control variables	included	included	included	included	included	included	included
Country level variables	included	included	included	included	included	included	included
_cons	0.082	1.900	1.369	3.437	16.924	0.007	2.399*
	(0.28)	(1.18)	(0.63)	(0.36)	(.)	(0.02)	(1.89)
year	included	included	included	included	included	included	included
industry	included	included	included	included	included	included	included
N	1956	132	72	31	15	2026	180
R-sq	0.21	0.46	0.52	0.73	1.00	0.20	0.49
adj. R-sq	0.20	0.33	0.29	0.46	.	0.19	0.40

t statistics in parentheses ="* p<0.10 ** p<0.05 *** p<0.01", Firm control and country level variables have been included in all models but are not presented for purposes of brevity.

4.5 Conclusion

ISA 701 mandates the reporting of KAMs to enhance the communicative value of audit reports. The disclosing of KAM concerns regarding significant issues, as well as the risk-based audit approach to cover these issues, revolve around an auditor's professional decision-making and judgement (Knechel, 2000). This study utilises Hogarth's (1980) decision behaviour theory to examine the influence of tenure on a partner's judgement and KAM disclosure decisions. The moderating effect of Hofstede's cultural dimensions, namely power distance, individualism, masculinity, and uncertainty avoidance, on the relationship between partner tenure and KAM reporting was examined. Several regression methods were utilised to test the hypotheses. The study sampled 456 non-financial listed firms in the six GCC countries from 2016 until 2021. A content analysis of 4,792 hand-collected KAMs was conducted and found that account-level KAMs dominated the sample and that revenue recognition is the most commonly disclosed KAM.

These findings demonstrated a strong positive association between partner tenure and the number of KAMs disclosed. This implies that long-tenured partners disclose more KAMs, further suggesting that auditors gradually obtain more knowledge and understanding of an audit client and their industry over longer tenure periods. The regression results for partner tenure remained positive and significant across all regression models, including robustness checks that control for endogeneity. Moreover, when the measured variable was manipulated, partner tenure was positively associated with the length and readability of KAMs. This further suggests better explanations of KAMs, resulting in improved communication value. Interestingly, evidence was found that long-tenured auditors exhibited a tendency to report the same KAM in subsequent years, suggesting boilerplate reporting. Our findings also show strong positive associations between audit firm tenure and the number of KAMs disclosed, in agreement with related literature.

The findings regarding Hofstede's culture moderators showed that power distance and uncertainty avoidance positively affect the relationship between partner tenure and KAM disclosure, while individualism negatively affects the relationship. The paper does not provide evidence for the role of masculinity as the results were insignificant. Results suggested that longer-tenured partners can influence hierarchical structures and information exchange, leading them to report more significant matters as KAMs. Moreover, long-tenured auditors appeared inclined to report more KAMs to avoid being exposed to litigation and reputation loss. When Hofstede's cultural dimensions were used as control variables to examine the national culture effect on KAM reporting, the findings showed that power distance and uncertainty avoidance are associated with less KAM reporting while individualism is associated with more KAM reporting. Results were consistent with existing literature in the context of disclosures (Gray & Vint, 1995; Hope, 2003; Jaggi & Low, 2000; Orij, 2010; Zarzeski, 1996) and with the Gray's (1988) hypothesis that societies with greater power distance, higher level of uncertainty avoidance, and collectivism are secretive. This is associated with members' tendency to limit information exchange to preserve inequalities in power, feel uncomfortable with uncertainty, and show concern for the interest of the group.

This study has implications for recent auditing reforms requiring KAM disclosure as it provides evidence to support calls for further exploration into factors that can influence partners' reports on KAMs. The study informs professional bodies (including audit firms and audit clients), standard setters, and regulators of potential variations on audit reporting using partner characteristics such as tenure and the effect of national culture on tenured partner behaviour in KAM disclosure. It can be inferred from this study that audit firms may choose to retain audit partners since tenured partners accumulate more client and industry-specific knowledge, resulting in improved communications and audit reporting. However, audit firms should be cautious about long-tenured partners' tendencies to boilerplate reporting. It also supports standard setters and regulators in assessing regulatory changes and audit reform. Finally, this study attracts the attention of professional bodies, regulators, policymakers, and scholars affected by the recent ISA 701 auditing reform.

Although this paper applies rigorous methods to examine the relationship between partner tenure and KAMs, it also retains some caveats which must be acknowledged in the interest of future research avenues. First, data and regulatory limitations restricted the research to non-financial listed firms in the GCC region. As such, the results are not pertinent to financial firms. Future research can seek to examine KAMs in the GCC region for financial listed companies. Second, further research can consider additional characteristics for partners in the GCC that may impact KAM disclosure, such as rotation, education, experience, expertise, ethics, gender, age, race, ethnicity, and social ties. Moreover, it would be interesting to study partner ethics as it is a key trait required in auditing and has been an ongoing concern in behavioural research (e.g., Cohen et al., 1993, 1995; Loeb, 1971). Third, future research could also study the impact of partner tenure on KAM disclosure in other regions to support the generalisation of outcomes. This is especially desirable as this paper is the first study to explore such a relationship. Fourth, it was not possible to examine the moderating effect of Hofstede's long-term orientation dimension on the relationship between partner tenure and KAMs due to data limitations. Future research can consider examining Hofstede's five dimensions to complement the results of this study. Finally, it is also recommended to use other measures for national culture besides Hofstede's. While Hofstede is widely utilised in research, it has been subject to some criticism such as outdated data, issues with dimension scores varying with economic conditions, and the inappropriateness of the complete five dimensions for all nations and cultures.

Chapter 5

Summary and Conclusion

5.1 Summary of Findings

This thesis provides a rigorous review of recent audit additions to auditing requirements and empirically investigates the determinants of KAMs (specifically ownership structure, board directorship, and audit partner tenure) using evidence from the GCC. It has three objectives. The first objective of the thesis is to provide a comprehensive systematic review on EAR to synthesise and extend current knowledge through an integrative framework on the recent auditing development (chapter 2). The second objective is to investigate whether ownership structure (royal, family, and foreign) and board director type (royal, family, and foreign) are associated with KAMs' external auditor reporting (chapter 3). The third objective is to investigate the relationship between audit partner tenure and KAM reporting, and whether Hofstede's cultural dimensions affect this relationship (chapter 4). The analysis in this thesis (objectives 2 and 3) is based on a unique hand-compiled dataset of non-financial firms listed on the stock exchanges of the six GCC countries, covering a period of six years.

The first objective (chapter 2) is to provide a comprehensive systematic review of EAR, offering an integrated and synthetic overview of current knowledge. This is to connect inconsistencies in prior results with potential explanations through an integrative framework comprising eight areas of EAR. These include seven topical themes: (1) investors, debtholders, and the stock market; (2) management; (3) audit committees; (4) external auditors; (5) audit features; (6) audited companies; and (7) standard setters. The eighth area covers the theoretical perspectives on these themes. The review comprises 156 articles published between 2014 and 2023, and is structured based on the economic context and methodology of the studies to promote novel perspectives. Developed countries showed varied results regarding the communicative value of EAR and its market impact, whereas emerging countries showed informativeness and market reactions. Both indicate a decrease in earnings management practices and enhancement in financial reporting quality. Most studies report that the characteristics of external auditors, audit committees, and auditees affect EAR disclosure, as do the precision of accounting standards and the clarity of auditing standards. Various opportunities are offered for future research to reconcile and extend past research, thereby filling existing gaps. These findings suggest that agency theory is the most commonly employed theory for studying EAR, particularly because of its prevalence in accounting and auditing. The current literature lacks qualitative studies that use surveys and interviews, mixed studies, cross-cultural research, studies on emerging economies, and multi-theoretical perspectives. Readers should be cautious about generalising the findings, partly because of archival research limitations such as small sample sizes, short timeframes, and experimental research limitations with student participants.

The second objective (chapter 3) utilises agency theory to investigate the relationship between ownership structure (royal, family, and foreign) and board director type (royal, family, and foreign) and the external auditor reporting of KAMs. It is argued that royal and family ownership and directorship are negatively associated with KAM reporting, whereas foreign ownership and directorship are positively associated. The findings offer compelling evidence that royal ownership decreases KAM disclosure, whereas family and foreign ownerships increase it. Both royal and foreign ownership findings are consistent with the hypotheses, whereas the family ownership findings contradict the hypothesis of a negative relationship rooted in agency-related issues. This positive association could be explained by the fact that high family concentration may encourage family owners to enhance monitoring and provide more accounting information. It is also found that loyal board directors reduce the number of disclosed KAMs, suggesting that external auditors consider power and status when determining KAMs. By contrast, foreign board directors increase KAM disclosure, possibly to address information asymmetry due to geographic separation between the principal and agents. There was no evidence of an association between family directors and KAM reporting. The results are robust when using various alternative measures for the dependent and independent variables. In all regression models, year, country, and industry fixed effects are included to control for differences in KAM disclosure across the six years, six GCC countries, and ten industries.

The third objective (chapter 4) investigates the relationship between audit partner tenure and KAM reporting, and whether Hofstede's cultural dimensions affect this relationship. Hogarth's (1980) decision behaviour theory is applied to examine the influence of tenure on a partner's judgement and KAM disclosure decisions. It was hypothesised that partner tenure is positively associated with KAM reporting. The results provide strong evidence that partner tenure increases KAM disclosure, suggesting that auditors gradually obtain more knowledge and understanding of the audit client and its industry over longer tenure periods. The regression results for partner tenure were consistently positive and significant across all regression models (OLS, Tobit, robust, Poisson, and fixed effects), including robustness checks using the subsampling method and endogeneity tests. The study also found that long-tenured partners disclose KAMs in more detail and produce more readable audit reports. Interestingly, long-tenured auditors tend towards boilerplate reporting. Evidence is also provide of a strong positive association between audit firm tenure (an alternative measure of partner tenure) and number of disclosed KAMs. The study controls for country-level variables in line with previous studies conducted in the GCC region and includes year and industry fixed effects as controls for variation in KAMs reporting across six years and ten industries. Through content analysis using 4,792 hand-collected KAMs, it was found that account-level KAMs dominated the sample, and revenue recognition was the most commonly reported KAM. The findings on the effect of Hofstede culture moderators suggest that the relationship between partner tenure and KAMs is relatively strong when power distance and uncertainty avoidance are moderating factors, and relatively weak when individualism is considered. Evidence could not be provided for the role of masculinity as the results were insignificant. These results suggest that long-tenured partners can influence hierarchical structures and information exchanges, leading them to report more significant matters as KAMs. Moreover, long-tenured auditors appear to be inclined to report more KAMs to avoid being exposed to litigation and reputational loss. When Hofstede's cultural dimensions were used as control variables to examine the national cultural effect on KAM reporting, the results indicated that power distance and uncertainty avoidance were associated with less KAM reporting, while individualism was associated with more. These findings are consistent with existing literature in the context of disclosures and with Gray's (1988) hypothesis that societies with greater power distance, higher levels of uncertainty avoidance, and collectivism are secretive.

5.2 Contributions of the Thesis

This thesis extends and contributes to EAR literature in several ways. First, to the best of the author's knowledge, this study is the first to present cross-country evidence of KAM disclosures in six GCC countries. Prior research has covered limited number of GCC countries, such as the UAE, Bahrain, and Oman (Al Lawati & Hussainey, 2022; Baatwah, 2023; Baatwah et al., 2022; Barghathi et al., 2021; Mah'd & Mardini, 2022), However, these studies have not examined the GCC as a region. Moreover, cross-country studies of developing economies are scarce with only one cross-country study that has been conducted in the Middle East (Mah'd & Mardini, 2022). Second, this study contributes to the EAR literature by providing the first evidence on the effect of the unique characteristics of the Gulf region (ownership structure and board directorship) on KAM reporting. This aspect has not been previously investigated in the EAR literature. Third, this study contributes to the literature by providing useful and timely empirical research on the relationship between ownership/directorship and KAM reporting by external auditors in the GCC, given the considerable resources devoted to improving corporate governance reforms and promoting foreign investment in the region. Fourth, this study provides the first evidence that ownership structure plays a significant role in KAM reporting. Fifth, the results complement the stream of corporate governance and KAM disclosure research in both developed and developing countries (Elmarzouky et al., 2023; Fera et al., 2022; Jaffar et al., 2023; Wuttichindanon & Issarawornrawanich, 2020) by providing first-time evidence that royal directors influence the disclosure of fewer KAMs by the external auditor, whereas foreign directors influence the disclosure of more KAMs. Sixth, the essays offer a unique hand-collected dataset for non-financially listed firms in six GCC countries, which provides valuable insights and contributes to the advancement of knowledge in the field.

Seventh, the SLR offers a comprehensive systematic review of EAR by analysing 156 studies from 80 journals rated by (AJG 2021) and/or the (SJR 2022) especially considering that a holistic academic perspective on EAR remains underdeveloped. This review provides a systematic approach that is transparent, and can be replicated by other researchers. The SLR sets itself apart from previous literature reviews on EAR (Bédard et al., 2016; Gimbar et al., 2016a; Gold & Heilmann, 2019; Luo, 2021; Minutti-Meza, 2021; Pais, 2020; Porumbăcean & Tiron-Tudor, 2021; Velte & Issa, 2019; Yoga & Dinarjito, 2021) in that it is comprehensive and systematic. Eighth, the analytical structure of the SLR, which is based on the economy (unprecedented) and methodology, contributes to the literature by providing novel insights. Ninth, the integrative research framework contributes to the literature by offering an analysis of the current research covering eight areas of EAR and a future research agenda for scholars, practitioners, and other financial statement users. Tenth, to the best of the author's knowledge, the SLR is the first literature review to comprehensively examine the theories used in the study of EAR.

Eleventh, this thesis provides unprecedented evidence of the tenure effect on the partner-level KAM reporting. Specifically, it provides first time evidence that long-tenured partners disclose greater numbers of KAMs, more detailed KAMs, and more readable KAMs, enhancing the communicative value of audit reporting. Previous studies have primarily examined the impact of tenure at the firm level with KAM disclosure and have yielded inconsistent findings (Elshafie, 2023; Pinto & Morais, 2019; Rahaman & Karim, 2023; Hussin et al., 2022). Twelfth, the study provides first-time evidence on the moderating role of Hofstede's national cultural dimensions in the relationship between partner tenure and KAM reporting. This paper responds to Bédard et al. (2019) and Pinto and Morais's (2019) call for further research on the influence of culture on auditors' behaviour with regard to EAR reporting. Thirteenth, the evidence offers first time insights into the effect of national culture on auditors' EAR reporting behaviour. These results complement the existing disclosure literature and Gray's (1988) secrecy hypothesis. Fourteenth and finally, this study is the first attempt to assess the content of KAMs (types and themes) in the GCC region to provide an understanding of the most commonly disclosed KAMs along with the types of KAMs being reported.

5.3 Implications of the Thesis

Considering the distinctive attributes of the GCC context, this thesis has several implications for scholars, practitioners, policymakers, standard-setters, regulators, and investors. First, the findings show that external auditors in the Gulf region responded to the recent regulatory reform mandating the disclosure of KAMs in audit reports to improve transparency, enhance governance, and protect shareholders. This shed light on the significance of auditor disclosure for investors, management, policymakers, and regulators. Second, the results demonstrate the significance of recent corporate governance reforms in the GCC and their impact on improving auditor disclosure. Accordingly, regulators and standard setters can constantly seek improvement to promote corporate governance principles that encourage good practices. Third, the results of the SLR indicate that EAR affects most stakeholders and promotes better corporate governance. Therefore, this study is useful for financial statement users, standard setters, regulators, auditors, audit committees, and senior executives.

Fourth, the findings emphasise the significance of ownership structure and its impact on auditor disclosure. It alerts audit firms, investors, regulators, and standard setters about possible variations in audit reporting due to the audit client ownership structure and board representation. This shows that stockholders, particularly family and foreign stockholders, have strong motives to encourage auditors to disclose more. Prospective investors can promote investment in firms with a high concentration of family and foreign ownership because they anticipate more transparency from external auditors in disclosing the most significant matters requiring auditor judgement in financial statement audits.

Fifth, the study informs professional bodies (including audit firms and clients), standard setters, and regulators of possible differences in audit reporting due to audit partner characteristics, such as tenure. This study suggests that audit firms may opt to retain their partners because they accumulate more client knowledge and industry expertise, leading to improved communication and audit reporting. Nonetheless, auditing firms should be careful about the inclinations of long-tenured partners in boilerplate reporting. Sixth, this study reveals how partner tenure can drive audit reporting, thereby enabling regulators and scholars to better evaluate the implications of long-tenured partners on audit reporting and, consequently, to produce regulations and research.

Seventh, it informs policymakers and standard setters that national culture can influence the behaviour of tenured partners in KAM disclosure, and also have an impact on KAM reporting. This is in view of the GCC region's institutional complexities and cultural contexts compared with those of other developing and developed economies. This study results align with those of prior studies documenting that variations in cultural values across countries can substantially affect accounting and auditing practices. Eighth, this thesis provides the theoretical implications. Insights provided by agency theory and Hogarth's (1980) decision behaviour theory can enhance the understanding of EAR reporting. A theoretical approach can clarify the seemingly diverse outcomes of auditor disclosures. Moreover, recognising regulatory and sociodemographic variations across GCC nations is critical. Ninth and finally, this study attracts the attention of professional bodies, investors, board members, regulators, policymakers, and scholars affected by the recent ISA 701 audit reform.

5.4 Limitations and Suggestions for Future Research

Similar to prior studies in the field, this thesis has some limitations that can be seen as promising directions for future research. Data and regulatory constraints limit this study to nonfinancial listed firms in the GCC region. Therefore, the findings do not apply to financial firms. Future research should seek to investigate the KAMs of financially listed firms in the GCC region. Given the limited number of cross-country studies on emerging economies, more research is recommended to understand the results for regions sharing similar cultures, beliefs, legal systems, and corporate governance structures, especially since KAM disclosure has become mandatory worldwide.

The SLR only considered papers from reputable journals listed in AJG 2021 and/or SJR 2022. Future reviews can include multiple databases in addition to Scopus, WoS, and EBSCO. The selected topical themes were based on sample studies and trends. Topics outside the specified themes were excluded because of the challenge of addressing every topic in the 156 articles. As such, topics on EAR in relation to materiality, Covid-19, litigation risk, and the impact of financial analysts' forecasts and perceptions have not been covered and can be explored in future studies.

Certain ownership and directorship types unique to the GCC region, such as royal, family, and foreign, are explored in this study. Future studies can explore other types of ownership or directorship in the GCC that could influence KAM reporting, such as government ownership, institutional ownership, and the corresponding directors on the board. Future research could also investigate how ownership structure influences KAM reporting in other regions (developed or developing) to support the generalisation of results. This is particularly desirable because this is the first study to investigate this relationship. This study investigates the effects of audit-partner tenure (auditor characteristics) on KAMs reporting. Future research can explore the additional characteristics of GCC partners that can influence KAM disclosure, such as rotation, education, experience, expertise, ethics, gender, age, race, ethnicity, and social ties.

While Hofstede is commonly used in research, it has been subject to criticism for outdated data, dimension scores influenced by economic conditions, and the unsuitability of the five dimensions for all nations and cultures. Thus, future studies can utilise alternative measures of national culture in addition to Hofstede’s measures. Moreover, the moderating role of Hofstede's long-term orientation dimension in the association between partner tenure and KAMs has not been examined because of data limitations. Future research can explore Hofstede's five dimensions to complement the findings of the present study.

References

Abbott, L. J., Parker, S., & Presley, T. J. (2012). Female board presence and the likelihood of financial restatement. *Accounting Horizons*, *26*(4), 607–629. https://doi.org/10.2308/acch-50249

Abdallah, A. A. N., & Ismail, A. K. (2017). Corporate governance practices, ownership structure, and corporate performance in the GCC countries. *Journal of International Financial Markets, Institutions and Money*, *46*, 98–115. https://doi.org/10.1016/j.intfin.2016.08.004

Abdelfattah, T., Elmahgoub, M., & Elamer, A. A. (2021). Female audit partners and extended audit reporting: UK evidence. *Journal of Business Ethics*, *174*, 177–197. https://doi.org/10.1007/s10551-020-04607-0

Abdullatif, M., & Al-Rahahleh, A. S. (2020). Applying a new audit regulation: Reporting key audit matters in Jordan. *International Journal of Auditing*, *24*(2), 268–291. https://doi.org/10.1111/ijau.12192

Abdullatif, M., Alzebdieh, R., & Ballour, S. (2023). The effect of key audit matters on the audit report lag: Evidence from Jordan. *Journal of Financial Reporting and Accounting*. https://doi.org/10.1108/JFRA-07-2022-0245

Abu-Nassar, M., & Rutherford, B. A. (1996). External users of financial reports in less developed countries: The case of Jordan. *The British Accounting Review*, *28*(1), 73–87. https://doi:10.1006/bare.1996.0004

Adhikari, A., & Tondkar, R. H. (1992). Environmental factors influencing accounting disclosure requirements of global stock exchanges. *Journal of International Financial Management & Accounting*, *4*(2), 75–105. https://doi.org/10.1111/j.1467-646X.1992.tb00024.x

Aguilera, R. V., & Cuervo-Cazurra, A. (2004). Codes of good governance worldwide: What is the trigger? *Organisation Studies*, *25*(3), 415–443. https://doi.org/10.1177/0170840604040669

Ahmed, A. S., & Duellman, S. (2007). Accounting conservatism and board of director characteristics: An empirical analysis. *Journal of Accounting and Economics*, *43(2-3)*, 411–437. https://doi.org/10.1016/j.jacceco.2007.01.005

Akhter, T., Abdul Halim, Z., Mehzabin, S., Shahriar, A., & Azad, M. A. K. (2023). Do national culture and economic freedom affect bank risk-taking behavior? Evidence from GCC countries. *International Journal of Islamic and Middle Eastern Finance and Management*, *16*(6), 1159–1180. https://doi.org/10.1108/IMEFM-07-2022-0283

Al Ani, M. K., & Chavali, K. (2023). The relationship between investment intensity and profitability measures from the perspective of foreign investors. *Humanities and Social Sciences Communications*, *10*(1), 1–11. https://doi.org/10.1057/s41599-023-01571-8

Al Lawati, H., & Hussainey, K. (2022). The determinants and impact of key audit matters disclosure in the auditor's report. *International Journal of Financial Studies*, *10*(4), 107. https://doi.org/10.3390/ijfs10040107

Al Nasser, Z. (2020). The effect of royal family members on the board on firm performance in Saudi Arabia. *Journal of Accounting in Emerging Economies*, *10*(3), 487–518. https://doi.org/10.1108/JAEE-04-2017-0041

Al-Dhamari, R., Alquhaif, A. S., & Al-Gamrh, B. A. (2022). Modelling the impact of audit/remuneration committee overlap on debtholders' perceptions of accounting information quality: The role of CEO power. *International Journal of Finance & Economics*, *27*(3), 2898–2920. https://doi.org/10.1002/ijfe.2304

Al-Hadi, A., Al-Yahyaee, K. H., Hussain, S. M., & Taylor, G. (2019). Market risk disclosures and corporate governance structure: Evidence from GCC financial firms. *Quarterly Review of Economics and Finance*, *73*, 136–150. https://doi.org/10.1016/j.qref.2017.11.008

Al-Hadi, A., Hasan, M. M., & Habib, A. (2016a). Risk committee, firm life cycle, and market risk disclosures. *Corporate Governance: An International Review*, *24*(2), 145–170. https://doi.org/10.1111/corg.12115

Al-Hadi, A., Taylor, G., & Al-Yahyaee, K. H. (2016b). Ruling family political connections and risk reporting: Evidence from the GCC. *International Journal of Accounting*, *51*(4), 504–524. https://doi.org/10.1016/j.intacc.2016.10.004

Al-Hadi, A., Taylor, G., & Hossain, M. (2015). Disaggregation, auditor conservatism and implied cost of equity capital: An international evidence from the GCC. *Journal of Multinational Financial Management*, *29*, 66–98. https://doi.org/10.1016/j.mulfin.2014.11.005

Alhazaimeh, A., Palaniappan, R., & Almsafir, M. (2014). The impact of corporate governance and ownership structure on voluntary disclosure in annual reports among listed Jordanian companies. *Procedia-Social and Behavioral Sciences*, *129*, 341–348. https://doi.org/10.1016/j.sbspro.2014.03.686

Alhossini, M. A., Ntim, C. G., & Zalata, A. M. (2021). Corporate board committees and corporate outcomes: An international systematic literature review and agenda for future research. *International Journal of Accounting*, *56*(1), 2150001. https://doi.org/10.1142/S1094406021500013

Aljifri, K., Alzarouni, A., Ng, C., & Tahir, M. I. (2014). The association between firm characteristics and corporate financial disclosures: Evidence from UAE companies. *The International Journal of Business and*

Finance Research, *8*(2), 101–124.
Allam, B. S. (2018). The impact of board characteristics and ownership identity on agency costs and firm performance: UK evidence. *Corporate Governance: An International Review*, *18*(6), 1147–1176. https://doi.org/10.1108/CG-09-2016-0184
Al-Matari, E. M., Mgammal, M. H., Senan, N. A. M., & Alhebri, A. A. (2021). Determinants of foreign direct investment in GCC countries: An empirical analysis. *Journal of Asian Finance, Economics and Business*, *8*(4), 69–81. https://doi.org/10.13106/jafeb.2021.vol8.no4.0069
Al-mulla, M., & Bradbury, M. E. (2022). Auditor, client and investor consequences of the enhanced auditor's report. *International Journal of Auditing*, *26*(2), 134–150. https://doi.org/10.1111/ijau.12255
Alnabsha, A., Abdou, H. A., Ntim, C. G., & Elamer, A. A. (2018). Corporate boards, ownership structures and corporate disclosures: Evidence from a developing country. *Journal of Applied Accounting Research*, *19*(1), 20–41. https://doi.org/10.1108/JAAR-01-2016-0001
Al-Shammari, B., Brown, P., & Tarca, A. (2008). An investigation of compliance with international accounting standards by listed companies in the Gulf Co-Operation Council member states. *International Journal of Accounting*, *43*(4), 425–447. https://doi.org/10.1016/j.intacc.2008.09.003
Alshbili, I., Elamer, A. A., & Beddewela, E. (2020). Ownership types, corporate governance and corporate social responsibility disclosures: Empirical evidence from a developing country. *Accounting Research Journal*, *33*(1), 148–166. https://doi.org/10.1108/ARJ-03-2018-0060
Alves Júnior, E. D., & Galdi, F. C. (2020). Relevância informacional dos principais assuntos de auditoria. *Revista Contabilidade & Finanças*, *31*(82), 67–83. https://doi.org/10.1590/1808-057x201908910
Al-Yahyaee, K. H., Pham, T. M., & Walter, T. S. (2011). The information content of cash dividend announcements in a unique environment. *Journal of Banking & Finance*, *35*(3), 606–612. https://doi.org/10.1016/j.jbankfin.2010.03.004
An, R., Li, W., Wang, D., Wang, Y., & Yu, L. (2023). Do key audit matters affect operating activities? Evidence from inventory management. *Abacus*, *59*(1), 300-339. https://doi.org/10.1111/abac.12269
Anderson, R. C., & Reeb, D. M. (2003). Founding-family ownership and firm performance: Evidence from the S&P 500. *The Journal of Finance*, *58*(3), 1301–1328. https://doi.org/10.1111/1540-6261.00567
Arayssi, M., & Jizi, M. (2024). Royal family board directors and the level of ESG disclosures in GCC listed firms. *Journal of Accounting & Organisational Change*. *20*(1), 58–83. https://doi.org/10.1108/JAOC-08-2022-0123
Arayssi, M., & Jizi, M. I. (2019). Does corporate governance spillover firm performance? A study of valuation of MENA companies. *Social Responsibility Journal*, *15*(5), 597–620. https://doi.org/10.1108/SRJ-06-2018-0157
Arouri, H., Hossain, M., & Badrul Muttakin, M. (2014). Effects of board and ownership structure on corporate performance Evidence from GCC countries. *Journal of Accounting in Emerging Economies*, *4*(1), 117–130. https://doi.org/10.1108/JAEE-02-2012-0007
At-Twaijri, M. I., & Al-Muhaiza, I. A. (1996). Hofstede's cultural dimensions in the GCC countries: An empirical investigation. *International Journal of Value-Based Management*, *9*(2), 121–131. https://doi.org/10.1007/BF00440149
Austin, A. A., & Williams, L. T. (2021). Evaluating company adoptions of blockchain technology: How do management and auditor communications affect nonprofessional investor judgments? *Journal of Accounting and Public Policy*, *40*(5), 106882. https://doi.org/10.1016/j.jaccpubpol.2021.106882
Baatwah, S. R. (2016). Audit tenure and financial reporting in Oman: Does rotation affect the quality? *Risk Governance & Control: Financial Markets & Institutions*, *6*(3), 16–27.
Baatwah, S. R. (2023). Key audit matters and big4 auditors in Oman: A quantile approach analysis. *Journal of Financial Reporting and Accounting*, *21*(5), 1124-1148. https://doi.org/10.1108/JFRA-09-2021-0289
Baatwah, S. R., Aljaaidi, K. S., Almoataz, E. S. & Salleh, Z. (2023). Culture and financial reporting quality in GCC countries: What do we know about tribal culture? *International Journal of Emerging Markets*, *18*(4), 788–821. https://doi.org/10.1108/IJOEM-04-2020-0439
Baatwah, S. R., Almoataz, E. S., Omer, W. K., & Aljaaidi, K. S. (2022). Does KAM disclosure make a difference in emerging markets? An investigation into audit fees and report lag. *International Journal of Emerging Markets*, (ahead-of-print). https://doi.org/10.1108/IJOEM-10-2021-1606
Backof, A. G., Bowlin, K., & Goodson, B. M. (2022). The importance of clarification of auditors' responsibilities under the new audit reporting standards. *Contemporary Accounting Research*, *39*(4), 2284–2304. https://doi.org/10.1111/1911-3846.12802
Balli, F., Louis, R. J., & Osman, M. (2011). The patterns of cross-border portfolio investments in the GCC region: Do institutional quality and the number of expatriates play a role? *Journal of Economics and Finance*, *35*, 434–455. https://doi.org/10.1007/s12197-009-9111-5
Barclay, M. J., & Holderness, C. G. (1989). Private benefits from control of public corporations. *Journal of Financial Economics*, *25*(2), 371–395. https://doi.org/10.1016/0304-405X(89)90088-3

Barghathi, Y., Mirani, S., Khan, N. U. (2021). Audit quality and earnings management after communicating Key Audit Matters (KAMs) in the UAE – audacity and auditors' perspectives. *Journal of Accounting and Management Information Systems*, *20*(2), 173–198. https://doi.org/10.24818/jamis.2021.02001

Bart, C., & Mcqueen, G. (2013). Why women make better directors. *International Journal of Business Governance*, *8*(1), 93–99. https://doi.org/10.1504/IJBGE.2013.052743

Baydoun, N., Maguire, W., Ryan, N., & Willett, R. (2013). Corporate governance in five Arabian Gulf countries. *Managerial Auditing Journal*, *28*(1), 7–22. https://doi.org/10.1108/02686901311282470

Bédard, J., Coram, P., Espahbodi, R., & Mock, T. J. (2016). Does recent academic research support changes to audit reporting standards? *Accounting Horizons*, *30*(2), 255–275. https://doi.org/10.2308/acch-51397

Bédard, J., Gonthier-Besacier, N., & Schatt, A. (2019). Consequences of expanded audit reports: Evidence from the justifications of assessments in France. *Auditing: A Journal of Practice and Theory*, *38*(3), 23–45. https://doi.org/10.2308/ajpt-52339

Bentley, J. W., Lambert, T. A., & Wang, E. (2021). The Effect of increased audit disclosure on managers' real operating decisions: Evidence from disclosing critical audit matters. *The Accounting Review*, *96*(1), 23–40. https://doi.org/10.2308/TAR-2017-0486

Bepari, M. K. (2023). Audit committee characteristics and Key Audit Matters (KAMs) disclosures. *Journal of Corporate Accounting and Finance*, *34*(1), 152–172. https://doi.org/10.1002/jcaf.22587

Bepari, M. K., Mollik, A. T., Nahar, S., & Islam, M. N. (2022). Determinants of accounts level and entity level key audit matters: Further evidence. *Accounting in Europe*, *19*(3), 397–422. https://doi.org/10.1080/17449480.2022.2060753

Beugelsdijk, S., Maseland, R., & Van Hoorn, A. (2015). Are scores on Hofstede's dimensions of national culture stable over time? A cohort analysis. *Global Strategy Journal*, *5*(3), 223–240. https://doi.org/10.1002/gsj.1098

Bley, J., & Chen, K. H. (2006). Gulf Cooperation Council (GCC) stock markets: The dawn of a new era. *Global Finance Journal*, *17*(1), 75–91. https://doi.org/10.1016/j.gfj.2006.06.009

Bley, J., & Saad, M. (2011). The effect of financial liberalization on stock-return volatility in GCC markets. *Journal of International Financial Markets, Institutions and Money*, *21*(5), 662–685. https://doi.org/10.1016/j.intfin.2011.04.003

Boolaky, P. K., & Quick, R. (2016). Bank directors' perceptions of expanded auditor's reports. *International Journal of Auditing*, *20*(2), 158–174. https://doi.org/10.1111/ijau.12063

Boonlert-U-Thai, K., & Suttipun, M. (2023). Influence of external and internal auditors on key audit matters (KAMs) reporting in Thailand. *Cogent Business and Management*, *10*(3). 2256084. https://doi.org/10.1080/23311975.2023.2256084

Boubakri, N., Chkir, I., Saadi, S., & Zhu, H. (2021). Does national culture affect corporate innovation? International evidence. *Journal of Corporate Finance*, *66*, 101847. https://doi.org/10.1016/j.jcorpfin.2020.101847

Boubakri, N., Cosset, J. C., & Saffar, W. (2012a). The impact of political connections on firms' operating performance and financing decisions. *Journal of Financial Research*, *35*(3), 397–423. https://doi.org/10.1111/j.1475-6803.2012.01322.x

Boubakri, N., Guedhami, O., Mishra, D., & Saffar, W. (2012b). Political connections and the cost of equity capital. *Journal of Corporate Finance*, *18*(3), 541–559. https://doi.org/10.1016/j.jcorpfin.2012.02.005

Bradbury, M. E., & Schröder, L. B. (2012). The content of accounting standards: Principles versus rules. *The British Accounting Review*, *44*(1), 1–10. https://doi.org/10.1016/j.bar.2011.12.003

Brasel, K., Doxey, M. M., Grenier, J. H., & Reffett, A. (2016). Risk disclosure preceding negative outcomes: The effects of reporting critical audit matters on judgments of auditor liability. *The Accounting Review*, *91*(5), 1345–1362. https://doi.org/10.2308/accr-51380

Breesch, D., & Branson, J. (2009). The effects of auditor gender on audit quality. *IUP Journal of Accounting Research & Audit Practices.*, *8*(3/4), 78–107. https://doi.org/10.21073/kiar.2009..25.007

Brooke Elliott, W., Fanning, K., & Peecher, M. E. (2020). Do investors value higher financial reporting quality, and can expanded audit reports unlock this value? *The Accounting Review*, *95*(2), 141–165. https://doi.org/10.2308/accr-52508

Brown, T., Majors, T. M., & Peecher, M. E. (2020). Evidence on how different interventions affect juror assessment of auditor legal culpability and responsibility for damages after auditor failure to detect fraud. *Accounting, Organisations and Society*, *87*, 101172. https://doi.org/10.1016/j.aos.2020.101172

Buertey, S., Sun, E. J., Lee, J. S., & Hwang, J. (2020). Corporate social responsibility and earnings management: The moderating effect of corporate governance mechanisms. *Corporate Social Responsibility and Environmental Management*, *27*(1), 256-271. https://doi.org/10.1002/csr.1803

Burke, J. J., Hoitash, R., Hoitash, U., & Xiao, S. (Xia). (2023). The disclosure and consequences of U.S. critical audit matters. *The Accounting Review*, *98*(2), 59–95. https://doi.org/10.2308/tar-2021-0013

Camacho-Miñano, M. M., Muñoz-Izquierdo, N., Pincus, M., & Wellmeyer, P. (2023). Are key audit matter

disclosures useful in assessing the financial distress level of a client firm? *The British Accounting Review*, 101200. https://doi.org/10.1016/j.bar.2023.101200
Camponovo, L., Scaillet, O., & Trojani, F. (2012). Robust subsampling. *Journal of Econometrics*, *167*(1), 197–210. https://doi.org/10.1016/j.jeconom.2011.11.005
Capital Market Authority. (2005). *Legislations Regulating the Companies Operating in the Field of Securities and Listed Companies: Oman.* https://cma.gov.om/Home/AnnualReportFileDownlad/7
Carcello, J. V. (2014). Commentary— A call to action: The securities and exchange commission and the auditing profession's public interest responsibilities. *Accounting and the Public Interest*, *14*(1), 72–78. https://doi.org/10.2308/apin-51124
Carey, P., & Simnett, R. (2006). Audit partner tenure and audit quality. *The Accounting Review*, *81*(3), 653–676. https://doi.org/10.2308/accr.2006.81.3.653
Carver, B., Muriel, L., & Trinkle, B. S. (2023). Does the reporting of critical audit matters affect nonprofessional investors' perceptions of auditor credibility, information overload, audit quality, and investment risk? *Behavioral Research in Accounting*, *35*(1), 21–44. https://doi.org/10.2308/BRIA-19-031
Cassell, C. A., Myers, L. A., & Seidel, T. A. (2015). Disclosure transparency about activity in valuation allowance and reserve accounts and accruals-based earnings management. *Accounting, Organisations and Society*, *46*, 23–38. https://doi.org/10.1016/j.aos.2015.03.004
Certo, S. T. (2003). Influencing initial public offering investors with prestige: Signaling with board structures. *Academy of Management Review*, *28*(3), 432–446. https://doi.org/10.2307/30040731
Chalmers, J. (2013). PwC comment letter on FRC revision to ISA (UK and Ireland) 700: Requiring the auditor's report to address risks of material misstatement, materiality and a summary of audit scope. Retrieved from https://www. pwc. co. uk/assets/pdf/pwccomments-on-the-auditor-reporting-consultation-paper. pdf.
Chan, K. H., Lin, K. Z., & Mo, P. L. L. (2003). An empirical study on the impact of culture on audit-detected accounting errors. *Auditing: A Journal of Practice and Theory*, *22*(2), 281–295. https://doi.org/10.2308/aud.2003.22.2.281
Chaney, P. K., Faccio, M., & Parsley, D. (2011). The quality of accounting information in politically connected firms. *Journal of Accounting and Economics*, *51*(1–2), 58–76. https://doi.org/10.1016/j.jacceco.2010.07.003
Chang, Y. T., Chi, W., & Stone, D. N. (2022). Is client-specific information useful to investors? Evidence from key audit matter reports. *Journal of Accounting, Auditing & Finance*, *64*, 0148558X221091804. https://doi.org/10.1177/0148558x221091804
Chen, E. T., Gray, S., & Nowland, J. (2013). Family representatives in family firms. *Corporate Governance: An International Review*, *21*(3), 242–263. https://doi.org/10.1111/corg.12009
Chen, L., Xiao, T., & Zhou, J. (2023). Do auditor changes affect the disclosure of critical audit matters? Evidence from China. *Economic Modelling*. *122*, 106245. https://doi.org/10.1016/j.econmod.2023.106245
Chi, W., Myers, L. A., Omer, T. C., & Xie, H. (2017). The effects of audit partner pre-client and client-specific experience on audit quality and on perceptions of audit quality. *Review of Accounting Studies 22*, 361-391. https://doi.org/10.1007/s11142-016-9376-9
Chirakool, W., Poonpool, N., Wangcharoendate, S., & Bhongchirawattana, U. (2022). Key Audit Matters readability and investor reaction. *Journal of Distribution Science*, *20*(9), 73–81. https://doi.org/10.15722/jds.20.09.202209.73
Christensen, B. E., Glover, S. M., & Wolfe, C. J. (2014). Do critical audit matter paragraphs in the audit report change nonprofessional investors' decision to invest? *Auditing: A Journal of Practice & Theory*, *33*(4), 71–94. https://doi.org/10.2308/ajpt-50793
Chu, J., Florou, A. & Pope, P. F. (2022). Auditor university education: Does it matter? *European Accounting Review*, *31*(4), 787–818. https://doi.org/10.1080/09638180.2020.1866633
Chung, H. H., & Wynn, J. P. (2008). Managerial legal liability coverage and earnings conservatism. *Journal of Accounting and Economics*, *46*(1), 135–153. https://doi.org/10.1016/j.jacceco.2008.03.002
Church, B. K., Davis, S. M., & McCracken, S. A. (2008). The auditor's reporting model: A literature overview and research synthesis. *Accounting Horizons*, *22*(1), 69–90. https://doi.org/10.2308/acch.2008.22.1.69
Claessens, S., Djankov, S., Fan, J. P. & Lang, L. H. (2002). Disentangling the incentive and entrenchment effects of large shareholdings. *The Journal of Finance*, *57*(6), 2741–2771. https://doi.org/10.1111/1540-6261.00511
Cohen, J. R., Hoitash, U., Krishnamoorthy, G., & Wright, A. M. (2014). The effect of audit committee industry expertise on monitoring the financial reporting process. *The Accounting Review*, *89*(1), 243–273. https://doi.org/10.2308/accr-50585
Cohen, J. R., Pant, L. W., & Sharp, D. J. (1993). Culture-based ethical conflicts confronting multinational accounting firms. *Accounting Horizons*, *7*(3), 1–13.
Cohen, J. R., Pant, L. W., & Sharp, D. J. (1995). An exploratory examination of international differences in auditors' ethical perceptions. *Behavioural Research in Accounting*, *7*(1), 37–64.

Cohen, J., Krishnamoorthy, G., & Wright, A. M. (2002). Corporate governance and the audit process. *Contemporary Accounting Research*, *19*(4), 573–594. https://doi.org/10.22495/cocv6i4c2p5
Cook, D. J., Mulrow, C. D., Haynes, R. B. (1997). Systematic reviews: Synthesis of best evidence for clinical decisions. *Annals of internal medicine*, *126*(5), 376–380. https://doi.org/10.7326/0003-4819-126-5-199703010-00006
Coram, P. J., & Wang, L. (2021). The effect of disclosing key audit matters and accounting standard precision on the audit expectation gap. *International Journal of Auditing*, *25*(2), 270–282. https://doi.org/10.1111/ijau.12203
Cordoş, G. S., & Fülöp, M. T. (2015). Understanding audit reporting changes: Introduction of key audit matters. *Journal of Accounting and Management Information Systems*, *14*(1), 128–152.
Craswell, A. T., & Taylor, S. L. (1992). Discretionary disclosure of reserves by oil and gas companies: An economic analysis. *Journal of Business Finance & Accounting*, *19*(2), 295–308. https://doi.org/10.1111/j.1468-5957.1992.tb00626.x
Dahya, J., & McConnell, J. J. (2007). Board composition, corporate performance, and the Cadbury committee recommendation. *Journal of Financial and Quantitative Analysis*, *42*(3), 535–564. https://doi.org/10.1017/s0022109000004099
Daoud, J. I. (2017, December). Multicollinearity and regression analysis. *Journal of Physics: Conference Series*, (Vol. 949, No. 1, p. 012009). IOP Publishing. https://doi.org/10.1088/1742-6596/949/1/012009
Daugherty, B. E., Dickins, D., Pitman, M. K., & Tervo, W. A. (2021). The process of identifying and reporting CAMs: Early evidence. *International Journal of Disclosure and Governance*, *18*(1), 16–23. https://doi.org/10.1057/s41310-020-00101-1
Davis, J. H., Schoorman, F. D., & Donaldson, L. (2018). Toward a stewardship theory of management. In *Business Ethics and Strategy*, Volumes I and II (pp. 473-500). Routledge.
De Franco, G., Hope, O. K., Vyas, D., & Zhou, Y. (2015). Analyst report readability. *Contemporary Accounting Research*, *32*(1), 76–104. https://doi.org/10.1111/1911-3846.12062
DeAngelo, H., & DeAngelo, L. (2000). Controlling stockholders and the disciplinary role of corporate payout policy: A study of the Times Mirror Company. *Journal of Financial Economics*, *56(2)*, 153–207. https://doi.org/10.1016/S0304-405X(00)00039-8
Deegan, C. (2014). Financial Accounting Theory, 4th edn, McGraw-Hill Education (Australia) Pty Ltd.
Demsetz, H., & Lehn, K. (1985). The structure of corporate ownership: Causes and consequences. *Journal of Political Economy*, *93*(6), 1155–1177. https://doi.org/10.1086/261354
Dennis, S. A., Griffin, J. B., & Zehms, K. M. (2019). The value relevance of managers' and auditors' disclosures about material measurement uncertainty. *The Accounting Review*, *94*(4), 215–243. https://doi.org/10.2308/accr-52272
Dey, A. (2008). Corporate governance and agency conflicts. *Journal of Accounting Research*, *46*(5), 1143–1181. https://doi.org/10.1111/j.1475-679X.2008.00301.x
Ding, Y., Jeanjean, T., & Stolowy, H. (2005). Why do national GAAP differ from IAS? The role of culture. *The International Journal of Accounting*, *40*(4), 325–350. https://doi.org/10.1016/j.intacc.2005.09.004
Doty, J. R. (2017). *Statement on adoption of an auditing standard on the auditor's report*. Speech at the PCAOB Open Board Meeting June 1, 2017. PCAOB (Public Company Accounting Oversight Board). https://pcaobus.org/news-events/speeches/speech-detail/statement-onadoption-of-an-auditing-standard-on-the-auditor-s-report_648
Doxey, M. (2014). The effects of auditor disclosures regarding management estimates on financial statement users' perceptions and investments. *Available at SSRN: 2181624*. https://ssrn.com/abstract=2181624
Doxey, M. M., Fuller, S. H., Geiger, M. A., Gist, W. E., Hackenbrack, K. E., Janvrin, D. J., Pitman, M. K., & Roush, P. B. (2017). Comments by the auditing standards committee of the auditing section of the American Accounting Association on PCAOB Release No. 2016-003, proposed auditing standard—the auditor's report on an audit of financial statements when the auditor expresses an unqualified opinion and related amendments to PCAOB standards. *Current Issues in Auditing*, *11*(1), C26–C40. https://doi.org/10.2308/ciia-51651
Duboisée De Ricquebourg, A., & Maroun, W. (2023). How do auditor rotations affect key audit matters? Archival evidence from South African audits. *The British Accounting Review*, *55*(2), 1–19. https://doi.org/10.1016/j.bar.2022.101099
Dunn, K. A., & Mayhew, B. W. (2004). Audit firm industry specialisation and client disclosure quality. *Review of Accounting Studies*, *9*, 35–58.
Dwyer, K. A. M., Brennan, N. M., & Kirwan, C. E. (2024). Disclosure of auditor risk assessments in expanded audit reports. *Journal of Applied Accounting Research, 25*(1) 1–23. https://doi.org/10.1108/jaar-07-2022-0181
Einhorn, H. J., & Hogarth, R. M. (1981). Behavioral decision theory: Processes of judgment and choice. *Annual Review of Psychology*, *32*, 53–88. https://doi.org/10.1146/annurev.ps.32.020181.000413

Elamer, A. A., Ntim, C. G., & Abdou, H. A. (2020). Islamic governance, national governance, and bank risk management and disclosure in MENA countries. *Business & Society*, *59*(5), 914–955. https://doi.org/10.1177/0007650317746108
Elmagrhi, M. H., Ntim, C. G., Wang, Y., Abdou, H. A., & Zalata, A. M. (2020). Corporate governance disclosure index–executive pay nexus: The moderating effect of governance mechanisms. *European Management Review*, *171*(1), 121–152. https://doi.org/10.1111/emre.12329
Elmarzouky, M., Hussainey, K., & Abdelfattah, T. (2023). The key audit matters and the audit cost: Does governance matter? *International Journal of Accounting and Information Management*, *31*(1), 195–217. https://doi.org/10.1108/IJAIM-08-2022-0178
Elmarzouky, M., Hussainey, K., Abdelfattah, T., & Karim, A. E. (2022). Corporate risk disclosure and key audit matters: The egocentric theory. *International Journal of Accounting & Information Management*, *30*(2), 230–251. https://doi.org/10.1108/IJAIM-10-2021-0213
Elsayed, M., Elshandidy, T., & Ahmed, Y. (2023). Is expanded auditor reporting meaningful? UK evidence. *Journal of International Accounting, Auditing and Taxation, 53,* 100582. https://doi.org/10.1016/j.intaccaudtax.2023.100582
Elshafie, E. (2023). Critical audit matters: Litigation, quality and conservatism. *Review of Accounting and Finance*, *22*(3). https://doi.org/10.1108/RAF-05-2022-0147
Eulaiwi, B., Al-Hadi, A., Taylor, G., Al-Yahyaee, K. H., & Evans, J. (2016). Multiple directorships, family ownership and the board nomination committee: International evidence from the GCC. *Emerging Markets Review*, *28*, 61–88. https://doi.org/10.1016/j.ememar.2016.06.004
European Commission. (2010). *Green Paper- Audit Policy: Lessons from the Crisis.* Publications Office of the European Union
European Parliament and Council. (2014). *Regulation (Eu) No 537/2014 of The European Parliament and of the Council of 16 April 2014 on specific requirements regarding statutory audit of public-interest entities and repealing Commission Decision 2005/909/EC*. https://eur-lex.europa.eu/legal content/EN/TXT/PDF/?uri=CELEX:32014R0537
Faccio, M. (2006). Politically connected firms. *American Economic Review*, *96(1),* 369–386. https://doi.org/10.1257/000282806776157704
Faccio, M., Masulis, R. W., & Mcconnell, J. J. (2006). Political connections and corporate bailouts. *Journal of Finance*, *61*(6), 2597–2635. https://doi.org/10.1111/j.1540-6261.2006.01000.x
Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The Journal of Law & Economics, 26*(2), 301–325. https://doi.org/10.1086/467037
Fan, J. P., & Wong, T. J. (2002). Corporate ownership structure and the informativeness of accounting earnings. *Journal of Accounting and Economics, 33(3),* 401–425. https://doi.org/10.1016/S0165-4101(02)00047-2
Fera, P., Pizzo, M., Vinciguerra, R., & Ricciardi, G. (2022). Sustainable corporate governance and new auditing issues: A preliminary empirical evidence on key audit matters. *Corporate Governance (Bingley)*, *22*(1), 194–211. https://doi.org/10.1108/CG-09-2020-0427
Ferreira, C., & Morais, A. I. (2020). Analysis of the relationship between company characteristics and key audit matters disclosed. *Revista Contabilidade e Financas*, *31*(83), 262–274. https://doi.org/10.1590/1808-057x201909040
Fidler, S., Skočaj, D., & Leonardis, A. (2006). Combining reconstructive and discriminative subspace methods for robust classification and regression by subsampling. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, *28*(3), 337–350. https://doi.org/10.1109/TPAMI.2006.46
Financial Reporting Council. (2013). *Revision to ISA (UK and Ireland) 700. Requiring the auditor's report to address risks of material misstatement, materiality and a summary of the audit scope*. FRC (Financial Reporting Council).
Financial Reporting Council. (2016). *Standard on Auditing (UK) 701 Communicating Key Audit Matters in the Independent Auditor's Report*. FRC (Financial Reporting Council). https://media.frc.org.uk/documents/ISA_UK_701_-_June_2016.pdf
Financial Reporting Council. (2018). *The UK Corporate Governance*. https://www.frc.org.uk/getattachment/88bd8c45-50ea-4841-95b0-d2f4f48069a2/2018-uk-corporate-governance-code-final.pdf
Fisman, R. (2001). Estimating the value of political connections. *American Economic Review*, *91*(4), 1095–1102. https://doi.org/10.1257/aer.91.4.1095
Frederickson, J. R., & Miller, J. S. (2004). The effects of pro forma earnings disclosures on analysts' and nonprofessional investors' equity valuation judgments. *The Accounting Review*, *79*(3), 667–686. https://doi.org/10.2308/accr.2004.79.3.667
Fuller, S. H., Joe, J. R., & Luippold, B. L. (2021). The effect of auditor reporting choice and audit committee oversight on management financial disclosures. *The Accounting Review, 96*(6), 239–274. https://doi.org/10.2308/TAR-2016-0246

Gambetta, N., Sierra-García, L., García-Benau, M. A., & Novejarque-Civera, J. (2023). The informative value of key audit matters in the audit report: Understanding the impact of the audit firm and KAM type. *Australian Accounting Review*, *33(104)*, 114–134. https://doi.org/10.1111/auar.12396

Gerged, A. M., Beddewela, E. S., & Cowton, C. J. (2021). Does the quality of country-level governance have an impact on corporate environmental disclosure? Evidence from Gulf Cooperation Council countries. *International Journal of Finance & Economics*, *28*(2), 1179-1200. https://doi.org/10.1002/ijfe.2469

Gimbar, C., Hansen, B., & Ozlanski, M. E. (2016a). Early evidence on the effects of critical audit matters on auditor liability. *Current Issues in Auditing*, *10*(1), A24–A33. https://doi.org/10.2308/ciia-51369

Gimbar, C., Hansen, B., & Ozlanski, M. E. (2016b). The effects of critical audit matter paragraphs and accounting standard precision on auditor liability. *The Accounting Review*, *91*(6), 1629–1646. https://doi.org/10.2308/accr-51382

Gold, A., & Heilmann, M. (2019). The consequences of disclosing key audit matters (KAMs): A review of the academic literature. *Maandblad Voor Accountancy En Bedrijfseconomie*, *93*(1/2), 5–14. https://doi.org/10.5117/mab.93.29496

Gold, A., Heilmann, M., Pott, C., & Rematzki, J. (2020). Do key audit matters impact financial reporting behavior? *International Journal of Auditing*, *24*(2), 232–244. https://doi.org/10.1111/ijau.12190

Goldman, E., Rocholl, J., & So, J. (2009). Do politically connected boards affect firm value? *The Review of Financial Studies, 22(6)*, 2331–2360. https://doi.org/10.1093/rfs/hhn088

Gompers, P., Ishii, J., & Metrick, A. (2003). Corporate governance and equity prices. *The Quarterly Journal of Economics*, *118*(1), 107–155. https://doi.org/10.1162/00335530360535162

Gray, G. L., Turner, J. L., Coram, P. J., & Mock, T. J. (2011). Perceptions and misperceptions regarding the unqualified auditor's report by financial statement preparers, users, and auditors. *Accounting Horizons*, *25*(4), 659–684. https://doi.org/10.2308/acch-50060

Gray, S. J. (1988). Towards a theory of cultural influence on the development of accounting systems internationally. *Abacus*, *24*(1), 1–15. https://doi.org/10.1111/j.1467-6281.1988.tb00200.x

Gray, S. J., & Vint, H. M. (1995). The impact of culture on accounting disclosures: Some international evidence. *Asia-Pacific Journal of Accounting*, *2*(1), 33–43. https://doi.org/10.1080/10293574.1995.10510476

Grove, H., Patelli, L., Victoravich, L. M., & Xu, P. T. (2011). Corporate governance and performance in the wake of the financial crisis: Evidence from US commercial banks. *Corporate Governance: An International Review*, *19*(5), 418–436. https://doi.org/10.1111/j.1467-8683.2011.00882.x

Guedhami, O., Pittman, J. A., & Saffar, W. (2009). Auditor choice in privatized firms: Empirical evidence on the role of state and foreign owners. *Journal of Accounting and Economics*, *48*(2–3), 151–171. https://doi.org/10.1016/j.jacceco.2009.08.003

Gutierrez, E., Minutti-Meza, M., Tatum, K. W., & Vulcheva, M. (2018). Consequences of adopting an expanded auditor's report in the United Kingdom. *Review of Accounting Studies*, *23*, 1543–1587. https://doi.org/10.1007/s11142-018-9464-0

Halawi, A., & Davidson, B. (2008). *Power matters: A survey of GCC boards (TNI Market Insight)*. Retrieved from the Hawkamah Institute for Corporate Governance website: https://hawkamah.org/exclusive-publications/attachment/powermatters.pdf

Haniffa, R. M., & Cooke, T. E. (2002). Culture, corporate governance and disclosure in Malaysian corporations. *Abacus*, *38*(3), 317–349. https://doi.org/10.1111/1467-6281.00112

Haniffa, R., & Hudaib, M. (2007). Locating audit expectations gap within a cultural context: The case of Saudi Arabia. *Journal of International Accounting, Auditing and Taxation*, *16*(2), 179–206. https://doi.org/10.1016/j.intaccaudtax.2007.06.003

Hardies, K., Breesch, D., & Branson, J. (2013). Gender differences in overconfidence and risk taking: Do self-selection and socialization matter? *Economics Letters*, *118*(3), 442–444. https://doi.org/10.1016/j.econlet.2012.12.004

Hardies, K., Breesch, D., & Branson, J. (2016). Do (fe) male auditors impair audit quality? Evidence from going-concern opinions. *European Accounting Review*, *25*(1), 7–34. https://doi.org/10.1080/09638180.2014.921445

Hashim, U. J., Ahmad, N., Abdullah, W. A. W., & Salleh, Z. (2021). Early practices of KAMs reporting in Malaysia: Evidence from construction sector. *Malaysian Construction Research Journal*, *33*(1), 47–60.

Haskins, M. E. (1987). Client control environments: An examination of auditors' perceptions. *The Accounting Review*, *62*(3), 542–563. https://www.jstor.org/stable/247576

Hategan, C. D., Pitorac, R. I., & Crucean, A. C. (2022). Impact of Covid-19 pandemic on auditors' responsibility: Evidence from European listed companies on key audit matters. *Managerial Auditing Journal*, *37*(7), 886–907. https://doi.org/10.1108/MAJ-07-2021-3261

Haut Conseil des Commissaires aux Comptes. 2006. *NEP-705 Justification des appréciations*. In Normes d'Exercice Professionnel des Commissaires aux Comptes. Paris, France: Haut Conseil des Commissaires aux Comptes

Healy, P. M., & Palepu, K. G. (1993). The effect of firms' financial disclosure strategies on stock prices. *Accounting Horizons*, *7*(1), 1–11.

Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics, 31(1-3)*, 405–440. https://doi.org/10.1016/S0165-4101(01)00018-0

Hegazy, M. A. A., & Kamareldawla, N. M. (2021). Key audit matters: Did IAASB unravel the knots of confusion in audit reports decisions? *Managerial Auditing Journal*, *36*(8), 1025–1052. https://doi.org/10.1108/MAJ-11-2019-2464

Hegazy, M. A. A., El-Haddad, R., & Kamareldawla, N. M. (2022). Impact of auditor characteristics and Covid-19 pandemic on KAMs reporting. *Managerial Auditing Journal*, *37*(7), 908–933. https://doi.org/10.1108/MAJ-07-2021-3271

Hertog, S. (2012). How the GCC did it: Formal and informal governance of successful public enterprise in the Gulf Co-operation Council countries. *Towards New Arrangements for State Ownership in the Middle East and North Africa.* OECD Publishing. https://doi.org/10.1787/9789264169111-5-en

Hillman, A. J. (2005). Politicians on the board of directors: Do connections affect the bottom line? *Journal of Management*, *31*(3), 464–481. https://doi.org/10.1177/0149206304272187

Hoang, H., & Phang, S. Y. (2021). How does combined assurance affect the reliability of integrated reports and investors' judgments? *European Accounting Review*, *30*(1), 175–195. https://doi.org/10.1080/09638180.2020.1745659

Hoang, H., Moroney, R., Phang, S. Y., & Xiao, X. (2022). Investor reactions to key audit matters: Financial and non-financial contexts. *Accounting & Finance*, 1–25. https://doi.org/10.1111/acfi.13041

Hodg, F., & Pron, M. (2006). The impact of expertise and investment familiarity on investors' use of online financial report information. *Journal of Accounting, Auditing & Finance*, *21*(3), 267–292. https://doi.org/10.1177/0148558X0602100304

Hofstede, G. (1980). *Culture's Consequences: International Differences in Work-Related Values*. Sage Publications.

Hofstede, G. (1991). *Cultures and Organisations: Software of the Mind: Intercultural Cooperation and its Importance for Survival*. McGraw-Hill.

Hofstede, G. (2001). *Culture's consequences, comparing values, behaviors, institutions, and organisations across nations* (2nd ed.). Sage Publications.

Hogarth, R. M. (1980). *Judgment and Choice: The Psychology of Decision*. John Wiley & Sons.

Honkamäki, T., Mättö, M., & Teittinen, H. (2022). The homogeneity of BIG4 audit reports after the implementation of key audit matters in the context of fair value accounting. *International Journal of Auditing*, *26*(3), 354–370. https://doi.org/10.1111/ijau.12285

Hope, O. K. (2003). Firm-level disclosures and the relative roles of culture and legal origin. *Journal of International Financial Management & Accounting*, *14*(3), 218–248. https://doi.org/10.1111/1467-646X.00097

Hope, O., K., Kang, T., Thomas, W., & Yoo, Y. K. (2008). Culture and auditor choice: A test of the secrecy hypothesis. *Journal of Accounting and Public Policy*, *27*(5), 357–373. https://doi.org/10.1016/j.jaccpubpol.2008.07.003

Houghton, K. A., Kend, M., & Jubb, C. (2013). The CLERP 9 audit reforms: Benefits and costs through the eyes of regulators, standard setters and audit service suppliers. *Abacus*, *49*(2), 139–160. https://doi.org/10.1111/abac.12002

Hsieh, Y. T., & Lin, C. J. (2016). Audit firms' client acceptance decisions: Does partner- level industry expertise matter? *Auditing: A Journal of Practice & Theory*, *35*(2), 97–120. https://doi.org/10.2308/ajpt-51292

Hsu, H. H., Lin, C. H., & Tsao, S. M. (2018). Founding family and auditor choice: Evidence from Taiwan. *Corporate Governance: An International Review*, *26*(2), 118–142. https://doi.org/10.1111/corg.12226

Human Development Insights. (n.d.). Human Development Reports. https://hdr.undp.org/data-center/country-insights#/ranks

Humphrey, C., Kausar, A., Loft, A., & Woods, M. (2011). Regulating audit beyond the crisis: A critical discussion of the EU Green Paper. *European Accounting Review*, *20*(3), 431–457. https://doi.org/10.1080/09638180.2011.597201

Hussin, N., Salleh, M. F. M., Ahmad, A., & Rahmat, M. M. (2022). The influence of audit firm attributes on KAM disclosures in FTSE100 in Malaysia. *Management & Accounting Review*, *21*(2), 239–262. https://doi.org/10.24191/MAR.V21i02-10

Institute of Chartered Accountants in England and Wales. (2017). *The start of a conversation. The Extended Audit Report.* https://www.icaew.com/-/media/corporate/files/technical/audit-and-assurance/audit-and-assurance-faculty/publications/extended-audit-report.ashx

International Auditing and Assurance Standards Board. (2015). *International standard on auditing 701 communicating key audit matters in the independent auditor's report.* In *International Auditing Standards.*

International Auditing and Assurance Standards Board. (2016). *The new auditor's report: A comparison between the ISAs and the US PCAOB reproposal both the IAASB and PCAOB.* In *International Auditing Standards.*

International Federation of Accountants. (2022). *International Standards: 2022 Global Adoption Status Snapshot*. https://www.ifac.org/knowledge-gateway/supporting-international-standards/publications/international-standards-2022-global-adoption-status-snapshot

International Financial Corporation & Hawkama. (2008). *A corporate governance survey of listed companies and banks across Middle East and North Africa*. Pennsylvania: International Finance Corporation and Hawkamah. https://documents1.worldbank.org/curated/en/421551468276554126/pdf/496070REPLACEM10Box341965B01PUBLIC1.pdf

Ittonen, K., Vähämaa, E., & Vähämaa, S. (2013). Female auditors and accruals quality. *Accounting Horizons*, *27*(2), 205–228. https://doi.org/10.2308/acch-50400

Jaffar, R., Abu, N. A., Hassan, M. S., & Rahmat, M. M. (2023). Value relevance of board attributes: The mediating role of key audit matter. *International Journal of Financial Studies, 11*(1), 41. https://doi.org/10.3390/ijfs11010041

Jaggi, B., & Low, P. Y. (2000). Impact of culture, market forces, and legal system on financial disclosures. *The International Journal of Accounting*, *35*(4), 495–519. https://doi.org/10.1016/S0020-7063(00)00076-5

Jaggi, B., Leung, S., & Gul, F. (2009). Family control, board independence and earnings management: Evidence based on Hong Kong firms. *Journal of Accounting and Public Policy*, *28*(4), 281–300. https://doi.org/10.1016/j.jaccpubpol.2009.06.002

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, *3*(4), 305–360. https://doi.org/10.1177/0018726718812602

Johnson, V. E., Khurana, I. K., & Reynolds, J. K. (2002). Audit-firm tenure and the quality of financial reports. *Contemporary Accounting Research*, *19*(4), 637–660. https://doi.org/10.1506/LLTH-JXQV-8CEW-8MXD

Kachelmeier, S. J., Rimkus, D., Schmidt, J. J., & Valentine, K. (2020). The forewarning effect of critical audit matter disclosures involving measurement uncertainty. *Contemporary Accounting Research*, *37*(4), 2186–2212. https://doi.org/10.1111/1911-3846.12583

Kang, Y. J. (2019). Are Audit committees more challenging given a specific investor base? Does the answer change in the presence of prospective critical audit matter disclosures? *Accounting, Organisations and Society*, *77*, 101051. https://doi.org/10.1016/j.aos.2019.04.001

Karjalainen, J., Niskanen, M., & Niskanen, J. (2018). The effect of audit partner gender on modified audit opinions. *International Journal of Auditing*, *22*(3), 449–463. https://doi.org/10.1111/ijau.12130

Kend, M., & Nguyen, L. A. (2020). Investigating recent audit reform in the Australian context: An analysis of the KAM disclosures in audit reports 2017–2018. *International Journal of Auditing*, *24*(3), 412–430. https://doi.org/10.1111/ijau.12205

Kend, M., & Nguyen, L. A. (2022). Key audit risks and audit procedures during the initial year of the Covid-19 pandemic: An analysis of audit reports 2019-2020. *Managerial Auditing Journal*, *37*(7), 798–818. https://doi.org/10.1108/MAJ-07-2021-3225

Khlif, H. (2016). Hofstede's cultural dimensions in accounting research: A review. *Meditari Accountancy Research*, *24*(4), 545–573. https://doi.org/10.1108/MEDAR-02-2016-0041

Kimbro, M. B. (2002). A cross-country empirical investigation of corruption and its relationship to economic, cultural, and monitoring institutions: An examination of the role of accounting and financial statements quality. *Journal of Accounting, Auditing and Finance*, *17*(4), 325–349. https://doi.org/10.1177/0148558X0201700403

Kitiwong, W., & Sarapaivanich, N. (2020). Consequences of the implementation of expanded audit reports with key audit matters (KAMs) on audit quality. *Managerial Auditing Journal*, *35*(8), 1095–1119. https://doi.org/10.1108/MAJ-09-2019-2410

Klevak, J., Livnat, J., Pei, D. (Selina), & Suslava, K. (2022). Critical audit matters: Possible market misinterpretation. *Auditing: A Journal of Practice & Theory*, *42*(3), 1–26. https://doi.org/10.2308/ajpt-2020-113

Knechel, W. R. (2000). Behavioral research in auditing and its impact on audit education. *Issues in Accounting Education*, *15*(4), 695–712. https://doi.org/10.2308/iace.2000.15.4.695

Knechel, W. R., & Payne, J. L. (2001). Additional evidence on audit report lag. *Auditing: A Journal of Practice & Theory*, *20*(1), 137–146. https://doi.org/10.2308/aud.2001.20.1.137

Köhler, A., Ratzinger-Sakel, N., & Theis, J. (2020). The effects of key audit matters on the auditor's report's communicative value: Experimental evidence from investment professionals and non-professional investors. *Accounting in Europe*, *17*(2), 105–128. https://doi.org/10.1080/17449480.2020.1726420

Küster, S. (2024). The determinants of linguistic features in key audit matters: Empirical evidence from Europe. *International Journal of Auditing*, 1–33. https://doi.org/10.1111/ijau.12344

Kuwait Ministry of Commerce and Industry. (2016). *Law No. 1 of 2016 on the Promulgation of the Companies Law. Unofficial translation by Kuwait Direct Investment Authority.* http://www.kbc.gov.kw/Files/Decisionsandlaws/d4069db7-74a1-46fd-adf8-a0c7b3c75df3.pdf

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (2000). Investor protection and corporate governance. *Journal of Financial Economics*, *58*(1–2), 3–27. https://doi.org/10.1016/S0304-405X(00)00065-9

Lau, C. K. (2021). Measurement uncertainty and management bias in accounting estimates: The perspective of key audit matters reported by Chinese firms' auditors. *Asian Review of Accounting*, *29*(1), 79–95. https://doi.org/10.1108/ARA-07-2020-0109

Lee, Y. J, Petroni, K. R., & Shen, M. (2006). Cherry picking, disclosure quality, and comprehensive income reporting choices: The case of property-liability insurers. *Contemporary Accounting Research*, *23*(3), 655–692. https://doi.org/10.1506/5QB8-PBQY-Y86L-DRYL

Lennox, C. S., & Wu, X. (2018). A review of the archival literature on audit partners. *Accounting Horizons*, *32*(2), 1–35. https://doi.org/10.2308/acch-51942

Lennox, C. S., Schmidt, J. J., & Thompson, A. M. (2023). Why are expanded audit reports not informative to investors? Evidence from the United Kingdom. *Review of Accounting Studies*, *28*(2), 497–532. https://doi.org/10.1007/s11142-021-09650-4

Li, D., Xing, L., & Zhao, Y. (2022). Does extended auditor disclosure deter managerial bad-news hoarding? Evidence from crash risk. *Journal of Corporate Finance*, *76*: 102256 https://doi.org/10.1016/j.jcorpfin.2022.102256

Li, H., Hay, D., & Lau, D. (2019). Assessing the impact of the new auditor's report. *Pacific Accounting Review*, *31*(1), 110–132. https://doi.org/10.1108/PAR-02-2018-0011

Li, V., & Luo, Y. (2023). Costs and benefits of auditors' disclosure of critical audit matters: Initial evidence from the United States. *Advances in Accounting, 60*, 100641. https://doi.org/10.1016/j.adiac.2022.100641

Liang, S. H., Hsieh, Y. T., Lin, H. C., & Hsiao, H. Y. (2023). What underlies key audit matters? Evidence from Taiwan. *Review of Quantitative Finance and Accounting*, *60*(3), 1243–1258. https://doi.org/10.1007/s11156-023-01128-5

Lin, H. L., & Yen, A. R. (2022). Auditor rotation, key audit matter disclosures, and financial reporting quality. *Advances in Accounting*, *57*, 100594. https://doi.org/10.1016/j.adiac.2022.100594

Liu, H., Ning, J., Zhang, Y., & Zhang, J. (2022). Key audit matters and debt contracting: Evidence from China. *Managerial Auditing Journal*, *37*(6), 657–678. https://doi.org/10.1108/MAJ-06-2021-3210

Liu, W. P., Yen, M. F., & Wu, T. Y. (2022). Report users' perceived sentiments of key audit matters and firm performance: Evidence from a deep learning-based natural language processing approach. *Journal of Information Systems*, *36*(3), 191–209. https://doi.org/10.2308/isys-2020-061

Liu, Y., Liu, J. J., & Xin, Q. (2022). Does industry audit risk similarity affect auditor expertise? Evidence from China. *Asia-Pacific Journal of Accounting and Economics*, 1–21. https://doi.org/10.1080/16081625.2022.2147964

Loeb, S. E. (1971). A survey of ethical behavior in the accounting profession. *Journal of Accounting Research*, *9*(2), 287–306. https://doi.org/10.2307/2489935

Loughran, T., & Mcdonald, B. (2011). When is a liability not a liability? Textual analysis, dictionaries, and 10-Ks. *Journal of Finance*, *66*(1), 35–65. https://doi.org/10.1111/j.1540-6261.2010.01625.x

Luo, Y. (2021). Determinants and consequence of critical audit matter disclosure: Early evidence. *International Journal of Disclosure and Governance*, *18*(4), 336–345. https://doi.org/10.1057/s41310-021-00112-6

Maalel, N., & Mahmood, H. (2018). Oil-abundance and macroeconomic performance in the GCC countries. *International Journal of Energy Economics and Policy*, *8*(2), 182–187.

Mah'd, O. A., & Mardini, G. H. (2022). Matters may matter: The disclosure of key audit matters in the Middle East. *Cogent Economics & Finance*, *10*(1). https://doi.org/10.1080/23322039.2022.2111787

Manry, D. L., Mock, T. J., & Turner, J. L. (2008). Does increased audit partner tenure reduce audit quality? *Journal of Accounting, Auditing and Finance*, *23*(4), 553–572. https://doi.org/10.1177/0148558X0802300406

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*(2), 224–253.

Martinez-Garcia, I., Basco, R., Gomez-Anson, S., & Boubakri, N. (2022). Ownership concentration in the Gulf Cooperation Council. *International Journal of Emerging Markets*, *17*(1), 219–252. https://doi.org/10.1108/IJOEM-03-2020-0290

Mazaheri, N. (2013). The Saudi monarchy and economic familism in an era of business environment reforms. *Business and Politics*, *15*(3), 295–321. https://doi.org/10.1515/bap-2012-0039

Mihret, D. G. (2014). National culture and fraud risk: Exploratory evidence. *Journal of Financial Reporting and Accounting*, *12*(2), 161–176. https://doi.org/10.1108/JFRA-10-2012-0049

Miller, D., Breton-miller, I. L., & Lester, R. H. (2013). Family firm governance, strategic conformity, and

performance: Institutional vs. strategic perspectives. *Organisation Science*, *24*(1), 189–209. https://doi.org/https://doi.org/10.1287/ orsc.1110.0728
Ministry of Economy. (2014). *Federal Law No. 12 of 2014*. https://ded.ae/DED_Files/Files/%D8%A7%D9%84%D9%82%D9%88%D8%A7%D9%86%D9%8A%D9%86%20%D9%88%D8%A7%D9%84%D8%AA%D8%B4%D8%B1%D9%8A%D8%B9%D8%A7%D8%AA%20PDF/Federal%20Law%20No%20(12)%20of%202014%20regarding%20Reorganisation%20of%20Accounts%20Auditors%20Profession.pdf
Ministry of Industry and Commerce. (2013). *Central Bank of Bahrain Rulebook. Volume 6: Capital Markets* High-Level Controls (Corporate Governance Module). https://cbben.thomsonreuters.com/rulebook/central-bank-bahrain-volume-6-capital-markets
Mock, T. J., Bédard , J., Coram, P. J., Davis, S. M., Espahbodi, R., & Warne, R. C. (2013). The audit reporting model: Current research synthesis and implications. *Auditing: A Journal of Practice & Theory*, *32*(Supplement 1), 323–351. https://doi.org/10.2308/ajpt-50294
Mueller, G. G., Gernon, H., and Meek, G (1991). *Accounting: An international perspective* (2nd ed.). Irwin Professional Publishing.
Murphy, P., McLaughlin, C., & Elamer, A. A. (2023). Audit partner gender and the Covid-19 pandemic: The impact on audit fees audit and key audit matters. *Journal of Financial Reporting and Accounting, Forthcoming*. https://doi.org/10.1108/JFRA-11-2022-0431
Myers, J. N., Myers, L. A., & Omer, T. C. (2003). Exploring the term of the auditor-client relationship and the quality of earnings: A case for mandatory auditor rotation? *The Accounting Review*, *78*(3), 779–799. https://doi.org/10.2308/accr.2003.78.3.779
Neu, D. (1992). The social construction of positive choices. *Accounting, Organisation and Society*, *17*(3-4), 223–237. https://doi.org/10.1016/0361-3682(92)90022-K
Nguyena, T. H. H., Ntim, C. G., & Malagilab, J. K. (2020). Women on corporate boards and corporate financial and non-financial performance: A systematic literature review and future research agenda. *International Review of Financial Analysis*, *71*, 101554. https://doi.org/10.1016/j.irfa.2020.101554
Nicholls, D., & Ahmed, K. (1995). Disclosure quality in corporate annual reports of non-financial companies in Bangladesh. *Research in Accounting in Emerging Economies*, *3*(2), 149–170.
Ntim, C. G., & Soobaroyen, T. (2013). Black economic empowerment disclosures by South African listed corporations: The influence of ownership and board characteristics. *Journal of Business Ethics*, *116*, 121–138. https://doi.org/10.1007/s10551-012-1446-8
Ntim, C. G., Lindop, S., & Thomas, D. A. (2013). Corporate governance and risk reporting in South Africa: A study of corporate risk disclosures in the pre-and post-2007/2008 global financial crisis periods. *International Review of Financial Analysis*, *30*, 363–383. https://doi.org/10.1016/j.irfa.2013.07.001
Orij, R. (2010). Corporate social disclosures in the context of national cultures and stakeholder theory. *Accounting, Auditing and Accountability Journal*, *23*(7), 868–889. https://doi.org/10.1108/09513571011080162
Overend, R. (2013). *EY comment letter on FRC revision to ISA (UK and Ireland) 700: Requiring the auditor's report to address risks of material misstatement, materiality and a summary of audit scope.* https://www.frc.org.uk/getattachment/95da69ad-6996-496b-adb7-b0f1522badc9/Feedback-Statement-for-publication.pdf
Patai, R. (1952). The Middle East as a cultural area. *Middle East Journal*, *6*(1), 1–21.
Pérez, Y. P., Miñano, M. D. M. C., & Segovia-Vargas, M. J. (2021). Risk on financial reporting in the context of the new audit report in Spain. *Revista de Contabilidad-Spanish Accounting Review*, *24*(1), 48–61. https://doi.org/10.6018/rcsar.363001
Pillai, R., & Al-Malkawi, H. A. N. (2018). On the relationship between corporate governance and firm performance: Evidence from GCC countries. *Research in International Business and Finance, 44*, 394–410. https://doi.org/10.1016/j.ribaf.2017.07.110
Pinto, I., & Morais, A. I. (2019). What matters in disclosures of key audit matters: Evidence from Europe. *Journal of International Financial Management and Accounting*, *30*(2), 145–162. https://doi.org/10.1111/jifm.12095
Piotroski, J. D., Wong, T. J., & Zhang, T. (2015). Political incentives to suppress negative information: Evidence from Chinese listed firms. *Journal of Accounting Research*, *53*(2), 405-459. https://doi.org/10.1111/1475-679X.12071
Polsiri, P., & Jiraporn, P. (2012). Political connections, ownership structure, and financial institution failure. *Journal of Multinational Financial Management*, *22*(1–2), 39–53. https://doi.org/10.1016/j.mulfin.2012.01.001
Public Company Accounting Oversight Board. (2011). *Concept Release on Possible Revisions to PCAOB Standards Related to Reports on Audited Financial Statements.* PCAOB Open Board Meeting Washington, DC.

Public Company Accounting Oversight Board. (2013). *Proposed Auditing Standards – The Auditor's Report on an Audit of Financial Statements when the Auditor Expresses an Unqualified Opinion; The Auditor's Responsibilities Regarding Other Information in Certain Documents Containing Audited Financial Statemen* (Issue 005). https://pcaobus.org/Rulemaking/Docket034/Release_2013-005_ARM.pdf

Public Company Accounting Oversight Board. (2016). *Proposed Auditing Standard— The Auditor's Report on An Audit of Financial Statements when the Auditor Expresses an Unqualified Opinion and Related Amendments to PCAOB Standards.* (Issue 003). https://pcaobus.org/Rulemaking/Docket034/Release-2016-003-ARM.pdf

Public Company Accounting Oversight Board. (2017). *The auditor's report on an audit of financial statements when the auditor expresses an unqualified opinion and related amendments to PCAOB Standards.* In *Auditing Standards AS3101* (Issue 001). https://pcaobus.org/Rulemaking/Docket034/2017-001-auditors-report-final-rule.pdf

Public Company Accounting Oversight Board. (2020). *Interim Analysis Report.* In *PCAOB* (Release No. 2020-002). https://doi.org/10.32388/10vxn5

Public Law Act. (2002). *Public Law 107-204-July 30, 2002* (pp. 1–66). Sarbanes–Oxley Act. https://pcaobus.org/About/History/Documents/PDFs/Sarbanes_Oxley_Act_of_2002.pdf

Qatar Financial Market Authority. (2016). *Governance Code for Companies & Legal Entities Listed on the Main Market.*https://www.qfma.org.qa/English/RulesRegulations/RulesDox/Governance_Code%20for%20Companies%20and_Legal%20Entities_Listed_on_the_Main_Market.pdf

Queiri, A., Madbouly, A., Reyad, S., & Dwaikat, N. (2021). Corporate governance, ownership structure and firms' financial performance: Insights from Muscat securities market (MSM30). *Journal of Financial Reporting and Accounting*, *19*(4), 640–665. https://doi.org/10.1108/JFRA-05-2020-0130

Ullah, S., Akhtar, P., & Zaefarian, G. (2018). Dealing with endogeneity bias: The generalized method of moments (GMM) for panel data. *Industrial Marketing Management*, *71*, 69–78. https://doi.org/10.1016/j.indmarman.2017.11.010

Ullah, S., Zaefarian, G., & Ullah, F. (2021). How to use instrumental variables in addressing endogeneity? A step-by-step procedure for non-specialists. *Industrial Marketing Management*, *96*, 3–8. https://doi.org/10.1016/j.indmarman.2020.03.006

Rahaman, M. M., & Karim, M. R. (2023). How do board features and auditor characteristics shape key audit matters disclosures? Evidence from emerging economies. *China Journal of Accounting Research*, *16*(4), 100331. https://doi.org/10.1016/j.cjar.2023.100331

Rahaman, M. M., Hossain, M. M., & Bhuiyan, M. B. U. (2023). Disclosure of key audit matters (KAMs) in financial reporting: Evidence from an emerging economy. *Journal of Accounting in Emerging Economies, 13*(3), 666-702. https://doi.org/10.1108/JAEE-11-2021-0355

Rapley, E. T., Robertson, J. C., & Smith, J. L. (2021). The effects of disclosing critical audit matters and auditor tenure on nonprofessional investors' judgments. *Journal of Accounting and Public Policy*, *40*(5), 106847. https://doi.org/10.1016/j.jaccpubpol.2021.106847

Rautiainen, A., Saastamoinen, J., & Pajunen, K. (2021). Do key audit matters (KAMs) matter? Auditors' perceptions of KAMs and audit quality in Finland. *Managerial Auditing Journal*, *36*(3), 386–404. https://doi.org/10.1108/MAJ-11-2019-2462

Reid, L. C., Carcello, J. V., Li, C., Neal, T. L., & Francis, J. R. (2019). Impact of auditor report changes on financial reporting quality and audit costs: Evidence from the United Kingdom. *Contemporary Accounting Research*, *36*(3), 1501–1539. https://doi.org/10.1111/1911-3846.12486

Rousseau, D. M., Manning, J., & Denyer, D. (2008). 11 evidence in management and organisational science: Assembling the field's full weight of scientific knowledge through syntheses. *The Academy of Management Annals*, *2*(1), 475–515. https://doi.org/10.1080/19416520802211651

Rousseeuw, P. J., & Leroy, A. M. (2005). Robust regression and outlier detection. John Wiley and sons (Vol. 589). University in Brussels. https://doi.org/10.1002/0471725382.

Sai, Q., Li, Y., Liu, Y., Zhao, H., & Ouyang, S. (2024). Audit report information improvement and earnings management. *International Journal of Finance and Economics*, *29*(1), 425–442. https://doi.org/10.1002/ijfe.2692

Salter, S. B., Sharp, D. J., & Chen, Y. (2013). The moderating effects of national culture on escalation of commitment. *Advances in Accounting*, *29*(1), 161–169. https://doi.org/10.1016/j.adiac.2013.02.001

Saudi Organisation for Chartered and Professional Accountants. (2018). *The document of endorsement of the international auditing, review, other assurance, and related services pronouncements for adoption in Saudi Arabia according to the Saudi Organisation for Certified Public Accountants' plan for transition to international standards, and according to the IAASB policy position statement regarding the modifications to International Standards of the IAASB Board.* https://socpa.org.sa/SOCPA/files/25/250e57b4-01bf-44ea-b677-1a26951d06b3.pdf

Schipper, K. (1981). Discussion of voluntary corporate disclosure: The case of interim reporting. *Journal of*

Accounting Research, *19*, 85–88. https://doi.org/10.2307/2490986
Seebeck, A., & Kaya, D. (2023). The power of words: An empirical analysis of the communicative value of extended auditor reports. *European Accounting Review, 32*(5), 1185-1215. https://doi.org/10.1080/09638180.2021.2021097
Segal, M. (2019). Key audit matters: Insight from audit experts. *Meditari Accountancy Research*, *27*(3), 472–494. https://doi.org/10.1108/MEDAR-06-2018-0355
Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The Journal of Finance*, 52(2), 737-783. https://doi.org/10.1111/j.1540-6261.1997.tb04820.x
Sidani, Y., & Al Ariss, A. (2014). Institutional and corporate drivers of global talent management: Evidence from the Arab Gulf region. *Journal of World Business*, *49*(2), 215–224. https://doi.org/10.1016/j.jwb.2013.11.005
Sierra-García, L., Gambetta, N., García-Benau, M. A., & Orta-Pérez, M. (2019). Understanding the determinants of the magnitude of entity-level risk and account-level risk key audit matters: The case of the United Kingdom. *The British Accounting Review*, *51*(3), 227–240. https://doi.org/10.1016/j.bar.2019.02.004
Simnett, R., & Huggins, A. (2014). Enhancing the auditor's report: To what extent is there support for the IAASB's proposed changes? *Accounting Horizons*, *28*(4), 719–747. https://doi.org/10.2308/acch-50791
Sirois, L. P., Bédard, J., & Bera, P. (2018). The informational value of key audit matters in the auditor's report: Evidence from an eye-tracking study. *Accounting Horizons, 32*(2), 141–162. https://doi.org/10.2308/acch52047
Smith, J. E., Smith, N. P. (1971). Readability: A measure of the performance of the communication function of financial reporting. *The Accounting Review*, *46*(3), 552–561. https://www.jstor.org/stable/244524
Smith, K. W. (2023). Tell Me More: A content analysis of expanded auditor reporting in the United Kingdom. *Accounting, Organisations and Society*, *108*, 101456. https://doi.org/10.1016/j.aos.2023.101456
Sneller, L., Bode, R., & Klerkx, A. (2017). Do IT matters matter? IT-related key audit matters in Dutch annual reports. *International Journal of Disclosure and Governance*, *14*(2), 139–151. https://doi.org/10.1057/s41310-016-0017-0
Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, *87*(3), 355–374.
Stanley, J. D., & DeZoort, F. T. (2007). Audit firm tenure and financial restatements: An analysis of industry specialisation and fee effects. *Journal of Accounting and Public Policy*, *26*(2), 131–159. https://doi.org/10.1016/j.jaccpubpol.2007.02.003
Stewart, J., & Munro, L. (2007). The impact of audit committee existence and audit committee meeting frequency on the external audit: Perceptions of Australian auditors. *International Journal of Auditing*, *11*(1), 51–69. https://doi.org/10.1111/j.1099-1123.2007.00356.x
Suttipun, M. (2020). KAM reporting and common share price of listed companies in the market of alternative investment from Thailand. *Academy of Accounting and Financial Studies Journal*, *24*(3), 1–10.
Suttipun, M. (2021). Impact of key audit matters (KAMs) reporting on audit quality: Evidence from Thailand. *Journal of Applied Accounting Research*, *22*(5), 869–882. https://doi.org/10.1108/JAAR-10-2020-0210
Suttipun, M. (2022). External auditor and KAMs reporting in alternative capital market of Thailand. *Meditari Accountancy Research*, *30*(1), 74–93. https://doi.org/10.1108/MEDAR-04-2020-0850
Suttipun, M., & Nuttaphon, C. (2014). Corporate social responsibility reporting on websites in Thailand. *Kasetsart Journal of Social Sciences, 35*(3), 536–549. https://so04.tci-thaijo.org/index.php/kjss/article/view/247301
Tan, H. T., & Yeo, F. (2022). What happens when managers are informed? Effects of critical audit matter awareness and auditor relationship on managers' accounting estimates. *The Accounting Review, 97*(4), 399–416. https://doi.org/10.2308/tar-2019-0370
The Organisation for Economic Cooperation and Development. (2019). *OECD Survey of Corporate Governance Frameworks in the Middle East and North Africa.* http://www.oecd.org/corporate/OECD-Survey-of-Corporate-Governance-Frameworks-in-MENA.htm
Tihanyi, L., Graffin, S., & George, G. (2014). Rethinking governance in management research. *Academy of Management Journal*, *57*(6), 1535–1543. https://doi.org/10.5465/amj.2014.4006
Tiron-Tudor, A., Cordoş, G. S., & Fülöp, M. T. (2018). Stakeholders' perception about strengthening the audit report. *African Journal of Accounting, Auditing and Finance*, *6*(1), 43–69. https://doi.org/10.1504/ajaaf.2018.10012245
Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, *14*(3), 207–222. https://doi.org/10.1111/1467-8551.00375
Trpeska, M., Atanasovski, A., & Lazarevska, Z. B. (2017). The relevance of financial information and contents of the new audit report for lending decisions of commercial banks. *Accounting and Management Information Systems*, *16*(4), 455–471. https://doi.org/10.24818/jamis.2017.04002
Tušek, B., & Ježovita, A. (2018). The key audit matters as an element of the independent auditor's report – a

booster to the corporate governance. *InterEULawEast: Journal for the International and European Law, Economics and Market Integrations*, *5*(2), 242–276. https://doi.org/10.22598/iele.2018.5.2.9
Twedt, B., & Rees, L. (2012). Reading between the lines: An empirical examination of qualitative attributes of financial analysts' reports. *Journal of Accounting and Public Policy*, *31*(1), 1–21. https://doi.org/10.1016/j.jaccpubpol.2011.10.010
Vanstraelen, A., Schelleman, C., Meuwissen, R., & Hofmann, I. (2012). The audit reporting debate: Seemingly intractable problems and feasible solutions. *European Accounting Review*, *21*(2), 193–215. https://doi.org/10.1080/09638180.2012.687506
Velte, P. (2018). Does gender diversity in the audit committee influence key audit matters' readability in the audit report? UK evidence. *Corporate Social Responsibility and Environmental Management*, *25*(5), 748–755. https://doi.org/10.1002/csr.1491
Velte, P. (2020). Associations between the financial and industry expertise of audit committee members and key audit matters within related audit reports. *Journal of Applied Accounting Research*, *21*(1), 185–200. https://doi.org/10.1108/JAAR-10-2018-0163
Velte, P., & Issa, J. (2019). The impact of key audit matter (KAM) disclosure in audit reports on stakeholders' reactions: A literature review. *Problems and Perspectives in Management*, *17*(3), 323–341. https://doi.org/10.21511/ppm.17(3).2019.26
Vera, J. O., & Alijarde, I. B. (2021). Audit of state-owned enterprises: The Most relevant areas of risk. *UCJC Business and Society Review*, *18*(2), 84–127. https://doi.org/10.3232/UBR.2021.V18.N2.02
Villalonga, B., & Amit, R. (2006). How do family ownership, control and management affect firm value? *Journal of Financial Economics*, *80*(2), 385–417. https://doi.org/10.1016/j.jfineco.2004.12.005
Vinson, J. M., Robertson, J. C., & Cockrell, R. C. (2019). The effects of critical audit matter removal and duration on jurors' assessments of auditor negligence. *Auditing: A Journal of Practice and Theory*, *38*(3), 183–202. https://doi.org/10.2308/ajpt-52319
Wanden-berghe, C., & Sanz-Valero, J. (2012). Systematic reviews in nutrition: Standardised methodology. *British Journal of Nutrition*, *107*(S2), S3–S7. https://doi.org/10.1017/S0007114512001432
Wang, D. (2006). Founding family ownership and earnings quality. *Journal of Accounting Research*, *44*(3), 619–656. https://doi.org/10.1111/j.1475-679X.2006.00213.x
Wan-Hussin, W. N. (2009). The impact of family-firm structure and board composition on corporate transparency: Evidence based on segment disclosures in Malaysia. *International Journal of Accounting*, *44*(4), 313–333. https://doi.org/10.1016/j.intacc.2009.09.003
Winship, C., & Western, B. (2016). Multicollinearity and model misspecification. *Sociological Science*, *3*(27), 627–649. https://doi.org/10.15195/v3.a27
Wood, W., Polek, D., & Aiken, C. (1985). Sex differences in group task performance. *Journal of Personality and Social Psychology*, *48*(1), 63–71. https://doi.org/10.1037/0022-3514.48.1.63
World Bank. (n.d.). Worldwide Governance Indicators. DataBank. https://databank.worldbank.org/source/worldwide-governance-indicators
Wu, C. Y. H., Hsu, H. H., & Lin, C. H. (2023). Do family ownership and control influence the consequences of IFRS adoption? *Corporate Governance: An International Review*, 1–24. https://doi.org/10.1111/corg.12537
Wu, X., Fan, Y., & Yang, Y. (2019). Do critical audit matters signal higher quality of audited financial information? Evidence from asset impairment. *China Journal of Accounting Studies*, *7*(2), 170–183. https://doi.org/10.1080/21697213.2019.1676037
Wuttichindanon, S., & Issarawornrawanich, P. (2020). Determining factors of key audit matter disclosure in Thailand. *Pacific Accounting Review*, *32*(4), 563–584. https://doi.org/10.1108/PAR-01-2020-0004
Xu, X., Ye, F., & Chen, Y. (2023). The joint effect of investors' trait scepticism and the familiarity and readability of key audit matters on the communicative value of audit reports. *China Journal of Accounting Studies*, *11*(1), 1–28. https://doi.org/10.1080/21697213.2022.2143687
Yatim, P., Iskandar, T. M., & Nga, E. (2016). Board attributes and foreign shareholdings in Malaysian listed firms. *Journal of Management & Governance*, *20*, 147–178. https://doi.org/10.1007/s10997-014-9301-1
Ye, P., Carson, E., & Simnett, R. (2011). Threats to auditor independence: The impact of relationship and economic bonds. *Auditing: A Journal of Practice &Theory*, *30*(1), 121–148. https://doi.org/10.2308/aud.2011.30.1.121
Yoga, B. S., & Dinarjito, A. (2021). The impact of key audit matters disclosure on communicative value of the auditor's report: A systematic literature review. *Jurnal Akuntansi Dan Keuangan Indonesia*, *18*(1), 15–32. https://doi.org/10.21002/jaki.2021.02
Zarzeski, M. T. (1996). Spontaneous harmonization effects of culture and market forces on accounting disclosure practices. *Accounting Horizons*, 10(1), 18–37.
Zeng, Y., Zhang, J. H., Zhang, J., & Zhang, M. (2021). Key audit matters reports in China: Their descriptions and implications of audit quality. *Accounting Horizons*, *35*(2), 162–192.

https://doi.org/10.2308/HORIZONS-19-189
Zhai, H., Lu, M., Shan, Y., Liu, Q., & Zhao, Y. (2021). Key audit matters and stock price synchronicity: Evidence from a quasi-natural experiment in China. *International Review of Financial Analysis*, *75*, 101747. https://doi.org/10.1016/j.irfa.2021.101747
Zhang, M., Zhang, W., & Zhang, S. (2016). National culture and firm investment efficiency: International evidence. *Asia-Pacific Journal of Accounting and Economics*, *23*(1), 1–21. https://doi.org/10.1080/16081625.2015.1027714
Zhang, P. F., & Shailer, G. (2021). Changes in audit effort and changes in auditors' disclosures of risks of material misstatement. *The British Accounting Review*, *53*(3), 100970. https://doi.org/10.1016/j.bar.2020.100970
Zhang, P. F., & Shailer, G. (2022). The impact of audit committee expertise on external auditors' disclosures of key audit matters. *International Journal of Auditing*, *26*(2), 151–170. https://doi.org/10.1111/ijau.12256
Zhi, X., & Kang, Z. (2021). Critical audit matters and stock price crash risk. *Frontiers of Business Research in China*, *15*(1), 1–25. https://doi.org/10.1186/s11782-021-00102-z

Appendices

Appendix 1: List of the GCC sampled firms' names

Sr#	Company Name	Company Code	Country	Included in Essay #
1	Abdullah Al Othaim Markets Co.	A.OTHAIM MARKET	KSA	2 & 3
2	Abdullah Saad Mohammed Abo Moati for Bookstores Co.	ABO MOATI	KSA	2 & 3
3	Abdulmohsen Alhokair Group for Tourism and Development	ALHOKAIR GROUP	KSA	2 & 3
4	ACWA POWER Co.	ACWA POWER	KSA	2 & 3
5	Advance International Company for Communication and Information Technology	AICTEC	KSA	2 & 3
6	Advanced Petrochemical Co.	ADVANCED	KSA	2 & 3
7	Al Abdullatif Industrial Investment Co.	ALABDULLATIF	KSA	2 & 3
8	Al Gassim Investment Holding Co.	GACO	KSA	2 & 3
9	Al Hammadi Company for Development and Investment	ALHAMMADI	KSA	2 & 3
10	Al Hassan Ghazi Ibrahim Shaker Co.	SHAKER	KSA	2 & 3
11	Al Jouf Cement Co.	JOUF CEMENT	KSA	2 & 3
12	Al Kathiri Holding Co.	ALKATHIRI	KSA	2 & 3
13	Al Moammar Information Systems Co.	MIS	KSA	2 & 3
14	Al Yamamah Steel Industries Co.	ALYAMAMAH STEEL	KSA	2 & 3
15	Alandalus Property Co.	ALANDALUS	KSA	2 & 3
16	Al-Babtain Power and Telecommunication Co.	ALBABTAIN	KSA	2 & 3
17	Aldawaa Medical Services Co.	ALDAWAA	KSA	2 & 3
18	Aldrees Petroleum and Transport Services Co.	ALDREES	KSA	2 & 3
19	Alhasoob Co.	ALHASOOB	KSA	2 & 3
20	Al-Jouf Agricultural Development Co.	ALJOUF	KSA	2 & 3
21	Aljouf Mineral Water Bottling Co.	ALJOUF WATER	KSA	2 & 3
22	Alkhaleej Training and Education Co.	ALKHALEEJ TRNG	KSA	2 & 3
23	Alkhorayef Water and Power Technologies Co.	AWPT	KSA	2 & 3
24	Almarai Co.	ALMARAI	KSA	2 & 3
25	Almasane Alkobra Mining Co.	AMAK	KSA	2 & 3
26	Almunajem Foods Co.	ALMUNAJEM	KSA	2 & 3
27	Al-Omran Industrial Trading Co.	ALOMRAN	KSA	2 & 3
28	Alujain Holding Corp.	ALUJAIN	KSA	2 & 3

Sr#	Company Name	Company Code	Country	Included in Essay #
29	Alwasail Industrial Co.	ALWASAIL INDUSTRIAL	KSA	2 & 3
30	AME Company for Medical Supplies	AME	KSA	2 & 3
31	Amwaj International Co.	AMWAJ INTERNATIONAL	KSA	3
32	Anaam International Holding Group	ANAAM HOLDING	KSA	2 & 3
33	Aqaseem Factory for Chemicals and Plastics Co.	AQASEEM	KSA	2 & 3
34	Arab Sea Information System Co.	ARAB SEA	KSA	2 & 3
35	Arabian Cement Co.	ACC	KSA	2 & 3
36	Arabian Centres Co.	ALMRAKEZ	KSA	2 & 3
37	Arabian Contracting Services Co.	ALARABIA	KSA	2 & 3
38	Arabian Food and Dairy Factories Co.	FADECO	KSA	3
39	Arabian International Healthcare Holding Co.	TIBBIYAH	KSA	2 & 3
40	Arabian Internet and Communications Services Co.	SOLUTIONS	KSA	2 & 3
41	Arabian Pipes Co.	APC	KSA	2 & 3
42	Arriyadh Development Co.	ARDCO	KSA	2 & 3
43	Ash-Sharqiyah Development Co.	SHARQIYAH DEV	KSA	2 & 3
44	Astra Industrial Group	ASTRA INDUSTRIAL	KSA	2 & 3
45	Ataa Educational Co.	ATAA	KSA	2 & 3
46	AYYAN Investment Co.	AYYAN	KSA	2 & 3
47	Baazeem Trading Co.	BAAZEEM	KSA	2 & 3
48	Banan Real Estate Co.	BANAN	KSA	2 & 3
49	Basic Chemical Industries Co.	BCI	KSA	2 & 3
50	Batic Investments and Logistics Co.	BATIC	KSA	2 & 3
51	Bawan Co.	BAWAN	KSA	2 & 3
52	BinDawood Holding Co.	BINDAWOOD	KSA	2 & 3
53	Canadian Medical Center Co.	CMCER	KSA	2 & 3
54	City Cement Co.	CITY CEMENT	KSA	2 & 3
55	Dallah Healthcare Co.	DALLAH HEALTH	KSA	2 & 3
56	Dar Alarkan Real Estate Development Co.	DAR ALARKAN	KSA	2 & 3
57	Development Works Food Co.	DWF	KSA	2 & 3
58	Dr. Sulaiman Al Habib Medical Services Group	SULAIMAN ALHABIB	KSA	2 & 3
59	Dur Hospitality Co.	DUR	KSA	2 & 3
60	East Pipes Integrated Company for Industry	EAST PIPES	KSA	2 & 3

Sr#	Company Name	Company Code	Country	Included in Essay #
61	Eastern Province Cement Co.	EPCCO	KSA	2 & 3
62	Electrical Industries Co.	EIC	KSA	2 & 3
63	Elm Co.	ELM	KSA	2 & 3
64	Emaar The Economic City	EMAAR EC	KSA	2 & 3
65	Enma AlRawabi Co.	ENMA ALRAWABI	KSA	2 & 3
66	Etihad Atheeb Telecommunication Co.	ATHEEB TELECOM	KSA	2 & 3
67	Etihad Etisalat Co.	ETIHAD ETISALAT	KSA	2 & 3
68	Fawaz Abdulaziz Alhokair Co.	ALHOKAIR	KSA	2 & 3
69	Fesh Fash Snack Food Production Co.	FESH FASH	KSA	2 & 3
70	Filing and Packing Materials Manufacturing Co.	FIPCO	KSA	2 & 3
71	Fitaihi Holding Group	FITAIHI GROUP	KSA	2 & 3
72	Gas Arabian Services Co.	GAS	KSA	2 & 3
73	Group Five Pipe Saudi Co.	GROUP FIVE	KSA	2 & 3
74	Hail Cement Co.	HCC	KSA	2 & 3
75	Halwani Bros. Co.	HB	KSA	2 & 3
76	Herfy Food Services Co.	HERFY FOODS	KSA	2 & 3
77	Jabal Omar Development Co.	JABAL OMAR	KSA	2 & 3
78	Jahez International Company for Information System Technology	JAHEZ	KSA	2 & 3
79	Jarir Marketing Co.	JARIR	KSA	2 & 3
80	Jazan Energy and Development Co.	JAZADCO	KSA	2 & 3
81	Knowledge Economic City	KEC	KSA	2 & 3
82	Ladun Investment Co.	LADUN	KSA	3
83	Lazurde Company for Jewelry	LAZURDE	KSA	2 & 3
84	Leejam Sports Co.	FITNESS TIME	KSA	2 & 3
85	Maharah Human Resources Co.	MAHARAH	KSA	2 & 3
86	Makkah Construction and Development Co.	MCDC	KSA	2 & 3
87	Methanol Chemicals Co.	CHEMANOL	KSA	2 & 3
88	Middle East Healthcare Co.	SAUDI GERMAN HEALTH	KSA	2 & 3
89	Middle East Paper Co.	MEPCO	KSA	2 & 3
90	Middle East Specialized Cables Co.	MESC	KSA	2 & 3
91	Mobile Telecommunication Company Saudi Arabia	ZAIN KSA	KSA	2 & 3
92	Mohammed Hasan AlNaqool Sons Co.	ALNAQOOL	KSA	2 & 3
93	Mouwasat Medical Services Co.	MOUWASAT	KSA	2 & 3
94	Nahdi Medical Co.	NAHDI	KSA	2 & 3

Sr#	Company Name	Company Code	Country	Included in Essay #
95	Najran Cement Co.	NAJRAN CEMENT	KSA	2 & 3
96	Nama Chemicals Co.	NAMA CHEMICALS	KSA	2 & 3
97	Naseej for Communication and Information Technology Co.	NASEEJ TECH	KSA	2 & 3
98	Naseej International Trading Co.	NASEEJ	KSA	2 & 3
99	National Agricultural Development Co.	NADEC	KSA	2 & 3
100	National Building and Marketing Co.	NBM	KSA	2 & 3
101	National Company for Learning and Education	NCLE	KSA	2 & 3
102	National Environmental Recycling Co.	TADWEEER	KSA	2 & 3
103	National Fertilizer Co.	MOBI	KSA	2 & 3
104	National Gas and Industrialization Co.	GASCO	KSA	2 & 3
105	National Gypsum Co.	NGC	KSA	2 & 3
106	National Industrialization Co.	TASNEE	KSA	2 & 3
107	National Medical Care Co.	CARE	KSA	2 & 3
108	National Metal Manufacturing and Casting Co.	MAADANIYAH	KSA	2 & 3
109	National Shipping Company of Saudi Arabia	BAHRI	KSA	2 & 3
110	Natural Gas Distribution Co.	NGDC	KSA	2 & 3
111	Northern Region Cement Co.	NORTHERN CEMENT	KSA	2 & 3
112	Obeikan Glass Co.	OBEIKAN GLASS	KSA	2 & 3
113	Qassim Cement Co.	QACCO	KSA	2 & 3
114	Rabigh Refining and Petrochemical Co.	PETRO RABIGH	KSA	2 & 3
115	Raoom Trading Co.	RAOOM	KSA	2 & 3
116	Raydan Food Co.	RAYDAN	KSA	2 & 3
117	Red Sea International Co.	RED SEA	KSA	2 & 3
118	Riyadh Cement Co.	RIYADH CEMENT	KSA	2 & 3
119	SABIC Agri-Nutrients Co.	SABIC AGRI-NUTRIENTS	KSA	2 & 3
120	Sadr Logistics Co.	SADR	KSA	2 & 3
121	Sahara International Petrochemical Co.	SIPCHEM	KSA	2 & 3
122	Saudi Airlines Catering Co.	CATERING	KSA	2 & 3
123	Saudi Arabia Refineries Co.	SARCO	KSA	2 & 3
124	Saudi Arabian Amiantit Co.	AMIANTIT	KSA	2 & 3
125	Saudi Arabian Mining Co.	MAADEN	KSA	2 & 3
126	Saudi Arabian Oil Co.	SAUDI ARAMCO	KSA	2 & 3
127	Saudi Automotive Services Co.	SASCO	KSA	2 & 3
128	Saudi Azm for Communication and Information Technology Co.	AZM	KSA	2 & 3

Sr#	Company Name	Company Code	Country	Included in Essay #
129	Saudi Basic Industries Corp.	SABIC	KSA	2 & 3
130	Saudi Cable Co.	SAUDI CABLE	KSA	2 & 3
131	Saudi Cement Co.	SAUDI CEMENT	KSA	2 & 3
132	Saudi Ceramic Co.	SAUDI CERAMICS	KSA	2 & 3
133	Saudi Chemical Co.	CHEMICAL	KSA	2 & 3
134	Saudi Company for Hardware	SACO	KSA	2 & 3
135	Saudi Electricity Co.	SAUDI ELECTRICITY	KSA	2 & 3
136	Saudi Fisheries Co.	SFICO	KSA	2 & 3
137	Saudi Ground Services Co.	SGS	KSA	2 & 3
138	Saudi Industrial Development Co.	SIDC	KSA	2 & 3
139	Saudi Industrial Export Co.	SIECO	KSA	2 & 3
140	Saudi Industrial Investment Group	SIIG	KSA	2 & 3
141	Saudi Industrial Services Co.	SISCO	KSA	2 & 3
142	Saudi Kayan Petrochemical Co.	SAUDI KAYAN	KSA	2 & 3
143	Saudi Marketing Co.	FARM SUPERSTORES	KSA	2 & 3
144	Saudi Paper Manufacturing Co.	SPM	KSA	2 & 3
145	Saudi Parts Center Co.	SPC	KSA	2 & 3
146	Saudi Pharmaceutical Industries and Medical Appliances Corp.	SPIMACO	KSA	2 & 3
147	Saudi Printing and Packaging Co.	SPPC	KSA	2 & 3
148	Saudi Public Transport Co.	SAPTCO	KSA	2 & 3
149	Saudi Real Estate Co.	ALAKARIA	KSA	2 & 3
150	Saudi Research and Media Group	SRMG	KSA	2 & 3
151	Saudi Steel Pipe Co.	SSP	KSA	2 & 3
152	Saudi Telecom Co.	STC	KSA	2 & 3
153	Saudi Vitrified Clay Pipes Co.	SVCP	KSA	2 & 3
154	Saudia Dairy and Foodstuff Co.	SADAFCO	KSA	2 & 3
155	Savola Group	SAVOLA GROUP	KSA	2 & 3
156	Scientific and Medical Equipment House Co.	EQUIPMENT HOUSE	KSA	2 & 3
157	Seera Group Holding	SEERA	KSA	2 & 3
158	Shatirah House Restaurant Co.	BURGERIZZR	KSA	2 & 3
159	Southern Province Cement Co.	SPCC	KSA	2 & 3
160	Sumou Real Estate Co.	SUMOU	KSA	2 & 3
161	Tabuk Agricultural Development Co.	TADCO	KSA	2 & 3
162	Tabuk Cement Co.	TCC	KSA	2 & 3
163	Taiba Investments Co.	TAIBA	KSA	2 & 3
164	Takween Advanced Industries Co.	TAKWEEN	KSA	2 & 3

Sr#	Company Name	Company Code	Country	Included in Essay #
165	Tanmiah Food Co.	TANMIAH	KSA	2 & 3
166	The National Company for Glass Industries	ZOUJAJ	KSA	2 & 3
167	Theeb Rent a Car Co.	THEEB	KSA	2 & 3
168	Thob Al Aseel Co.	ALASEEL	KSA	2 & 3
169	Tihama Advertising and Public Relations Co.	TAPRCO	KSA	2 & 3
170	Tourism Enterprise Co.	TECO	KSA	2 & 3
171	Umm Al-Qura Cement Co.	UACC	KSA	2 & 3
172	United Electronics Co.	EXTRA	KSA	2 & 3
173	United International Transportation Co.	BUDGET SAUDI	KSA	2 & 3
174	United Wire Factories Co.	ASLAK	KSA	2 & 3
175	Wafrah for Industry and Development Co.	WAFRAH	KSA	2 & 3
176	Watani Iron Steel Co.	WATANI STEEL	KSA	2 & 3
177	Yamama Cement Co.	YSCC	KSA	2 & 3
178	Yanbu Cement Co.	YCC	KSA	2 & 3
179	Yanbu National Petrochemical Co.	YANSAB	KSA	2 & 3
180	Zahrat Al Waha for Trading Co.	OASIS	KSA	2 & 3
181	Zamil Industrial Investment Co.	ZAMIL INDUST	KSA	2 & 3
182	Al Anwar Ceramic	AACT	Oman	2 & 3
183	Al Hassan Eng	HECI	Oman	2 & 3
184	Al Kamel Power	KPCS	Oman	2 & 3
185	Al Maha Markting	MHAS	Oman	2 & 3
186	Al Suwadi Power	SUWP	Oman	2 & 3
187	Albatinah Hotels	BAHS	Oman	2 & 3
188	Albatinah Power	BATP	Oman	2 & 3
189	Aljazeera Services	AJSS	Oman	2 & 3
190	Almaha Ceramics	AMCI	Oman	2 & 3
191	Al-Oula Company	DMGI	Oman	2 & 3
192	Aluminium Prod.	NAPI	Oman	2 & 3
193	Asaffa Foods	SPFI	Oman	2 & 3
194	Barka Desalination	BRDE	Oman	3
195	Barka Water And Power	BWPC	Oman	2 & 3
196	Computer St.Ind	CSII	Oman	2 & 3
197	Construction M.	CMII	Oman	2 & 3
198	Dhofar Beverages	DBCI	Oman	2 & 3
199	Dhofar Cattle	SAOG	Oman	2 & 3
200	Dhofar Generating	DGEN	Oman	2 & 3

Sr#	Company Name	Company Code	Country	Included in Essay #
201	Dhofar Poultry	DPCI	Oman	2 & 3
202	Dhofar Tourism	DTCS	Oman	2 & 3
203	Fajar Alamia	AFAI	Oman	2 & 3
204	Galfar Engineer.	GECS	Oman	2 & 3
205	Gulf Hotels (Om)	GHOS	Oman	2 & 3
206	Gulf Int.Chemi	GICI	Oman	2 & 3
207	Gulf Mushroom P	GMPI	Oman	2 & 3
208	Gulf Stones	GSCI	Oman	2 & 3
209	Hotels Mn.Co.Int	HMCI	Oman	2 & 3
210	Jazeera Steel Prod	ATMI	Oman	2 & 3
211	Majan College	BACS	Oman	2 & 3
212	Majan Glass	MCGI	Oman	2 & 3
213	Mct Desalinate	MCDE	Oman	2 & 3
214	Mineral Water	NMWI	Oman	2 & 3
215	Musandam Power	MSPW	Oman	2 & 3
216	Muscat Gases	MGMC	Oman	2 & 3
217	Muscat Thread Mill	MTMI	Oman	2 & 3
218	Nat. Detergent	NDTI	Oman	2 & 3
219	National Biscuit	NBII	Oman	2 & 3
220	National Gas	NGCI	Oman	2 & 3
221	Oman Cables Indstr	OCAI	Oman	2 & 3
222	Oman Cement	OCOI	Oman	2 & 3
223	Oman Chlorine	OCHL	Oman	2 & 3
224	Oman Chromite	OCCI	Oman	2 & 3
225	Oman Edu Training	OETI	Oman	2 & 3
226	Oman Fisheries	OFCI	Oman	2 & 3
227	Oman Flour Mills	OFMI	Oman	2 & 3
228	Oman Invst& Fin	OIFC	Oman	2 & 3
229	Oman Nat. Eng	ONES	Oman	2 & 3
230	Oman Oil Marketing	OOMS	Oman	2 & 3
231	Oman Packaging	OPCI	Oman	2 & 3
232	Oman Refreshment	ORCI	Oman	2 & 3
233	Oman Sweets	OSCI	Oman	2 & 3
234	Oman Telecom	OTEL	Oman	2 & 3
235	Omani Euro F.Ind	OEFI	Oman	2 & 3
236	Ooredoo (Oman)	ORDS	Oman	2 & 3
237	Packaging Co. Ltd	PCLI	Oman	2 & 3
238	Phoenix Power	PHPC	Oman	2 & 3

Sr#	Company Name	Company Code	Country	Included in Essay #
239	Raysut Cement	RCCI	Oman	2 & 3
240	Renaissance Ser.	RNSS	Oman	2 & 3
241	Sahara Hospitality	SAHS	Oman	2 & 3
242	Salalah Beach Reso	SHCS	Oman	2 & 3
243	Salalah Mills	SFMI	Oman	2 & 3
244	Salalah Port Sr	SPSI	Oman	2 & 3
245	Sembcorp Salalah	SSPW	Oman	2 & 3
246	Sharqiyah Desalin.	SHRQ	Oman	2 & 3
247	Shell Oman Mrk.	SOMS	Oman	2 & 3
248	Smn Power Holding	SMNP	Oman	2 & 3
249	Sohar Power	SHPS	Oman	2 & 3
250	Ubar Hotels And Resorts	UBAR	Oman	2 & 3
251	Voltamp Energy	VOES	Oman	2 & 3
252	Abu Dhabi Aviation Co.	ADAVIATION	UAE	2 & 3
253	Abu Dhabi National Co. for Building Materials	BILDCO	UAE	2 & 3
254	Abu Dhabi National Energy Company	TAQA	UAE	2 & 3
255	Abu Dhabi National Hotels Co.	ADNH	UAE	2 & 3
256	Abu Dhabi National Oil Company For Distribution	ADNOCDIST	UAE	2 & 3
257	Abu Dhabi Ports Company PJSC	ADPORTS	UAE	2 & 3
258	Abu Dhabi Ship Building Co.	ADSB	UAE	2 & 3
259	ADNOC Drilling Company PJSC	ADNOCDRILL	UAE	2 & 3
260	Agthia Group	AGTHIA	UAE	2 & 3
261	Air Arabia PJSC	AIRARABIA	UAE	2 & 3
262	Al Dar Properties	ALDAR	UAE	2 & 3
263	Al Firdous Holdings PJSC	ALFIRDOUS	UAE	2 & 3
264	Al Khaleej Investment	KICO	UAE	2 & 3
265	Al Seer Marine Supplies & Equipment Company P.J.S.C	ASM	UAE	2 & 3
266	Al Yah Satellite Communications Company PJSC	YAHSAT	UAE	2 & 3
267	Alpha Dhabi Holding PJSC	ALPHADHABI	UAE	2 & 3
268	Anan Investment Holding P.J.S.C	ANAN	UAE	2 & 3
269	APEX Investment P.S.C	APEX	UAE	2 & 3
270	Aram Group	ARAM	UAE	2 & 3
271	Aramex PJSC	ARMX	UAE	2 & 3
272	Arkan Building Materials Company	EMSTEEL	UAE	2 & 3
273	Dana Gas PJSC	DANA	UAE	2 & 3

Sr#	Company Name	Company Code	Country	Included in Essay #
274	Depa Limited	DEPA	UAE	2 & 3
275	Deyaar Development PJSC	DEYAAR	UAE	2 & 3
276	Drake & Scull International P.J.S.C	DSI	UAE	2 & 3
277	Dubai Refreshment Company P.J.S.C.	DRC	UAE	2 & 3
278	e& (previously known as Etisalat Group)	ETISALAT	UAE	2 & 3
279	Easy Lease Motorcycle Rental PJSC	EASYLEASE	UAE	2 & 3
280	Emaar Development PJSC	EMAARDEV	UAE	2 & 3
281	Emaar Properties PJSC	EMAAR	UAE	2 & 3
282	Emirates Driving Company	DRIVE	UAE	2 & 3
283	Emirates Integrated Telecommunications Company PJSC	DU	UAE	2 & 3
284	Emirates Refreshments Company	ERC	UAE	2 & 3
285	Emirates REIT (CEIC) PLC	REIT	UAE	2 & 3
286	ENBD REIT (CEIC) PLC	ENBDREIT	UAE	2 & 3
287	ESG Emirates Stallions Group P.J.S.C	ESG	UAE	2 & 3
288	Eshraq Investments P.J.S.C	ESHRAQ	UAE	2 & 3
289	Fertiglobe plc	FERTIGLB	UAE	2 & 3
290	Foodco National Foodstuff Prjsc	FNF	UAE	3
291	Fujairah Building Industries P.S.C	FBI	UAE	2 & 3
292	Fujairah Cement Industries	FCI	UAE	2 & 3
293	Ghitha Holding P.J.S.C.	GHITHA	UAE	2 & 3
294	Gulf Cement Co.	GCEM	UAE	2 & 3
295	Gulf Medical Projects Company	GMPC	UAE	2 & 3
296	Gulf Navigation Holding PJSC	GULFNAV	UAE	2 & 3
297	Gulf Pharmaceutical Industries	JULPHAR	UAE	2 & 3
298	Hikma Pharmaceuticals GDR	HIK	UAE	2 & 3
299	Hily Holding Pjsc	HH	UAE	2 & 3
300	Manazel PJSC	MANAZEL	UAE	2 & 3
301	National Cement Company (P.S.C.)	NCC	UAE	2 & 3
302	National Central Cooling Co.	TABREED	UAE	2 & 3
303	National Corporation for Tourism & Hotels	NCTH	UAE	2 & 3
304	National Marine Dredging Co.	NMDC	UAE	2 & 3
305	Orascom Construction PLC	OC	UAE	2 & 3
306	Palms Sports PrJSC	PALMS	UAE	2 & 3
307	Q Holding PSC	QHOLDING	UAE	3
308	RAK Ceramics PJSC	RAKCEC	UAE	2 & 3
309	RAK Co. for White Cement & Construction Materials	RAKWCT	UAE	2 & 3

Sr#	Company Name	Company Code	Country	Included in Essay #
310	RAK Properties	RAKPROP	UAE	2 & 3
311	Ras Al Khaima Poultry & Feeding Co	RAPCO	UAE	2 & 3
312	Response Plus Holding PrJSC	RPM	UAE	2 & 3
313	Sharjah Cement and Industrial Development Co.	SCIDC	UAE	2 & 3
314	Sudatel Telecommunications Group Company Limited	SUDATEL	UAE	2 & 3
315	Unikai Foods P.J.S.C.	UNIKAI	UAE	2 & 3
316	Union Properties PJSC	UPP	UAE	2 & 3
317	United Foods Company (PSC)	UFC	UAE	2 & 3
318	Aayan Real Estate Co KSCP	AAYANRE	Kuwait	2 & 3
319	Acico Industries	ACICO	Kuwait	2 & 3
320	Advanced Technology	ATC	Kuwait	3
321	Agility Public Warehousing	AGLTY	Kuwait	2 & 3
322	Ajial Real Estate Entertainment	AREEC	Kuwait	2 & 3
323	Ajwan Gulf Real Estate	AJWAN	Kuwait	3
324	Al Arabiya Real Estate Co KSC	ARABREC	Kuwait	2 & 3
325	Al Eid Food	ALEID	Kuwait	2 & 3
326	Al Enmaa Real Estate	ERESCO	Kuwait	2 & 3
327	Al Kout Industrial Projects	ALKOUT	Kuwait	2 & 3
328	Al Maidan Clinic for Oral Health Services Co KSC	MIDAN	Kuwait	3
329	Al Masaken International Real Estate Development	MASAKEN	Kuwait	2 & 3
330	Al Massaleh Real Estate Co K.S.C	MASSALEH	Kuwait	3
331	Al Mazaya Holding	MAZAYA	Kuwait	2 & 3
332	ALAFCO Aviation Lease and Finance Co KSCP	ALAFCO	Kuwait	2 & 3
333	Alargan International Real Estate	ARGAN	Kuwait	2 & 3
334	Ali Alghanim Sons Automotive Company K.S.C.	ALG	Kuwait	3
335	Aqar Real Estate Investments	AQAR	Kuwait	2 & 3
336	Arkan Al Kuwait Real Estate	ARKAN	Kuwait	2 & 3
337	Automated Systems Co KPSC	ASC	Kuwait	2 & 3
338	Boubyan Petrochemical Co KSCP	BPCC	Kuwait	2 & 3
339	Burgan Company for Well Drilling, Trading and Maintenance	ABAR	Kuwait	3
340	Combined Group Contracting KSCP	CGC	Kuwait	2 & 3
341	Dalqan Real Estate Co K.S.C	DALQAN	Kuwait	2 & 3
342	Dar Al Thuraya Real Estate	THURAYA	Kuwait	3

Sr#	Company Name	Company Code	Country	Included in Essay #
343	Educational Holding Group	EDU	Kuwait	2 & 3
344	Equipment Holding	EQUIPMENT	Kuwait	3
345	First Dubai for Real Estate Development	FIRSTDUBAI	Kuwait	2 & 3
346	Future Kid Entertainment and Real Estate	FUTUREKID	Kuwait	2 & 3
347	Gulf Cable and Electrical Industries	CABLE	Kuwait	2 & 3
348	Gulf Petroleum Investment	GPI	Kuwait	3
349	Hayat Communications	HAYATCOMM	Kuwait	3
350	Heavy Engineering Industries and Shipbuilding	SHIP	Kuwait	2 & 3
351	Human Soft Holding	HUMANSOFT	Kuwait	2 & 3
352	IFA Hotels and Resorts	IFAHR	Kuwait	2 & 3
353	Independent Petroleum Group KSCP	IPG	Kuwait	2 & 3
354	Injazzat Real Estate Development	INJAZZAT	Kuwait	2 & 3
355	Integrated Holding Co KSC	INTEGRATED	Kuwait	3
356	Jassim Transport & Stevedoring Company K.S.C.P	JTC	Kuwait	2 & 3
357	Jazeera Airways Co K.S.C.P	JAZEERA	Kuwait	2 & 3
358	Jiyad Holding Co	JIYAD	Kuwait	2 & 3
359	Kuwait and Gulf Link Transport	KGL	Kuwait	2 & 3
360	Kuwait Business Town Real Estate	KBT	Kuwait	3
361	Kuwait Cement K.P.S.C.	KCEM	Kuwait	2 & 3
362	Kuwait Company for Process Plant Construction and Contracting	KCPC	Kuwait	2 & 3
363	Kuwait Foundry	KFOUC	Kuwait	2 & 3
364	Kuwait Hotels Co KSCP	KHOT	Kuwait	2 & 3
365	Kuwait National Cinema	KCIN	Kuwait	2 & 3
366	Kuwait Portland Cement	PCEM	Kuwait	2 & 3
367	Kuwait Real Estate CO K.S.C	KRE	Kuwait	2 & 3
368	Kuwait Real Estate Holding	ALAQARIA	Kuwait	2 & 3
369	Kuwait Remal Real Estate	REMAL	Kuwait	3
370	Kuwait Resorts	MUNTAZAHAT	Kuwait	2 & 3
371	Kuwait Telecommunications	STC	Kuwait	2 & 3
372	Land United Real Estate Company	LAND	Kuwait	3
373	Livestock Transport and Trading Co KSC	CATTL	Kuwait	2 & 3
374	Mabanee Co K.P.S.C	MABANEE	Kuwait	2 & 3
375	Mashaer Holding	MASHAER	Kuwait	2 & 3
376	Mena Real Estate	MENA	Kuwait	3
377	Metal and Recycling	MRC	Kuwait	2 & 3
378	Mezzan Holding Co	MEZZAN	Kuwait	2 & 3

Sr#	Company Name	Company Code	Country	Included in Essay #
379	Mobile Telecommunications	ZAIN	Kuwait	2 & 3
380	Mubarrad Holding Company K.S.C.P	MUBARRAD	Kuwait	3
381	Munshaat Real Estate Projects	MUNSHAAT	Kuwait	2 & 3
382	National Cleaning Co KSCP	CLEANING	Kuwait	2 & 3
383	National Industries K.S.C.	NICBM	Kuwait	2 & 3
384	National Mobile Telecommunications	OOREDOO	Kuwait	2 & 3
385	National Petroleum Services	NAPESCO	Kuwait	2 & 3
386	National Real Estate Co K.S.C	NRE	Kuwait	2 & 3
387	Osos Holding Group Co	OSOS	Kuwait	2 & 3
388	Oula Fuel Marketing	OULAFUEL	Kuwait	2 & 3
389	Palms Agro Production	PAPCO	Kuwait	2 & 3
390	Qurain Petrochemical Industries	ALQURAIN	Kuwait	2 & 3
391	Real Estate Trade Centers	MARAKEZ	Kuwait	3
392	Salbookh Trading	SALBOOKH	Kuwait	2 & 3
393	Salhia Real Estate	SRE	Kuwait	2 & 3
394	Sanam Real Estate	SANAM	Kuwait	2 & 3
395	Senergy Holding Co	SENERGY	Kuwait	2 & 3
396	Shamal Az-Zour Al-Oula Power and Water Co K.S.C.P	AZNOULA	Kuwait	2 & 3
397	Shuaiba Industrial	PAPER	Kuwait	2 & 3
398	Sokouk Holding	SOKOUK	Kuwait	2 & 3
399	Soor Fuel Marketing	SOOR	Kuwait	2 & 3
400	Specialities Group Holding	SPEC	Kuwait	3
401	Sultan Center Food	SULTAN	Kuwait	3
402	Taameer and Real Estate Investment	TAAMEER	Kuwait	3
403	Tamdeen Real Estate Co KSC	TAM	Kuwait	2 & 3
404	The Commercial Real Estate Co K.S.C	ALTIJARIA	Kuwait	2 & 3
405	The Energy House Holding	ENERGYH	Kuwait	2 & 3
406	Tijara and Real Estate Investment	TIJARA	Kuwait	2 & 3
407	United Projects Co for Aviation Services	UPAC	Kuwait	2 & 3
408	United Real Estate K.S.C	URC	Kuwait	2 & 3
409	Yiaco Medical	YIACO	Kuwait	2 & 3
410	Aamal	AHCS	Qatar	2 & 3
411	Al Meera	MERS	Qatar	2 & 3
412	Baladna	BLDN	Qatar	2 & 3
413	Barwa	BRES	Qatar	2 & 3
414	Cinema	QCFS	Qatar	2 & 3
415	Electricity & Water	QEWS	Qatar	2 & 3

Sr#	Company Name	Company Code	Country	Included in Essay #
416	Ezdan Holding	ERES	Qatar	2 & 3
417	Gulf International	GISS	Qatar	2 & 3
418	Gulf Warehousing Co	GWCS	Qatar	2 & 3
419	Ind. Manf. Co.	QIMD	Qatar	2 & 3
420	Industries Qatar	IQCD	Qatar	2 & 3
421	Investment Holding	IGRD	Qatar	2 & 3
422	Mannai Corp.	MCCS	Qatar	2 & 3
423	Mazaya (Qatar)	MRDS	Qatar	2 & 3
424	Medicare	MCGS	Qatar	2 & 3
425	Mesaieed	MPHC	Qatar	2 & 3
426	Nakilat	QGTS	Qatar	2 & 3
427	National Cement Co.	QNCD	Qatar	2 & 3
428	Ooredoo	ORDS	Qatar	2 & 3
429	QAMCO	QAMC	Qatar	2 & 3
430	Qatar Fuel	QFLS	Qatar	2 & 3
431	Qatar German Co. Med	QGMD	Qatar	2 & 3
432	Qatar Navigation	QNNS	Qatar	2 & 3
433	Salam International	SIIS	Qatar	2 & 3
434	The Investors	QIGD	Qatar	2 & 3
435	United Dev. Company	UDCD	Qatar	2 & 3
436	Vodafone Qatar	VFQS	Qatar	2 & 3
437	Widam	WDAM	Qatar	2 & 3
438	Zad Holding Company	ZHCD	Qatar	2 & 3
439	Aluminium Bahrain B.S.C.	ALBH	Bahrain	2 & 3
440	APM Terminals Bahrain B.S.C.	APMTB	Bahrain	2 & 3
441	Bahrain Car Parks Company (Amakin) B.S.C.	CPARK	Bahrain	2 & 3
442	Bahrain Cinema Company B.S.C.	CINECO	Bahrain	2 & 3
443	Bahrain Duty Free Shop Complex B.S.C.	DUTYF	Bahrain	2 & 3
444	Bahrain Family Leisure Company B.S.C.	FAMILY	Bahrain	2 & 3
445	Bahrain Flour Mills Company B.S.C.	BFM	Bahrain	2 & 3
446	Bahrain Ship Repairing and Engineering Company B.S.C.	BASREC	Bahrain	2 & 3
447	Bahrain Telecommunications Company B.S.C.	BATELCO	Bahrain	2 & 3
448	Banader Hotels Company B.S.C.	BANADER	Bahrain	2 & 3
449	BMMI B.S.C.	BMMI	Bahrain	2 & 3
450	Delmon Poultry Company B.S.C.	POLTRY	Bahrain	2 & 3
451	Gulf Hotels Group B.S.C.	GHG	Bahrain	2 & 3

Sr#	Company Name	Company Code	Country	Included in Essay #
452	Nass Corporation B.S.C.	NASS	Bahrain	2 & 3
453	National Hotels Company B.S.C.	NHOTEL	Bahrain	2 & 3
454	Seef Properties B.S.C.	SEEF	Bahrain	2 & 3
455	Trafco Group B.S.C.	TRAFCO	Bahrain	2 & 3
456	Zain Bahrain B.S.C.	ZAINBH	Bahrain	2 & 3

Firms are arranged according to the GCC country.

Note: Essay 2 'Ownership Structure, Corporate Governance, and Key Audit Matters: Evidence from the Gulf Cooperation Council' included a sample of 430 firms while Essay 3 'Audit Partner Tenure and Key Audit Matters in the Gulf Cooperation Council: The Moderating Effect of Culture' included a sample of 456 firms. 26 firms were not included in Essay 2 as Governance Reports were not available for these companies during the period covered. Both Essays cover the period from 2026-2021.

Appendix 2: Global Industry Classification Standard (GICS)

Sr#	Industry Type	Description
1	Energy	Energy Equipment & Services, Oil, and Gas & Consumable Fuels.
2	Materials	Chemicals, Construction Materials, Containers & Packaging, Metals & Mining, and Paper & Forest Products.
3	Industrials	Capital Goods, Commercial & Professional Services, and Transportation.
4	Consumer Staples	Food & Staples Retailing, Food, Beverages, Tobacco, Household and Personal Products.
5	Consumer Discretionary	Automobiles & Components, Consumer Durables & Apparel, Hotels, Restaurants & Leisure, and Retail.
6	Health Care	Health Care Equipment and Services, Pharmaceuticals, Biotechnology, and Life Sciences.
7	Communication Services	Telecommunication Services, Media, and Entertainment.
8	Utilities	Electric, Water, Gas, Independent Power, and Renewable Electricity Producers.
9	Financials	Banks, Diversified Financial Services, and Insurance.
10	Information Technology	Software and it Services, Technology Hardware & Equipment, and Semiconductors.
11	Real Estate	Real Estate Management & Development, and Equity Real Estate Investment Trusts (REITS).

Appendix 3: Hofstede cultural dimensions scores (GCC country-partner country)

A 3.1 Hofstede cultural dimensions scores by GCC country

GCC Country	Power Distance	Individualism	Masculinity	Uncertainty Avoidance
Bahrain	46	38	53	77
KSA	72	48	43	64
Kuwait	90	28	40	80
Oman	60	52	12	72
Qatar	93	18	55	80
UAE	74	36	52	66

A 3.2 Hofstede cultural dimensions scores by partner country

Partner Country	Power Distance	Individualism	Masculinity	Uncertainty Avoidance
Australia	38	73	61	51
Bahrain	46	38	53	77
Egypt	80	13	55	55
India	77	24	56	40
Jordan	70	20	45	65
Kuwait	90	28	40	80
Lebanon	62	27	48	57
Libya	100	17	66	67
New Zealand	22	69	58	49
Oman	60	52	12	72
Pakistan	55	5	50	70
Palestine	80	38	53	68
Poland	68	47	64	93
Russia	93	46	36	95
KSA	72	48	43	64
South Africa	49	23	63	49
Syria	80	35	52	60
UAE	74	36	52	66
United Kingdom	35	76	66	35
United States	40	60	62	46