

# THE IMPACT OF COMPLEX ESTIMATES OF IFRS-9 ON THE PROPORTION OF KEY AUDIT MATTERS (KAM) DISCLOSURES: EVIDENCE FROM JORDANIAN CAPITAL MARKET

Esraa Esam Alharasis

*Department of Accounting, College of Business, Mutah University, Al-Karak  
Governorate, P.O. Box 61710, Al-Karak, Jordan*

E-mail: [Esraa\\_alharasis@mutah.edu.jo](mailto:Esraa_alharasis@mutah.edu.jo)

## ABSTRACT

*This study seeks to provide fresh empirical evidence on the way complex IFRS-9 estimations affect Key Audit Matters (KAM) disclosure in Jordan, an impoverished nation. A robust year-industry fixed-effects OLS regression model has been employed to test the developed hypotheses over the period from 2017 to 2022. The investigation showed a substantial statistical relationship between each IFRS-9 complex estimate category (proxied by financial assets held for trade, sale, or maturity) and KAM proportions. The results concurred with nations that IFRS-9 caused capital market uncertainty. To reduce information asymmetry, auditors provide a large number of KAM in their reports to evaluate and appraise complicated estimations. This research may be utilised to set a financial reporting and disclosure policy for unfavourable scenarios. This study updates policymakers and standard-setters on the impact of ISA-701's KAM disclosure requirement. KAM research is helpful for evaluating confidence interval disclosures, external audits, and KAM disclosures' utility following IFRS implementation. Thus, regulatory agencies, standard-setters, stakeholders, and audit report consumers interested in KAM disclosures and ISA-701 implementation in developing nations could gain from this research. The findings may motivate academia to use similar data to other emerging nations to better understand how reporting KAMs influences audit methods. To author knowledge, this is one of the first empirical research to examine the influence of post-IFRS-9 audit processes and the first to refer to its correlation with KAM disclosures. This study is the first to*

---

Received: 21 April 2024; Accepted: 13 September 2024; Published: 27 December 2024

To cite this article: Alharasis, E. E. (2024). The impact of complex estimates of IFRS-9 on the proportion of Key Audit Matters (KAM) disclosures: Evidence from Jordanian capital market. *Asian Academy of Management Journal of Accounting and Finance*, 20(2), 255–295. <https://doi.org/10.21315/aamjaf2024.20.2.9>

To link to this article: <https://doi.org/10.21315/aamjaf2024.20.2.9>

© Asian Academy of Management and Penerbit Universiti Sains Malaysia, 2024. This work is licensed under the terms of the Creative Commons Attribution (CC BY) (<http://creativecommons.org/licenses/by/4.0/>).

*evidence on the impact of IFRS-complex estimations on KAM proportions. How auditors handle investor protection after IFRS introduction and its extended reporting obligations in underdeveloped economies have received little attention. This study examines audit activity under a weak legal framework, unlike other auditing studies, which are highly regulated.*

**Keywords:** Key audit matters, IAS-701, IFRS-9, Complex estimates, Middle East, Jordan

## INTRODUCTION

In Jordanian capital market, IFRS-9: Financial Instruments complicated estimations may affect the proportions of Key Audit Matters (KAM) needed by International Standard on Auditing-701 (ISA). Jordanian stock market correlation is unique (Alharasis, 2023). After almost 30 years, Jordan was one of the first Middle Eastern (ME) countries to embrace International Accounting and Auditing Standards (IAAS). This allows longer-term IAAS effects to be captured. Second, Jordan's open economy attracts Arab and non-Arab capital market investors (Alharasis, 2023). Third, Jordan's free market privatisation and international economic ties contribute to EU and the World Trade Organisation (WTO) research into developing states (Boonyanet & Promsen, 2018). Fourth, Jordan force public corporations to report their annual KAM (Tahat et al., 2018). Thus, this article examines how IFRS-9 affects new KAM disclosures, particularly in Jordan for the first time (Alharasis, Alidarous, & Jamaati, 2023; Alharasis, Prokofieva, et al., 2023). IFRS-9 categories including financial assets complicated estimations "held for trade, held for sale and held to maturity" may raise or reduce Jordanian enterprises' KAM proportions. The influence of the major three categories of complicated estimations called by IFRS-9 on KAM disclosures in enterprises' annual reports has been explored to derive novel outcomes. It illustrates how external auditors safeguard stakeholders and firm accounting data. The association between IFRS-9 complicated estimations and KAM may validate company operating performance, allowing stakeholders to make creative business decisions (Nyakurukwa & Seetharam, 2023).

In recent decades, Jordan has improved governance and transparency frameworks to boost economic confidence, despite limited natural resources (Al-Htaybat, 2018). Since 1990, developing market economies like Jordan have adopted the International Accounting Standards/International Financial Reporting Standards (IAS/IFRS) standards. Adapting to achieve high transparency and comparability in financial information is crucial for enhancing international commerce between Arab nations and the world (Abdullatif & Al-Rahahleh, 2020). Such implementations aim to boost annual report disclosures. Enhancing

companies' financial reporting assists users make judgements (Alharasis et al., 2022; Alharasis, Alidarous, Alkhwalidi, et al., 2023). Given the increasing situation in impoverished countries, especially Jordan, the shift to IFSR/IAS has significant consequences for the accounting and auditing profession worldwide.

On 12 November 2009, IFRS-9 superseded IAS-39's financial asset categorisation and measurement (IAS Plus, 2024a). IFRS-9 required financial asset classification and measurement standards to be implemented on 1 January 2013, with early adoption allowed. IFRS-9 classifies all IAS-39 financial assets as trade, sale or maturity. The fundamental reason for IFRS-9 is to simplify financial instruments (IAS Plus, 2024b). IFRS provide updated financial information on real firms' financial positions and increase financial reporting transparency compared to traditional accounting methods. Complex estimations and modifications during asset and liability appraisal provide audit challenges (Laux & Leuz, 2010; Penman, 2007). Due to inefficient markets, some assets and liabilities cannot be appropriately valued as such estimations rely on existing prices. The agency problem between managers and owners increases financial information manipulation and misstatement incentives.

Later, the International Auditing and Assurance Standards Board (IAASB) through the International Standards on Auditing (ISA) had to act against the negative effects of IFRS implementation and the several crises caused by accounting system updates and economic downturn on accounting data transparency by providing new auditor role recommendations. ISA-560 "Subsequent Events" requires financial statements to include an explanatory remark by December 2019. Such data helped users comprehend how the recession affected their businesses. By late 2016, "Disclosure of Key Audit Issues in the Independent Auditor's Report" required auditors to address relevant issues and write about key items that may jeopardise operational continuity (Hay et al., 2021). Audit guidelines imply auditors to find and include all significant events in financial statements (Hategan et al., 2022). ISA-701 states that KAM is used to satisfy accounting information consumers' need to incorporate more information in the auditor's report on the most significant and critical audit concerns, therefore enhancing transparency and communicative value. The auditor's report includes KAM to boost involvement of stakeholders.

In auditing, communication has been examined as a conversational art (Minutti-Meza, 2021) or as a verbal power through the evaluation of reporting interaction value (Seebeck & Kaya, 2021). The IAASB's ISA-701 changes require external auditors to mention significant audit problems in their clients' annual reports. New auditor obligations under the IAAS enabled openness in firm

financial performance (Nyakurukwa & Seetharam, 2023). Financial reporting improves with more disclosures (Hay et al., 2021; Fariha, 2022). Financial statement auditors must identify and document occurrences that might substantially impact the company (Hategan et al., 2022). ISA-701 mandated auditors to report KAM to promote stakeholder communication. This paper aims to examine how auditors accounted for the impact of IFRS-9 on financial asset measurement and disclosures in firms' financial statements, as reflected in their KAMs.

Research on KAMs focuses on factors affecting case reporting (Sierra-García et al., 2019; Pinto et al., 2020) and the legal implications of "expanded auditor reporting" (Kachelmeier et al., 2020). Research on KAMs has focused on the quality of financial reporting and audit process (Asbahr & Ruhnke, 2019; Suttipun, 2021; Baatwah et al., 2022; Camacho-Miñano et al., 2021; Fera et al., 2022; Pinto & Morais, 2019; Hategan et al., 2022; Ecim et al., 2023) have examined the relationship between KAMs and several features such as audit lag, tenure, fees, quality, financial distress and going concern. This research focuses on established economies like the U.S. and U.K., with few exceptions (Kend & Nguyen, 2020; Bédard et al., 2019; Abu & Jaffar, 2020; Md Khokan et al., 2022; Abu et al., 2022; Segal, 2019). The relationship between new IFRS regulations and KAMs is unclear. Further, the scholarly literature has ignored auditors' increased reporting obligations in developmental countries' regulatory, economic and legal settings (Alharasis et al., 2024).

To address the subjectivity of qualitative evaluations of past research data, Osama and Mardini (2022) suggested an econometric model/real economic study. Some study argues that most previous evidence is qualitative, and that econometric research is needed to clarify the current body of knowledge (Abdullatif et al., 2023; Elmarzouky, 2023). Researchers highlighted the absence of ME research in this field of study. Additionally, ME's financial data should be tested for KAM effects. The scholars' potential indicated that KAM disclosure has received attention recently and needs further investigation, especially in ME. Abdullatif et al. (2023) advised examining KAMs' influence on audit practises across long periods to better evaluate diverse periods and economic situations and compare stable and troubled eras. Thus, unlike earlier investigations, this article advances auditing knowledge in several ways. First, this work adds quantitative support to previously published models. Second, unlike prior KAM research, which focused on highly developed economies, this study focuses on Jordan, an underprivileged nation. Third, it is the first to investigate how IFRS-9 has affected KAM disclosures in Jordan, an emerging market economy. By analysing KAM disclosure in such a scenario, this paper adds to the assurance literature. Fourth, this work objectively updates previous models by examining a Jordanian sample

from 2017 to 2022. This allows better analysis of numerous time periods and economic conditions, making stable and problematic times more comparable. Fifth, this study incorporates non-financial and financial institution data, which sheds light on the impact of IFRS-9 deployments on clients' audit procedures throughout their portfolios. Sixth, and most critically, this research uses a 15-item KAM checklist, unlike previous investigations.

ME nations have huge natural resource differences and are economically varied. Foreign investments and international funds are most likely to connect these nations to the global environment, sustaining their economic cooperation and political integration (Abdullatif et al., 2023). Accounting openness is crucial when dealing with investors, trading partners, and overseas purchasers (Change et al., 2024). Middle Eastern countries are interesting because to their distinct political, cultural, legal and economic environments (Boolakay et al., 2018). Common heritage, language, religion, beliefs, customs and geography strengthen ME nations' cultural, social and economic life, boosting accounting study on them (Alhababsah, 2019). Political, financial and technical advances drive accounting reforms like IFRS adoption, which affect all aspects of life (Al-Htaybat et al., 2018). Jordan is politically stable in a volatile region. Jordan's economy has suffered from political and economic issues (Abdullatif et al., 2023). The economy was already in place, even if adjacent economies had more state participation in political situations (Alharasis & Mustafa, 2024). Jordanian firms have improved their conduct and financial communication due to cultural and political considerations (Al-Htaybat, 2018). The study highlights the growing interest in Jordan as a gateway for international investments, despite scant knowledge about the Middle Eastern accounting environment (Al-Htaybat, 2018). Contributing to government policy to improve financial reporting circumstances is another reason given the major changes in the Middle Eastern corporate climate (Tahat et al., 2018). Integration and promotion of the Middle East and Jordan in worldwide business can achieve this.

Therefore, by shedding light on the implications of IFRS-9's recent significant step in accounting systems—which mandated the measurement and disclosure of less verifiable financial assets and placed additional obligations and responsibilities on the audit profession to disclose the KAM in accordance with ISA-701's first requirement—this study aims to close the gap in the literature on auditing. Using Jordanian institution data from 2017–2022, Ordinary Least Squares regression was used to evaluate the hypotheses and achieve the study's objectives. The analysis revealed that the increase in KAM disclosures was caused by IFRS-9 and sophisticated assessments of new financial asset categories. This study aids in the understanding of KAM disclosures and ISA-701 by stakeholders,

regulatory bodies, standard-setters, and readers of audit reports. The conclusions make Jordanian auditing laws more compliant with IAAS standards. Other ME countries can also benefit from the research.

## **CONTEXT BACKGROUND**

### **The Evolution of IFRS-9**

The International Accounting Standards Board (IASB) (formerly known as the International Accounting Standards Committee, IASC) is another group that has been instrumental in bringing about global uniformity in the use of accounting standards by businesses and other organisations. Financial instrument efforts resulted in IAS-39 in 1998 and after. IASC and Financial Accounting Standards Board (FASB) have mostly focused on financial instruments. In 1994, FASB issued the Statement of Financial Accounting Standards (FAS-115), which classified financial assets as “held to maturity,” “held for sale,” and “held for trading” and applied to all financial organisations. Companies have to evaluate assets in “held to maturity” categories using discounted cash flow under FAS-115.

The worldwide economy was greatly impacted by IAS-39: Financial Instruments: Recognition and Measurement (Fiechter & Novotny-Farkas, 2017). In 2004, the IAS-39 released. It specifies how to recognise and measure financial assets, liabilities, and some non-financial transactions (IAS Plus, 2024a). Requiring such categories helps determine the process of valuing and reporting assets in financial statements. These categories have different implementation and unrealised gain/loss recognition requirements (IAS Plus, 2024a). First, “Available-for-trading financial assets (AFT) through profit or loss” includes two subcategories: Designated, which indicates any financial asset designated on initial recognition to be measured using value changes in profit or loss; and “Held for trading,” which indicates financial assets acquired for the purpose of selling in the short term to hold shorter-term profits. Second, “available-for-sale financial assets (AFS)” are “non-derivative financial assets” marked as “available for sale” upon initial recognition. Other instruments not classified as “loans, receivables”, “held-to-maturity investments” or “financial assets via profit or loss” are also assets. The balance sheet measures and recognises IAS-39 AFS assets, while the equity statement immediately recognises value changes. Third, “Held-to-maturity investments (HTM)”. They show specific payments that companies plan to hold until they are due, excluding loans and debts. They are not marked as “assets through profit or loss” or ready for sale at the time they are recognised. HTM products are worn down over time.



On 12 November 2009, IFRS-9 superseded IAS-39's financial asset categorization and measurement (IAS Plus, 2024b). IFRS-9, part of the IAS-39 replacement effort, is one of the biggest modifications. It largely replaces IAS-39, although impairment and hedging components are still needed. The fundamental reason for IFRS-9 is to simplify financial instruments (IAS Plus, 2024b). Fiechter and Novotny-Farkas (2017) examined IFRS-compliant financial instrument implementation in 907 banks from 46 countries. Countries like Australia, Austria, Bahrain, Belgium, Botswana, Bulgaria, China, Croatia, Cyprus, Czech Republic, Denmark, Egypt, Finland, France, Germany, Greece, Hong Kong, Hungary, Ireland, Israel, Italy, Jordan, Kazakhstan, Kenya, Kuwait, Latvia, Lithuania, Macedonia, Malaysia, Mauritius, Norway, Oman, Pakistan, Philippines, Poland, Portugal, Romania, Russia, Saudi Arabia, Slovakia, South Africa, Spain, Sweden, Switzerland and Turkey. After Fiechter and Novotny-Farkas (2017) descriptive analysis of IFRS-9 financial instruments in several countries, the average proportion of financial instruments is 23%, with financial assets 17.1% and liabilities 5.9%. The rising presence of such categories in firms' annual reports prompts this study to examine post-IFRS-9 effects.

### **ISA-701 Development and Importance**

Multiple IFRS/IAS modifications have done unprecedented damage to public faith in audited financial reports, increasing scrutiny of their informative value (Bédard et al., 2016). In developed and developing economies, authorities and standard-setters value the auditor's report (Burke et al., 2021; Ecim, 2023). This casts doubt on ISA-compliant audit reports' applicability. Traditional audit reports have been criticised and debated (Church et al., 2008). Despite substantial standardisation, the traditional audit report remains inadequate, uninformative, and opaque (Carcello, 2012; Asare & Wright, 2012; IAASB, 2011; Gold & Heilmann, 2019). The typical auditor's report lacks information, which can lead to bad investment decisions, inefficient resource allocation, needless legal conflicts, and investor distrust (Asare & Wright, 2012). Audit transparency and risk-related disclosures are increasingly sought by financial statement consumers (Mock et al., 2013; Vanstraelen et al., 2012). Instead of examining the client, the audit report outlines the audit process (Abdullatif & Al-Rahahleh, 2020). The difference between a normal audit report and the information stakeholders want in financial statements has led to much debate and discussion about whether the auditor's report should be significantly changed to avoid confusion (Gold & Heilmann, 2019).

To strengthen audit opinion reliability and trust, regulators and professional bodies have developed audit reporting methods (Ecim et al., 2023). The IAASB has added audit report requirements to address information asymmetry and the

gap between independent auditors and stakeholders. The IAASB has established auditing standards to increase transparency and trust in the audit profession and made numerous major changes to the conventional audit report in response to reform requests. ISA-701 changes took effect in December 2016. KAM is “those matters that, in the auditor’s professional judgement, were of most significance in the audit of the current period’s financial statements” (IAASB, 2015). These KAMs were created to make auditor observations, especially those involving serious concerns, events and hazards or requiring expert judgements, more transparent. Thus, KAM disclosure should improve audit report communicability and help investors focus on financial statement challenges (Sirois et al., 2018). ISA-701 requires auditors to submit relevant problems that would benefit financial statement customers. KAM disclosure should reduce stakeholder agency dilemma knowledge asymmetry and expectation gap (Velte & Issa, 2019). As stakeholders may not have the expertise or professional capacity to interpret financial accounts, ISA-701 aims to eliminate the information gap through KAM disclosure. They want more auditor information to comprehend business challenges.

ISA-701 shows that KAMs describe the issue, why it was detected, and how the audit firm resolved it for each company and financial period. Audit organisations must disclose KAM concerns that demand significant attention during the audit, however this does not lead to specific audit opinions on individual accounts or supplant audit opinion requirements (IAASB, 2016). Audit firms have some leeway in reporting KAMs and presenting them under ISA-701. The audit firm can choose report themes, KAMs, and detail.

### **The Auditing Landscape in Jordan and The Introduction of ISA-701**

Jordan has many social and world ties. Culture and politics have made financial reports and management better (The World Bank, 2021). In a globalised world, Jordan is attractive to many foreign companies. External checks are used by business owners, the government of Jordan, and creditors. Auditing financial records increases trust, which boosts foreign investment and the economy (Abdullatif et al., 2023). In order to get foreign funding, the Jordanian government wanted rules to be made. The ISA is what Jordanian private inspectors have to follow. Even though Jordan does not have a lot of natural resources, it has always tried to make its economy safer (Abdullatif & Al-Rahahleh, 2020). Accounting has changed since Jordan joined the IASC in 1988. The Jordanian Association of Certified Public Accountants (JACPA) was created in 1989 to keep standards high and avoid disagreements. Outside audits are overseen by the Anti-Corruption Commission (JACC), Companies Control Department (CCD) and Jordan Securities Commission (JSC). IASC told JACPA that all businesses should use



IAS by 1990. Firms must file approved financial reports every year because of the Companies Law (Tahat et al., 2018). The 1997 Companies Law set up Jordanian government. The JSC says that 1998 Securities Act No. 23 required all traded businesses to have IFRS and ISA reports.

Thus, Jordanian audit companies ought to adhere to ISA-701. Jordanian public listed firms' financial statements dated for the 31 December 2016 year-end have contained the enlarged audit report required by ISA, including KAM reporting, from 2017. ISA-701 uses IFRS rules to calculate KAMs. IAASB (2016): para 8 selects KAM from governance communiqués (Gomez Sanchez et al., 2022). An issue submitted to a governing board is a KAM if the auditor considers: (i) the danger of substantial misstatement; (ii) significant estimates and judgements, and (iii) important events and transactions within the reporting period. A separate portion of the auditor's report discusses this process's KAMs (IAASB, 2016: para 11). IAASB (2016): para 13 explains why each problem was essential to the audit and how it was remedied. Audit reports must state that KAMs are absent (IAASB, 2016: para 16). KAM should highlight essential audit areas, improve communication with management and stakeholders, and concentrate auditors on risk assessment and response, the foundation of contemporary auditing. To increase clients' access to quality accounting documents (Tahat et al., 2018). Significant improvement in investor and user information. Consumers welcome more audit information, not just 'boilerplate' (IASB, 2017). Thus, the purpose of releasing the standard was to boost user trust in audits and the usefulness of audit reports (Abdullatif & Al-Rahahleh, 2020; Rousseau & Zehms, 2024).

Jordan was a case study for several reasons. First, the results may be applied to other ME nations. Accounting research in ME nations is rising because to common histories, political structures, languages, customs, and cultures (Tahat et al., 2018). Second, Jordan has used IFRS for 30 years, therefore it is conceivable to examine how such standards influenced the number of issues reported by Jordanian corporate auditors. Third and final, Jordan is one of the few ME nations that requires listed businesses to reveal auditor opinion/report, including KAM queries, in their annual reports. The JACPA oversees Jordanian audits. Jordan's CCD, ACC, and JSC monitor the JACPA to guarantee certain IFRS/ISA implementation and practice. Since ISA has been implemented in Jordan for 30 years, it is possible to study how accounting system changes affect corporate performance (Abu Rishah & Al-Saeed, 2014).

## **FOUNDATIONAL THEORY, OVERVIEW OF RELEVANT LITERATURE AND FORMULATION OF HYPOTHESES**

### **Foundational Theory**

This research delves into the potential effects of IFRS-9 complex estimations on the KAM proportions of the International Standard on Auditing (ISA)-701 in the Jordanian capital market. It does this by combining the theories of agency, stakeholder and signalling. Due to the increased complexity and risk associated with analysing and assessing such complicated estimates, auditors disclose a high number of KAM disclosures in their reports. This is in response to the considerable uncertainty that has formed in the capital market as a result of management bias following the introduction of IFRS-9.

In the modern business world, IFRS serves as a guiding concept that establishes a solid connection to stakeholders and signalling thoughts. Given the potential for management-agency theory abuse and the usage of complicated and uncertain estimations, the organisational context presents significant challenges to the application of IFRSs. Stakeholder theory makes it possible to evaluate the accounting figures prepared by IFRS-9 requirements in the broader social fabric, where managers are accountable to more stakeholders (Huang et al., 2020), while triangulation agency and signalling theories are used to explain the choice of accounting methods (Khlif & Achek, 2016). In response to the standards of IFRS-9, which classify financial assets into three groups, advocates of agency theory sought to explain the anticipated information asymmetry problem by addressing the issues of ambiguous estimations and managers' tendency to abuse their positions. In order to anticipate and plan for the financial impacts of adopting IFRS, all parties involved need reliable disclosures (Abdullatif & Al-Rahahleh, 2020). As a result, there have been, and continue to be, demands to broaden the scope of the audit report. Many users have voiced their dissatisfaction with the traditional format of audit reports, stating that it fails to adequately address entity-specific information needs (IAASB, 2015) and focus excessively on the audit and insufficient on the audit client (Litjens et al., 2015).

The IAASB and the Public Company Accounting Oversight Board (PCAOB) were among the regulatory bodies that advocated for changes to the audit report that would have necessitated more disclosure in order to make it more relevant to users' needs (Bedard et al., 2016). The KAM revelation stood out among the others. In an effort to make the audit report more entity-specific, this specific disclosure stands out for its fairly free-form phrasing. To summarise, auditors are obligated to use their professional judgement in selecting the most important and

risky concerns from those that were presented to those responsible for governance, according to ISA-701 (IAASB, 2016). The purpose of reporting on such things is to make the audit report more transparent and useful for communicating the audit and its results (Köhler et al., 2016). Despite the potential benefits of KAM reporting, there have been concerns about its potential unintended consequences. These include leaving too much to the auditor's discretion, making the audit firm more vulnerable to client confidentiality issues, and limiting the value that can be added through boilerplate reporting (Segal, 2019).

The auditor's report becomes more relevant with KAMs reporting (Bedard et al., 2016). Disclosure of KAMs, according to stakeholder and agency theory, lessens the expectation gap, mitigates information asymmetry, and eliminates the likelihood of interest conflicts between stakeholders and management (Segal, 2019). Auditors are supposed to act in the best interests of the company's shareholders and everyone else who uses the financial accounts, putting aside any consideration for personal gain, according to the agency's philosophy of corporate governance (Hegazy & Kamareldawla, 2021; Gomez Sanchez et al., 2022). In addition to providing an opinion on the financial statements, auditors also report on management's performance through the KAMs disclosure. Users now have more faith in KAM's services because of the company's openness regarding its potentially hazardous actions (Nyakurukwa & Seetharam, 2023). A corporation may struggle to address the needs of its stakeholders, if it fails to adhere to the stakeholder theory (Velte & Issa, 2019). Since agency theory may be either behavioural or agency-stakeholder-oriented, Hill and Jones (1992) merged the two schools of thought. Since KAMs can lessen information asymmetries and stakeholder conflicts of interest, agency theory provides an explanation for how KAM reporting affects investor choices (Suttipun, 2021). Behavioural agency theory also specifies that stakeholders may respond negatively to reports of KAMs. Because KAMs capture the interest of stakeholders and other users (Orquin & Loose, 2013), understanding what factors influence their quantity is important (Suttipun, 2021). When making financial judgements, users may rely on them.

The survey of prior research revealed that KAMs may impact investor decision-making and lead to less information asymmetry in some contexts (Elliott et al., 2020; Christensen et al., 2014; Ozlanski, 2019). Furthermore, KAMs have the potential to draw attention to extra risk elements (Kachelmeier et al., 2020), reduce the use of aggressive or excessively optimistic accounting assumptions (Gold et al., 2020; Reid et al., 2019), and boost trust in certain audit reports (Moroney et al., 2021). Theoretically, KAM disclosures make audits more open and transparent (Reid et al., 2019; Gold et al., 2020; IAASB, 2015). This provides insight into the auditors' methodology into critical audit areas, which is useful

for stakeholders and those responsible for governance. Using KAMs shows that auditors are more valuable and credible, especially for smaller audit businesses (Moroney et al., 2021; Gomez Sanchez et al., 2022). In a corporate setting, upper management is aware of high-risk regions and the parts of financial reporting that call for discretion, such as those outlined in IFRS-9. According to several sources (Asbahr & Ruhnke, 2019; Gold et al., 2020), heightened auditor scrutiny is expected to result in more cautious decision-making, improved implementation of accounting controls, and improved credibility in reporting to investors. Additionally, auditor-governance-chargee (GRC) conversations made easier by KAM identification have the potential to improve the quality of complicated accounting numbers via a more stringent risk-recognition and response procedure (Segal, 2019). Audit reports are now subject to increasing public and stakeholder scrutiny; thus, auditors need to be extra careful to record and meet all audit goals (Kachelmeier et al., 2020). With a greater grasp of the audit function by audit report consumers, the audit expectation gap might be reduced in the long run (Ecim et al., 2023).

In addition, according to the literature on audit reports, stakeholders' interests should be prioritised when revealing KAMs since it should improve the quality of accounting statistics, particularly those that are seen as difficult estimations (Ittonen & Peni, 2012; Velte & Issa, 2019; Osama & Mardini, 2022). According to agency theory, which describes the connection between stakeholders and auditors, the primary goal of auditing is to boost users' confidence in financial statements (Mah'd et al., 2019). Schrader and Sun (2019) and Velte and Issa (2019) emphasise agency literature that states a higher quality audit is accomplished when the audit committee conducts greater control and requires better coverage of the audit. If auditors are transparent about KAMs, stakeholders may use them for self-evaluation, which in turn improves their financial analysis and investment choices. Better financial reporting and less information asymmetry should result from more transparency. Theoretically, the audit will be of greater quality if the audit committee increases its monitoring and requires more thorough coverage (Schrader & Sun, 2019). Therefore, increased transparency should lead to better financial reporting and less information asymmetry.

Agency theory and stakeholder theory investigate manager-shareholder conflict (An et al., 2011). Signalling theory justifies subjective accounting figure judgements once accounting standards improved, whereas stakeholder theory reflects the broader purpose of financial openness. Signalling theory supports professional auditors as reliability and monitoring devices. Agency theory, like signalling theory, examines asymmetric information and shareholder influence (Khelif & Achek, 2016). The stakeholder model views corporate announcements as

essential for fulfilling stakeholders' resource allocation preferences. Stakeholder theory considers the organisation in its social environment and makes managers accountable to a wider stakeholder group than agency theory. The concept of stakeholders improves the agency theory's focus. Thus, Managers ought to provide stakeholders with more financial data to make responsible resource allocation decisions. It is possible to combine the concepts of constituents and agency, provided that the latter does not incorporate the notion of information asymmetry (An et al., 2011).

The current study offers the first evidence of the impact of IFRS-9 implementation on KAM disclosures to highlight the importance of the ISA's recent audit requirements and the importance of compliance in narrowing the expectation gap between preparers and auditors. The present study is the initial attempt to combine agency, stakeholder, and signalling theories to better understand how KAMs affect audit efforts in Jordan, a developing economy.

### **Hypotheses Development**

IFRS-9 disclosures, consisting of held-for-trading (HFT), available-for-sale (AFS) and held-for-maturity (HFM) classifications, caused significant issues in capital markets, particularly in Jordan, due to the lack of active markets to measure and evaluate the application of such figures (Abdullatif & Al-Rahahleh, 2020). In contrast, worldwide auditing institutions are attempting to mitigate the impact of such regulations on accounting data integrity. KAM disclosures indicated financial data quality, with IFRS-9 standards a focus (ACCA, 2018). Prior studies have shown a positive link between KAMs and audit quality. This study's authors proposed that auditors should submit additional KAM statements in the KAM section to complement the revealed accounting data.

Addressing KAM improves the quality of audits and provides advantages to stakeholders (Ittonen & Peni, 2012; Velte & Issa, 2019; Hategan et al., 2022). The purpose of conducting audits on financial accounts is to instill trust and assurance (Mah'd et al., 2019). Agency theory pertains to the study of auditor-stakeholder relationships. As stated in the agency literature, when audit committees provide supervision and there is improved audit coverage, the quality of audit and accounting data is enhanced (Velte & Issa, 2019). Auditors can provide KAMs to allow stakeholders to evaluate their performance and make more informed financial and investment choices. Enhancing openness is expected to decrease information asymmetry and improve financial reporting, according to Schrader and Sun (2019). To enhance the audit, it is recommended that the auditing board closely monitors and enforces more comprehensive audit coverage, as suggested

by agency theory (Schrader & Sun, 2019). Therefore, transparency needs to decrease the imbalance of information and improve the process of financial reporting. Pérez et al. (2021) examined the level of financial reporting uncertainty by analysing audit reports from the initial two years following the implementation of audit reform in Spain. The study examined the impact of audit reform on the reduction of audit expectations and identified the elements that influence the disclosure of KAM. The disclosure of KAM can be advantageous for users of financial statements in their decision-making process (Hategan et al., 2022).

Further investigation analysed auditor reports that were given to Asian corporations. In China, known for its highly advanced financial market in this region, Zeng et al. (2021) discovered that internal auditors' express apprehension regarding customer earnings, audit efforts, and the potential for issuing a modified opinion. These concerns are influenced by the number of KAMs and their presentation, including factors such as topic, similarity, clarity, and paragraph length. Increasing KAMs can enhance the clarity of audits and decrease the imbalance of information, which may motivate auditors to disclose a greater number of significant issues (Segal, 2019). Auditors prioritise complicated and judgmental aspects of financial reporting, including IFRS-9 measurement scepticism and falsification (ACCA, 2018; IAASB, 2015; Sierra-García et al., 2019). This would follow a risk-based assurance strategy, which would affect KAM concerns. The agency theory states that auditors will report more KAMs if there are more disclosures of less verifiable financial asset estimations. Due to the widespread presence of IFRS disclosures, compliance with IFRS updates, and auditors' growing experience with KAM determination, auditors may include more KAMs in their audit reports over time (Ecim et al., 2023). In light of this, the following hypotheses were proposed on the basis of the theoretical grounds that were stated earlier:

- H1: The proportions of key audit matters among publicly listed firms in Jordan are positively correlated with held-to-trading financial assets.
- H2: The proportions of key audit matters among publicly listed firms in Jordan are positively correlated with held-to-sale financial assets (HFS).
- H3: The proportions of key audit matters among publicly listed firms in Jordan are positively correlated with held-to-maturity financial assets (HFT).



The posited models assume that external auditors will reveal more KAM statements in annual reports with complicated accounting figures. In other words, external auditors need to figure out agency-related accounting information infractions. Auditors' ability to recognise these infractions affects audit quality (Gul et al., 2013). To my knowledge, this research is the first in established and emerging nations to analyse how IFRS-9 may affect KAM disclosures in annual reports. It verifies previous models by researching Jordan from 2017 to 2022. This allows for high-quality evaluations across industry portfolios, periods and economic conditions.

## **SELECTION OF RESEARCH SAMPLES AND DATA**

### **Selection of Data**

The statistics were collected from Jordanian public listed corporations' 2017–2022 annual reports on the “Amman Stock Exchange (ASE)” website. The investigation commenced in 2017, the inaugural year in which Jordanian businesses deployed ISA-70. Additionally, the analysis culminates in 2022 due to the absence of sufficient data for the years adhering to 2022. Table 1 shows a preliminary sample of 235 public enterprises. The final sample size was 153 firms (918 firm-year observations) after eliminating 50 enterprises with missing financial data as well as 32 firms with missing KAM data. The final sample, presented in Table 2, has two significant sub-industries. The number of firms accepted from the financial industry was 62, while 91 were from the non-financial sector.

Table 1  
*Sample choice technique*

Sample	Total firms	Pooled
Preliminary sample	235	1,410
(–) Companies with lack financial data or those that withdraw from the market due to the COVID-19 effect	(50)	(300)
(–) Firms with missing KAM data	(32)	
Total sample	153	918

Table 2  
Industry-based sample allocation

<b>Panel B: Industry distribution</b>		
	Total accepted firms	%
Total sample from financial industry	91	59
Total sample from industrial and service sectors	62	41
Total	153	100

## Research Design and Variables Measurement

### Research design

For the first time, auditing models incorporate IFRS-9 complicated estimations as a proxy for client risk and complexity and KAM as a proxy for accounting figure oversight. The examination analyses IFRS-9 complicated estimations (*HFT*, *HFS*, *HFM*) and KAM. KAM variation across time and industry has been considered using the OLS regression model with fixed effects for industry and years (Audoussert-Coulier et al., 2016). This evaluates how IFRS-9 affects KAM proportions in varied emerging client portfolios. Starting with the following basic equation and amending it to test hypotheses is the suggested research paradigm:

#### Basic equation

$$KAM = \delta_0 + \delta_1 SIZE + \delta_2 SUBS + \delta_3 ROA + \delta_4 LEV + \delta_5 GROWTH + \delta_6 QRATIO + \delta_7 BIG4 + \delta_8 TENURE + \delta_9 OPINION + YearEF + IndFE + \varepsilon \quad (1)$$

To assess H1 to H3, Equation (1) is revised by the inclusion of the IFRS-9 complex estimates factors in separately as presented in Equations 2 to 4.

$$\mathbf{H1:} \quad KAM = \delta_0 + \delta_1 HFT + \delta_2 SIZE + \delta_3 SUBS + \delta_4 ROA + \delta_5 LEV + \delta_6 GROWTH + \delta_7 QRATIO + \delta_8 BIG4 + \delta_9 TENURE + \delta_{10} OPINION + YearEF + IndFE + \varepsilon \quad (2)$$

$$\mathbf{H2:} \quad KAM = \delta_0 + \delta_1 HFS + \delta_2 SIZE + \delta_3 SUBS + \delta_4 ROA + \delta_5 LEV + \delta_6 GROWTH + \delta_7 QRATIO + \delta_8 BIG4 + \delta_9 TENURE + \delta_{10} OPINION + YearEF + IndFE + \varepsilon \quad (3)$$

$$\mathbf{H3:} \quad KAM = \delta_0 + \delta_1 HFM + \delta_2 SIZE + \delta_3 SUBS + \delta_4 ROA + \delta_5 LEV + \delta_6 GROWTH + \delta_7 QRATIO + \delta_8 BIG4 + \delta_9 TENURE + \delta_{10} OPINION + YearEF + IndFE + \varepsilon \quad (4)$$

Control variables from auditing literature are included in the analytical model. Many control criteria, including those from prior auditing research, were included (Badia et al., 2017; Abernathy et al., 2019). Table 3 lists *SIZE*, *SUBS*, *ROA*, *LEV*, *GROWTH*, *QRATIO*, *BIG4*, *TENURE* and *OPINION*. The data analysis (2017–2022) must meet four OLS conditions to be analysed. Testing regression assumptions: normality, multicollinearity, homoscedasticity, linearity. These hypotheses were supported by the data (Appendix A). Additionally, all parameters are winsorised annually at the 1% and 99% levels to eliminate outliers.

Table 3  
*Variables definition and measurement*

Variable	Label	Measurement	Authors
Audit fees or audit fees to revenue ratio	LNAFEES	The natural log of total audit fees.	Ettredge et al. (2014); Alexeyeva & Mejia-Likosova (2016); Badia et al. (2017); Sangchan et al. (2020)
Number of key audit matters	KAM	Key audit matters, measured as number of KAMs reported in the audit report.	Abu & Jaffar (2020); Camacho-Miñano et al. (2021); Verho (2021); Zeng et al. (2021); Özcan (2021); Sierra-García et al. (2019); Lennox et al. (2021); Pinto & Morais (2019); Ferreira & Morais (2019); Srijunpetch (2019); Baatwah et al. (2022); Fera et al. (2022), Kitiwong & Sarapaivanich (2020); Reid et al. (2019)
Client size	<i>SIZE</i>	The natural log of a firm's total assets.	Alexeyeva & Mejia-Likosova (2016); Sangchan et al. (2020); Griffith (2020); Bradley & Sun (2021)
Subsidiaries	<i>SUBS</i>	The number of firm's subsidiaries/branches.	Mohammad Rezaei et al. (2018); Naser & Hassan (2016); Hassan & Naser (2013); Naser & Nuseibeh (2008); Alhababsah (2019); Abernathy et al. (2019)
Return on assets	<i>ROA</i>	The net income by total assets.	Hay et al. (2006); Hay (2013); Abernathy et al. (2019); Sangchan et al. (2020)

(Continued on next page)

Table 3 (Continued)

Variable	Label	Measurement	Authors
Leverage	<i>LEV</i>	Total debt divided by the total assets.	Hay et al. (2006); Abernathy et al. (2019); Salehi et al. (2019)
Growth ratio	<i>GROWTH</i>	The current year revenues to last year revenues.	Abernathy et al. (2019); Alzoubi (2018); Hay et al. (2006); Minutti-Meza (2021)
Quick ratio	<i>QRATIO</i>	Current assets less inventory to current liabilities.	Sangchan et al. (2020); Khlif & Achek (2016); Hay (2013)
Big 4 audit firms	<i>BIG4</i>	Dummy variable coded as 1 if the audit firm is one of the Big 4 audit firms (PwC, KPMG, Deloitte, and E&Y), 0 otherwise.	Choi et al. (2010); Huang et al. (2020); Francis et al. (2017); Abernathy et al. (2019); Sangchan et al. (2020); Khlif & Achek (2016); Hay (2013)
Auditor tenure	<i>TENURE</i>	Auditor tenure of three years, coded 1 if the audit firm did not change, 0 otherwise.	Salehi et al. (2019); Schneider (2017); Sangchan et al. (2020); Griffith (2020); Bradley & Sun (2021)
Unqualified opinion	<i>OPINION</i>	Dummy variable coded 1 if the firm receives an unqualified opinion, 0 otherwise.	Kausar & Lennox (2017); Abernathy et al. (2019); Cahan & Sun (2015); Francis et al. (2005); Ghosh & Lustgarten (2006); Leventis et al. (2013); Abdullatif (2016)

## Variables Measurement

### *Measuring the independent variable in interest: Key audit matters*

Qualitative content analysis processed data. Each organisation's audit report is repeatedly examined for KAM. This required independent KAM analysis. Coding 344 KAM objects into 50 categories. Prior study highlighted subcategories under IFRS recognition, measurement, presentation and disclosure norms (Segal, 2019; Kend & Nguyen, 2020; Sierra-García et al., 2019). Statistics were collected by company and year. After selecting 50 categories, 15 themes emerged (Osama & Mardini, 2022). Jordan's accounting and disclosure system was considered while creating the checklists to compute KAMs (Mah'd & Mardini, 2022; Kend & Nguyen, 2020). Fifteen (15) ISA-701 KAMs in Jordanian auditing reports

were detected (Mah'd & Mardini, 2022; IAASB, 2015). Each audit report had an unweighted KAM checklist (Appendix B, Table B1: KAM checklist). According to earlier research (Mah'd & Mardini, 2022; Osama & Mardini, 2022; Ecim et al., 2023), each report's score was calculated by dividing each firm's actual KAM by the checklist's total KAM as follows:

$$KAM = \sum_{i=1}^k \frac{kdi}{k}$$

where  $k$  is the total number of KAM items and  $kdi$  is equal to 1 if the item is reported in the annual report and 0 otherwise.

### ***Measuring IFRS-9 factors***

Again, according to IFRS-9 criteria, financial assets must be divided into three major groups. First, "available-for-trading financial assets (AFT), next available-for-sale financial assets (AFS), and finally held-to-maturity investments (HTM)", which identify particular payments financial assets that businesses want to maintain till maturity. As a result, new IFRS-9 proxies (HFT, HFS and HFM) proposed by Fiechter and Novotny-Farkas (2017) are used for the first time in auditing models with IFRS references as a proxy for customer complexity and risk. The quantity of each form of financial asset was manually derived from each company's annual report. The proportions of each of these assets were calculated by dividing the firm's total quantity of each type of financial asset by its total assets. The investigation included the quantities of every type of financial asset in the developed models to see how they would affect the proportions of KAM disclosures.

## **DISCUSSION AND FINDINGS**

### **Descriptive and Correlation Statistics**

Table 4 displays regression analysis variable descriptive statistics. Dependent variable: KAM proportions. A low standard deviation of 0.076 and mean (median) of 0.148 (0.167) characterise KAM. Some businesses have no important concerns to disclose in auditor reports under the KAM section. However, the largest proportion of KAM statements provided by external auditors among Jordanian publicly listed enterprises is roughly 30%. The average Jordanian external auditor validated 30% of KAM disclosers after ISA-701 was adopted to increase audit openness and minimise "information asymmetry". This supports previous research (Abdullatif et al., 2023; Osama & Mardini, 2022; Alharasis, 2024). Again, auditors may report more KAMs if they strengthen audit openness and minimise information

asymmetry (Segal, 2019). In a risk-based assurance strategy, auditors prioritise complicated and judgmental areas of financial reporting (ACCA, 2018; Sierra-García et al., 2019; IAASB, 2015), which might impact the concerns identified as KAMs. Furthermore, the analysis of IFRS-9 complex estimates factors showed that Jordanian firms hold mostly financial assets available for sale (HFS) and for trading (HFT), followed by IFRS-9 classification and measurement requirements. The mean (median) of HFS and HFT are 0.314 (0.000) and 0.206 (0.000). Analysis showed that Held-to-maturity assets (HTM) had the lowest sample mean (median) of 0.106 (0.000). The investigation shows strong IFRS-9 compliance and financial asset classifications into HFS, HFT and HFM. This result inspires this study to investigate how complex figures may affect external auditors' KAM reports. Table 5 displays all Pearson correlations. Regression model independent variable correlation is tested using multicollinearity (Chi & Chin, 2011). Unreported mean VIF tests show no collinearity because each model's mean VIF is less than 2.

Table 4  
*Descriptive statistics (N = 41)*

Variable	Mean	Median	S.D.	Min	Max
KAM	0.148	0.167	0.076	0.000	0.278
AFS	0.314	0.000	0.464	0.000	1.000
HFT	0.206	0.000	0.404	0.000	1.000
HTM	0.106	0.000	0.308	0.000	1.000
SIZE	17.380	17.240	1.859	13.629	22.682
SUBS	2.347	1.000	3.479	0.000	18.000
ROA	973.800	937.000	578.697	25.000	2134.000
LEV	1303.676	1334.500	738.513	29.000	2513.000
GROWTH	1.349	1.012	2.274	-2.739	19.830
QRATIO	2.991	1.013	6.869	-0.504	49.364
BIG-4	0.434	0.000	0.496	0.000	1.000
TENURE	0.736	1.000	0.441	0.000	1.000
OPINION	0.857	1.000	0.351	0.000	1.000

Note: All variables are defined in Table 3.



Table 5  
Correlation matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1) KAM	1.000												
(2) AFS	0.377***	1.000											
(3) HFT	0.350***	0.022	1.000										
(4) HTM	0.270***	0.240***	0.109**	1.000									
(5) SIZE	0.172***	0.021	0.209***	-0.018	1.000								
(6) SUBS	0.061	0.101**	-0.031	0.021	0.279***	1.000							
(7) ROA	0.124***	-0.0782*	0.024	0.033	0.133***	-0.104**	1.000						
(8) LEV	0.178***	0.021	0.172***	0.003	0.470***	0.006	-0.024	1.000					
(9) GROWTH	-0.026	0.052	0.018	0.017	-0.102**	0.019	0.019	-0.020	1.000				
(10) QRATIO	-0.181***	0.001	-0.0751*	-0.006	-0.173***	0.013	-0.059	-0.270***	-0.013	1.000			
(11) BIG-4	0.0772*	0.029	0.0844*	-0.117***	0.484***	0.0909**	0.223***	0.180***	-0.063	-0.039	1.000		
(12) TENURE	-0.0794*	-0.112***	-0.105**	-0.013	-0.0851*	0.029	0.027	-0.035	0.032	-0.008	-0.0880**	1.000	
(13) OPINION	-0.026	-0.0699*	-0.004	-0.063	0.028	-0.0932**	0.156***	-0.025	-0.002	0.0789*	0.055	0.0881**	1.000

**Univariate Analysis**

The mean difference in KAM proportions among HFS, HFT and HFM IFRS-9 financial assets is shown in Table 6. The investigation shows that ASE-listed businesses report significantly higher KAMs for each sample of HFS, HFT and HFM assets than those with no or minimal disclosures. businesses with HFS, HFT and HFM assets have mean KAMs of 0.191, 0.201 and 0.207, which are far higher than businesses without such estimations of 0.128, 0.134 and 0.141. The study shows that each *t*-value is extremely significant at 0.01 (HFS = -12.4932, HFT = -11.5208, HFM = -8.5151). According to auditing theory, external auditors report more KAMs when IFRS-9 regulations take effect in Jordan. By giving external auditors extra work, KAM encourages them to learn more about client finances and financial misstatements to decrease litigation risk and reputation harm. Auditor reports may include greater KAM disclosures to alleviate information asymmetry when auditors evaluate businesses’ performance and disclosures and warn stakeholders. Auditors may report more KAMs since they improve audit openness and minimise information asymmetry (Segal, 2019). In a risk-based assurance strategy, auditors prioritise complicated and judgemental areas of accounting records (ACCA, 2018; IAASB, 2015; Sierra-García et al., 2019), which might impact the concerns identified as KAMs.

Table 6  
*Univariate analysis: Fees in pre vs. post-COVID-19*

	<i>KAM proportions by HFS, HFT and HFM assets vs. non- HFS, HFT and HFM assets</i>		
	<b>HFS</b> <b>(HFS_dummy = 1)</b> <b>N = 290 Obs.</b>	<b>HFS</b> <b>(HFS_dummy = 0)</b> <b>N = 634 Obs.</b>	
AFS	0.191	0.128	<b>(-12.4932)***</b>
	<b>HFT</b> <b>(HFT_dummy = 1)</b> <b>N = 190 Obs.</b>	<b>HFT</b> <b>(HFT_dummy = 0)</b> <b>N = 734 Obs.</b>	
HFT	0.201	0.134	<b>(-11.5208)***</b>
	<b>HFM</b> <b>(HFM_dummy = 1)</b> <b>N = 98 Obs.</b>	<b>HFM</b> <b>(HFM_dummy = 0)</b> <b>N = 826 Obs.</b>	
HTM	0.207	0.141	<b>(-8.5151)***</b>

Notes: \*, \*\*, and \*\*\* indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively. where: *HFS\_dummy*; *HFT\_dummy*; *HFM\_dummy*:

**Multivariate Analysis: Regression Analysis and Discussion**

Table 7 summarises the study model outcomes. Model 1 shows the regression findings of the control variables; Models 2 to 4 show how each IFRS-9 component affects KAM proportions; and Model 5 shows how all IFRS-9 factors affect KAM proportions. Models 1 to 5 have acceptable explanatory power (R2) of 10% to 38%, since their *P*-values are very significant at the 0.01 level. This matches auditing studies (Abu Rishah & Al-Saeed, 2014; Alhababsah, 2019). Model 1 shows that the control variable coefficients in this study possess the intended magnitude and signs, consistent with earlier research.

Table 7  
*Regression analysis*

DV = KAM Variables	Baseline model Coeff. (t)	Model (1) Coeff. (t)	Model (2) Coeff. (t)	Model (3) Coeff. (t)	Model (4) Coeff. (t)
Intercept	0.070 (2.30)***	0.030 (1.12)***	0.109 (3.94)***	0.067 (2.33)***	0.069 (2.73)***
AFS		0.073 (15.88)***			0.068 (14.58)***
HFT			0.062 (12.49)***		0.059 (12.59)***
HTM				0.064 (11.82)**	0.027 (5.14)***
SIZE	0.002 (1.300)	0.003 (1.480)	0.000 (0.100)	0.002 (1.220)	0.000 (0.040)
SUBS	0.002 (2.11)**	0.001 (1.360)	0.002 (2.91)***	0.002 (1.960)	0.002 (2.14)**
ROA	0.000 (2.31)**	0.000 (2.47)**	0.000 (2.42)**	0.000 (2.04)**	0.000 (2.51)**
LEV	0.000 (3.90)***	0.000 (4.99)***	0.000 (3.49)***	0.000 (3.77)***	0.000 (4.48)***
GROWTH	-0.000 (-0.530)	-0.001 (-1.060)	-0.001 (-1.090)	-0.001 (-0.820)	-0.001 (-1.680)
QRATIO	-0.001 (-2.92)***	-0.001 (-3.11)***	-0.001 (-2.65)***	-0.001 (-3.25)***	-0.001 (-2.97)***
BIG4	0.001 (0.190)	-0.001 (-0.130)	0.002 (0.380)	0.007 (1.210)	0.003 (0.590)
TENURE	-0.012 (-2.25)**	-0.007 (-1.450)	-0.007 (-1.370)	-0.011 (-2.17)**	-0.002 (-0.420)
OPINION	-0.004 (-0.500)	0.003 (0.490)	-0.003 (-0.370)	0.000 (0.020)	0.005 (0.870)

(Continued on next page)

Table 7 (Continued)

DV = KAM Variables	Baseline model Coeff. (t)	Model (1) Coeff. (t)	Model (2) Coeff. (t)	Model (3) Coeff. (t)	Model (4) Coeff. (t)
Robust std error	Yes	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes	Yes
Industry dummies	Sector	Sector	Sector	Sector	Sector
N	918	918	918	918	918
F-test	(16)***	(17)***	(17)***	(17)***	(19)***
R <sup>2</sup>	10.12%	28%	20%	16%	38%
Mean VIF	1.38	1.37	1.37	1.36	1.37

Notes: \*\*\*, \*\*, and \* indicate statistical significance at the 0.01, 0.05 and 0.10 levels, respectively, using a two-tailed test. This table presents the results of OLS regression of the moderating COVID-19 on audit fees and FV with firm-clustered standard errors and fixed effects for years and industry

Models 2–4 show a significant and positive relationship between each IFRS-9 financial assets categorisation and KAM disclosures for HFS, HFT and HFM. As predicted, the results confirmed that IFRS-9 caused capital market uncertainty. To reduce information asymmetry, auditors provide a significant number of KAM in their reports to evaluate and appraise complicated estimations (IAASB, 2015). The findings accord with audit rules, as auditors must identify major events affecting organisations and report them in financial statements. KAM required under ISA-701 make it harder for management to disclose ambiguous financial statements, according to Pinto and Morais (2019). For firms with more complicated and less verifiable estimates, auditors should disclose more KAM to decrease agency conflict-related information asymmetry concerns (Pinto & Morais, 2019; IAASB, 2016). The findings match Bédard et al. (2014). Organisations with economic complexity demand complicated accounting rules, which complicates financial reports. Given the complex nature of accounting records, auditors are compelled to disclose an increased number of KAMs (IAASB, 2015; 2016).

Auditors should look at more than financial accounts, separate auditing from accounting, and share reports from independent groups that examine their work. Audits should be more fraud-resistant. Recent studies propose higher fraud accountability, therefore auditing requirements have evolved (Abdullatif et al., 2023). This time, authorities could not blame auditors for the disturbance because they were a surveillance body helping stakeholders mitigate IFRS's difficult and hazardous requirements' detrimental effects on accounting data. Audit rules for KAM disclosures require auditors to identify and include any events that may materially affect a firm in financial statements. To include stakeholders in auditing, ISA-701 requires KAM in the auditor's report (Pinto & Morais, 2019).

KAMs enhance the auditor's report. According to "agency and stakeholder theories", KAM disclosure reduces knowledge asymmetry, conflicts of interest, and expectation gaps (Bédard et al., 2016). The "agency believes" auditors should represent shareholders and other stakeholders (Hegazy & Kamareldawla, 2021). In addition to the financial account audit opinion, auditors might disclose management's activities through KAMs. KAM's discoveries gave more users access to crucial information and increased system confidence. The theory of stakeholders declares that organisations could alienate various stakeholders if they skip out on them (Velte, 2020). Agency theory could refer to agency-stakeholder or behavioural (Hill & Jones, 1992). KAM reporting improves investment decisions because it reduces "information asymmetry" and addresses conflicts of interest between firms and their stakeholders, according to agency-stakeholder theory (Suttipun, 2021). KAM disclosure supports the behavioural agency hypothesis by showing how management reacts to the latest IFRS changes, especially for complex measures. According to the reviewed research, KAMs may reduce information asymmetry and influence investor behaviour in certain situations. KAMs can also highlight additional risk problems, prevent aggressive or overly optimistic accounting assumptions, and improve audit report trustworthiness. These KAMs mostly address new accounting requirements that were effective during the evaluation period, such as the IFRS for complex financial assets. Additionally, Model 5 confirms Models 2 to 4 regression results. The analysis supports H1–H3.

## ADDITIONAL ANALYSIS

To strengthen the primary analysis results, a supplementary analysis was performed to examine the influence of complex IFRS-9 estimations on KAM disclosure using the *Agg\_Complex* variable to aggregate the IFRS-9 financial assets categories. *Agg\_Complex* is the firm's total sales, trading and maturity financial assets divided by total assets.

$$KAM = \delta_0 + \delta_1 Agg\_Complex + \delta_2 SIZE + \delta_3 SUBS + \delta_4 ROA + \delta_5 LEV + \delta_6 GROWTH + \delta_7 QRATIO + \delta_8 BIG4 + \delta_9 TENURE + \delta_{10} OPINION + YearEF + IndFE + \varepsilon$$

The robust year-industry fixed-effects OLS regression of *Agg\_Complex*'s direct influence on KAM is shown in Table 8. Model 8's *P*-value is very significant at the 0.01 level, indicating a 38%  $R^2$  explanatory power. Similar to the primary investigation, this analysis showed that aggregated IFRS-9 financial assets significantly affect external auditor KAM disclosures. *Agg\_Complex* is highly significant at 0.01 (*Coeff.* = 0.054; *Rob. t* = 21.00). This result supports the notion

that complicated statistics may affect external auditors' KAMs. External auditors report the most KAMs for complicated assets. These KAMs mostly address new accounting requirements that were effective during the review period, such as the IFRS for complex financial assets. This supports the study assumptions that KAMs may reduce information asymmetry and influence investor behaviour in certain situations. KAMs can also highlight additional risk problems, prevent aggressive or overly optimistic accounting assumptions, and improve audit report trustworthiness.

Table 8  
*Additional analysis*

DV = KAM variables	Baseline model [Coeff. (t)]
Intercept	0.076 (2.97)***
Agg_Complex	0.054 (21.00)***
SIZE	0.000 (0.120)
SUBS	0.002 (2.10)**
ROA	0.000 (3.00)***
LEV	0.000 (4.28)***
GROWTH	-0.001 (-1.780)*
QRATIO	-0.001 (-3.17)***
BIG4	0.004 (0.880)
TENURE	-0.007 (-1.490)
OPINION	0.005 (0.940)
Robust std. error?	Yes
Year dummies?	Yes
Industry dummies?	Sector
N	918
F-test	(17)***
R <sup>2</sup>	38%
Mean VIF	1.37

Notes: \*\*\*, \*\*, and \* indicate statistical significance at the 0.01, 0.05 and 0.10 levels, respectively, using a two-tailed test. This table presents the results of OLS regression of the moderating COVID-19 on audit fees and FV with firm- clustered standard errors and fixed effects for years and industry. *Agg\_Complex* = the aggregated proportion of IFRS-9 complex assets estimates from HFS, HFT and HFM financial assets. *Agg\_Complex* has a mean value of 0.63.



## **ROBUSTNESS TEST**

### **Testing COVID-19 Effect**

The moderating effect of COVID-19 on the connection among IFRS-9 financial assets and KAM proportions was examined to guarantee that the analytic results are unaffected by the recent crisis. The study shows that COVID-19 does not moderate the link between IFRS-9 financial assets and KAM proportions. Table C1 in Appendix C shows results.

### **Excluding Banking Industry**

Removing the banking industry from the regression analysis allows for a new evaluation to account for the banking sector's unique characteristics. The total of 72 firm-year observations were removed. Table C1 in Appendix C supports the original analysis.

### **Exclusion of The Big 4 Companies**

The initial was replicated research and excluded Big4 audited firms from the analysis. The original study and Table C2 in Appendix C suggest similar outcomes.

### **Exclusion of the Transition Towards KAM Year of 2017**

To verify the validity of the regression results of the original study, 2017 was deleted due to the change specification/transition year to KAM following ISA-701). The original analysis and Table C1 in Appendix C exhibit comparable results.

### **Endogeneity Test**

Most “auditing costs” models use the “Heckman two-stage” estimator to account for Big4 self-selection bias (Sangchan et al., 2020). The Inverse Mills Ratio (*INMILLS*) variable was created using probit regression in the first step. The existing models were updated using this variable. Appendix C shows that the secondary estimation results match the initial analysis results.

## **IMPLICATIONS**

The findings of this study provide policymakers and other individuals who are responsible for establishing standards with up-to-date empirical knowledge regarding the ramifications of adopting the ISA-701, which mandates that external auditors submit additional disclosures on critical audit matters. The findings of the study could potentially lead to the formation of a new policy or standard for the disclosure of unexpected occurrences in the procedures of financial reporting and disclosure by the government. This could be brought about by the study findings. This study offers policymakers and those responsible for developing standards with the latest empirical data on the potential effects of this change. This is also relevant in light of recent modifications to the ISA-701 regulation, which mandates that external auditors submit extra information on the KAM. It would be beneficial for “stakeholders, regulatory agencies, standard-setters and audit report readers” to have access to this study given the current state of KAM disclosures and the acceptance of ISA-701 in developing countries. Therefore, the findings are important for academics, who may be interested in undertaking future research by extending the data to other new areas to have a better understanding of the genuine influence that KAM reporting has on audit processes. Specifically, this is since the findings might have implications for learners.

A valuable framework is offered for analysing the value of disclosures concerning confidence intervals and the role that external audits concerning KAM disclosures play in decreasing worries. This framework is provided as a result of dealing with complex numbers. Therefore, “stakeholders, regulatory authorities, standard-setters, and readers of audit reports” who are interested in the current state of KAM disclosure and how ISA-701 is being applied in developing countries would find this examination to be important. ISA-701 stands for the International Standards for Accounting Methods. This study is one of the few empirical investigations of the knowledge and capabilities of external auditors. This is significant because IFRS-9 involves complicated evaluations of financial assets, and this study is one of the few that have been conducted. In addition to being among the first to indicate a connection between accounting standards and the efficiency of organisations, the findings of this study are extremely noteworthy. In particular, the manner in which auditors respond to investor protection and strengthen reporting standards in developing nations has gotten less attention than it should have. This is especially true for businesses that disclose a substantial percentage of their current and future financial holdings. This study makes a contribution to the current body of auditing literature by investigating audit activity in a weak legal setting. This is in contrast to the vast majority of studies, which are done in highly regulated environments. To the best of the author’s knowledge,

this investigation is one of the very few empirical studies conducted to investigate the impact of complicated statistics on auditing procedures. Particular attention has been paid to the effect that revelations made by external auditors regarding KAM have had on the auditing process for the first time utilising the triangulation of agency, stakeholders and signalling theories. The findings are more likely to have scholarly repercussions, such as the production of additional evidence and the diffusion of this data to other rising nations, to acquire a clear explanation of the genuine effect that reporting KAM has on audit procedures. This is because the findings are more likely to have a significant impact on learning institutions.

## **CONCLUSION**

The purpose of this study is to investigate, for the very first time, how the difficult calculations of IFRS-9 may have an effect on the KAM percentage of the ISA-701 in the Jordanian capital market. Agency, stakeholder and signalling theories were utilised in this investigation. Regression employing the Ordinary Least Squares method is used in this study to evaluate hypotheses using data from Jordanian institutions spanning the years 2017–2022. According to the findings of the inquiry, the increasing number of KAM disclosures can be attributed to IFRS-9 and advanced calculations of updated financial asset categories. According to the findings of this study, stakeholders, regulatory agencies, standard-setters and audit report consumers are better able to comprehend KAM disclosures and ISA-701. Jordanian auditing laws are strengthened as a result of the findings in order to meet IAAS requirements. The findings are applicable to other countries in the Middle East as well. There are a number of issues that could potentially limit the utility of the inquiry, including the sample size and the time range. It is conceivable to extend this method such that it includes data from the year 2023, and forthcoming research should concentrate on enhancing it so that it may be applied to a larger variety of scenarios in the developing world. In addition, the findings point to a few intriguing directions that could be pursued in subsequent research. Further research on the correlation between the development of accounting standards and the frequency of KAM disclosures, as well as other areas of auditing such as internal controls, going concern, and the function of laws governing corporate oversight, can be conducted on the basis of the findings of this study, which provide a foundation for such research.

## REFERENCES

- Abdullatif, M. (2016). Auditing fair value estimates in developing countries: The case of Jordan. *Asian Journal of Business and Accounting*, 9(2), 101–140.
- Abdullatif, M., & Al-Rahahleh, A. (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. and Ballour, S. (2023). The effect of key audit matters on the audit report lag: evidence from Jordan. *Journal of Financial Reporting and Accounting* [ahead-of-print]. <https://doi.org/10.1108/JFRA-07-2022-0245>
- Abernathy, J. L., Kubick, T. R., & Masli, A. N. (2019). The effect of general counsel prominence on the pricing of audit services. *Journal of Accounting and Public Policy*, 38(1), 1–14. <https://doi.org/10.1016/j.jaccpubpol.2019.01.001>
- Abu Rishah, K. E., & Al-Saeed, M. t. A. (2014). The impact of IFRS adoption on audit fees: Evidence from Jordan. *Accounting and Management Information Systems (Contabilitate si Informatica de Gestiune)*, 13(3), 520–536.
- Abu, N. A., & Jaffar, R. (2020). Audit committee effectiveness and key audit matters. *Asian Journal of Accounting and Governance*, 14, 1–12. <https://doi.org/10.17576/ajag-2020-14-06>
- Abu, N. A., Jaffar, R., Rahmat, M. M., & Hassan, M. S. (2021). Key audit matters and investors' reactions. *Management and Accounting Review*, 20(3), 159–185. <https://doi.org/10.24191/MAR.V20i03-07>
- ACCA. (2018). Key audit matters: Unlocking the secrets of the audit. [https://www.accaglobal.com/content/dam/ACCA\\_Global/professionalinsights/Key-audit-matters/pi-key-audit-matters.pdf](https://www.accaglobal.com/content/dam/ACCA_Global/professionalinsights/Key-audit-matters/pi-key-audit-matters.pdf)
- Alexeyeva, I., & Mejia-Likosova, M. (2016). The impact of fair value measurement on audit fees: Evidence from financial institutions in 24 European countries. *International Journal of Auditing*, 20, 255–266. <https://doi.org/10.1111/ijau.12075>
- Al-Htaybat, K., von Alberti-Alhtaybat, L., & Alhatabat, Z. (2018). Educating digital natives for the future: Accounting educators' evaluation of the accounting curriculum. *Accounting Education*, 27(4), 333–357. <https://doi.org/10.1080/09639284.2018.1437758>
- Alhababsah, S. (2019). Ownership structure and audit quality: An empirical analysis considering ownership types in Jordan. *Journal of International Accounting, Auditing and Taxation*, 35, 71–84. <https://doi.org/10.1016/j.intaccudtax.2019.05.006>
- Alharasis, E. E. (2023). Evaluation of ownership structure and audit-quality in the wake of the COVID-19 crisis: Empirical evidence from Jordan. *International Journal of Law and Management* [ahead-of-print]. <https://doi.org/10.1108/IJLMA-03-2023-0035>
- Alharasis, E. E., Alidarous, M., Alkhwalidi, A. F., Haddad, H., Alramahi, N., & Al-Shattarat, H. K. (2023). Corporates' monitoring costs of fair value disclosures in pre-versus post-IFRS7 era: Jordanian financial business evidence. *Cogent Business and Management*, 10(2), 2234141. <https://doi.org/10.1080/23311975.2023.2234141>

- Alharasis, E. E., Alidarous, M., & Jamaani, F. (2023). Auditor industry expertise and external audit prices: empirical evidence from Amman Stock Exchange-listed companies. *Asian Journal of Accounting Research*, 8(1), 94–107. <https://doi.org/10.1108/AJAR-02-2022-0051>
- Alharasis, E. E., & Alkhwalidi, A. F. (2024). The implementation of advanced AIS and the accounting data quality: The case of Jordanian SMEs. In F. F. H. Nah, & K. L. Siau. (Eds.), *HCI in Business, Government and Organizations. HCII 2024. Lecture Notes in Computer Science* (vol. 14721). Springer, Cham. [https://doi.org/10.1007/978-3-031-61318-0\\_11](https://doi.org/10.1007/978-3-031-61318-0_11)
- Alharasis, E. E., & Mustafa, F. (2024). The effect of the COVID-19 epidemic on auditing quality and the reaction of family vs non-family businesses to COVID-19: The case of Jordan. *Journal of Family Business Management*, 14(3), 405–430. <https://doi.org/10.1108/JFBM-07-2023-0106>
- Alharasis, E. E., Alkhwalidi, A. F., & Hussainey, K. (2024). Key audit matters and auditing quality in the era of COVID-19 pandemic: The case of Jordan. *International Journal of Law and Management* [ahead-of-print]. <https://doi.org/10.1108/IJLMA-11-2023-0248>
- Alharasis, E. E., Prokofieva, M., & Clark, C. (2022). Fair value accounting and audit fees: The moderating effect of the Global Financial Crisis in Jordan. *Asian Academy of Management Journal of Accounting and Finance*, 18(1), 163–194. <https://doi.org/10.21315/aamjaf2022.18.1.7>
- Alharasis, E. E., Prokofieva, M., & Clark, C. (2023). The moderating impact of auditor industry specialisation on the relationship between fair value disclosure and audit fees: Empirical evidence from Jordan. *Asian Review of Accounting*, 31(2), 227–255. <https://doi.org/10.1108/ARA-03-2022-0050>
- Alzoubi, E. S. S. (2018). Audit quality, debt financing, and earnings management: Evidence from Jordan. *Journal of International Accounting, Auditing and Taxation*, 30, 69–84. <https://doi.org/10.1016/j.intaccudtax.2017.12.001>
- An, Y., Davey, H., & Eggleton, I. R. C. (2011). Towards a comprehensive theoretical framework for voluntary IC disclosure. *Journal of Intellectual Capital*, 12(4), 571–585. <https://doi.org/10.1108/14691931111181733>
- Asare, S. K., & Wright, A. M. (2012). Investors', auditors', and lenders' understanding of the message conveyed by the standard audit report on the financial statements. *Accounting Horizons*, 26(2), 193–217. <https://doi.org/10.2308/acch-50138>
- Asbahr, K., & Ruhnke, K. (2019). Real effects of reporting key audit matters on auditors' judgment and choice of action. *International Journal of Auditing*, 23(2), 165–180. <https://doi.org/10.1111/ijau.12154>
- Audousset-Coulier, S., Jeny, A., & Jiang, L. (2015). The validity of auditor industry specialization measures. *Auditing: A Journal of Practice & Theory*, 35(1), 139–161. <https://doi.org/10.2308/ajpt-51176>
- Baatwah, S. R., Al-Qadasi, A. A., Al-Shehri, A. M., & Derouiche, I. (2022). Corporate social responsibility budgeting and spending during COVID-19 in Oman: A humanitarian response to the pandemic. *Finance Research Letters*, 47, 102686. <https://doi.org/10.1016/j.frl.2022.102686>

- Badia, M., Duro, M., Penalva, F., & Ryan, S. (2017). Conditionally conservative fair value measurements. *Journal of Accounting and Economics*, 63(1), 75–98. <https://doi.org/10.1016/j.jacceco.2016.10.006>
- 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>
- Boolaky, P. K., Omotoso, K., Ibrahim, M. U., & Adelopo, I. (2018). The development of accounting practices and the adoption of IFRS in selected MENA countries. *Journal of Accounting in Emerging Economies*, 8(3), 327–351. <https://doi.org/10.1108/JAEE-07-2015-0052>
- Boonyanet, W., & Promsen, W. (2018). Key audit matters: just little informative value to investors in emerging markets? *Chulalongkorn Business Review*, 41(159), 153–183.
- Bradley, W., & Li Sun, L. (2021). Managerial ability and fair value accounting: Evidence from nonfinancial firms. *Journal of Financial Reporting and Accounting*, 19(4), 666–685. <https://doi.org/10.1108/JFRA-08-2020-0229>
- Burke, J. J., Hoitash, R., & Hoitash, U. (2019). Auditor response to negative media coverage of client environmental, social, and governance practices. *Accounting Horizons*, 33(3), 1–23. <https://doi.org/10.2308/acch-52450>
- Cahan, S. F., & Sun, J. (2015). The effect of audit experience on audit fees and audit quality. *Journal of Accounting, Auditing and Finance*, 30(1), 78–100. <https://doi.org/10.1177/0148558X14544503>
- Camacho-Miñano, M. d. M., Muñoz-Izquierdo, N., Pincus, M., & Wellmeyer, P. (2021). Are key audit matter disclosures useful in assessing the financial distress level of a firm? SSRN 3744282. <https://doi.org/10.2139/ssrn.3744282>
- Carcello, J. V. (2012). What do investors want from the standard audit report? *The CPA Journal*, 82(1), 22.
- Chang, Y. T., Chi, W., & Stone, D. N. (2024). Is client-specific information useful to investors? Evidence from key audit matter reports. *Journal of Accounting, Auditing & Finance*, 39(3), 786–806. <https://doi.org/10.1177/0148558X221091804>
- 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), 71–93. <https://doi.org/10.2308/ajpt-50793>
- Ecim, D., Maroun, W., & de Riquebourg, A. D. (2023). An analysis of key audit matter disclosures in South African audit reports from 2017 to 2020. *South African Journal of Business Management*, 54(1), 14. <https://doi.org/10.4102/sajbm.v54i1.3669>
- Elliott, W. B., 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>
- Elmarzouky, M., Hussainey, K., & AbdelFattah, T. M. H. (2023). Key audit matters: A systematic review. *International Journal of Accounting, Auditing and Performance Evaluation* [ahead-of-print].



- Ettredge, M. L., Xu, Y., & Yi, H. S. (2014). Fair value measurements and audit fees: Evidence from the banking industry. *Auditing: A Journal of Practice and Theory*, 33(3), 33–58. <https://doi.org/10.2308/ajpt-50701>
- 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: The International Journal of Business in Society*, 22(1), 194–211. <https://doi.org/10.1108/CG-09-2020-0427>
- Ferreira, C., & Morais, A. I. (2019). Analysis of the relationship between company characteristics and key audit matters disclosed. *Revista Contabilidade & Finanças*, 31(4), 1–14. <https://doi.org/10.1590/1808-057x201909040>
- Fiechter, P., & Novotny-Farkas, Z. (2017). The impact of the institutional environment on the value relevance of fair values. *Review of Accounting Studies*, 22, 392–429. <https://doi.org/10.1007/s11142-016-9378-7>
- Ghosh, A., & Lustgarten, S. (2006). Pricing of initial audit engagements by large and small audit firms. *Contemporary Accounting Research*, 23(2), 333–368. <https://doi.org/10.1506/927U-JGJY-35TA-7NT1>
- 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, 232–244. <https://doi.org/10.1111/ijau.12190>
- Gomez Sanchez, A. M., Sarmiento-Castillo, J. I., & Fajardo-Hoyos, C. L. (2022). Regional business cycles and manufacturing productivity: Empirical evidence in Colombia. *Economía*, 23(1), 62–87. <https://doi.org/10.1108/ECON-05-2022-0020>
- Griffith, E. E. (2020). Auditors, specialists, and professional jurisdiction in audits of fair values. *Contemporary Accounting Research*, 37(1), 245–276. <https://doi.org/10.1111/1911-3846.12506>
- Gul, F. A., Zhou, G., & Zhu, X. (2013). Investor protection, firm informational problems, Big N auditors, and cost of debt around the world. *Auditing: A Journal of Practice & Theory*, 32(3), 1–30. <https://doi.org/10.2308/ajpt-50462>
- Hassan, Y., & Naser, K. (2013). Determinants of audit fees: Evidence from an emerging economy. *International Business Research*, 6(8), 13–25.
- 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>
- Hay, D. (2013). Further evidence from meta-analysis of audit fee research. *International Journal of Auditing*, 17(2), 162–176. <https://doi.org/10.1111/j.1099-1123.2012.00462.x>
- Hay, D. C., Knechel, W. R., & Wong, N. (2006). Audit fees: A meta-analysis of the effect of supply and demand attributes. *Contemporary Accounting Research*, 23(1), 141–191. <https://doi.org/10.1506/4XR4-KT5V-E8CN-91GX>

- Hay, D., Shires, K., & Van Dyk, D. (2021). Auditing in the time of COVID: The impact of COVID-19 on auditing in New Zealand and subsequent reforms. *Pacific Accounting Review*, 33(2), 179–188. <https://doi.org/10.1108/PAR-09-2020-0155>
- 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>
- Hill, C. W., & Jones, T. M. (1992). Stakeholder-agency theory. *Journal of Management Studies*, 29(2), 131–154. <https://doi.org/10.1111/j.1467-6486.1992.tb00657.x>
- Huang, H.-W. S., Feng, Z.-Y. A., & Zaher, A. A. (2020). Fair value and economic consequences of financial restatements. *Finance Research Letters*, 34, 101244. <https://doi.org/10.1016/j.frl.2019.07.017>
- IAASB. (2011). Enhancing the value of auditor reporting: Exploring options for change. <https://www.iasb.org/publications/enhancing-value-auditor-reporting-exploring-options-change-1>
- IAASB. (2015). International standard on auditing (ISA) 701, communicating key audit matters in the independent auditor's report. <https://www.iasb.org/publications/international-standard-auditing-isa-701-new-communicating-key-audit-matters-independent-auditors>
- IAASB. (2016). Determining and communicating key audit matters. <https://www.iasb.org/publications/determining-and-communicating-key-audit-matters-4>
- IASB. (2017). *Post-implementation review of IFRS 13 fair value measurement*. IFRS Foundation.
- IAS Plus. (2024a). IAS 39 – Financial Instruments: Recognition and measurement. <https://www.iasplus.com/en/standards/ias/ias39>
- IAS Plus. (2024b). IFRS 9 – Financial instruments. <https://www.iasplus.com/en/standards/ifrs/ifrs9>
- Ittonen, K., & Peni, E. (2012). Auditor's gender and audit fees. *International Journal of Auditing*, 16(1), 1–18. <https://doi.org/10.1111/j.1099-1123.2011.00438.x>
- 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>
- Kausar, A., & Lennox, C. (2017). Balance sheet conservatism and audit reporting conservatism. *Journal of Business Finance and Accounting*, 44(7-8), 897–924. <https://doi.org/10.1111/jbfa.12256>
- 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>
- Khelif, H., & Achek, I. (2016). IFRS adoption and auditing: A review. *Asian Review of Accounting*, 24(3), 338–361. <https://doi.org/10.1108/ARA-12-2014-0126>
- 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>

- Laux, C., & Leuz, C. (2010). Did fair-value accounting contribute to the financial crisis? *Journal of Economic Perspectives*, 24(1), 93–118. <https://doi.org/10.1257/jep.24.1.93>
- Lennox, C. S., Schmidt, J. J., & Thompson, A. (2021). Why are expanded audit reports not informative to investors? Evidence from the UK. Working paper. <https://ssrn.com/abstract=2619785>
- Litjens, R., van Buuren, J., & Vergoossen, R. (2015). Addressing information needs to reduce the audit expectation gap: Evidence from Dutch bankers audited companies and auditors. *International Journal of Auditing*, 19(3), 267–281. <https://doi.org/10.1111/ijau.12042>
- Mah'd, O. A., & Mardini, G. H. (2022). Matters may matter: The disclosure of key audit matters in the Middle East. *Cogent Economics and Finance*, 10(1), 2111787. <https://doi.org/10.1080/23322039.2022.2111787>
- Mah'd, O., Mardini, G. H., & Ali, M. M. (2019). The relationship between evidence characteristics and audit efficiency and effectiveness: Evidence from Middle Eastern countries. *International Journal of Accounting Auditing and Performance Evaluation*, 15(3), 219–240. <https://doi.org/10.1504/IJAAPE.2019.10023902>
- Md Khokan, B., Abu Taher, M., Shamsun, N., & Mohammad, N. I. (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>
- Minutti-Meza, M. (2021). The art of conversation: The expanded audit report. *Accounting and Business Research*, 51(5), 548–581. <https://doi.org/10.1080/00014788.2021.1932264>
- 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(Suppl. 1), 323–351. <https://doi.org/10.2308/ajpt-50294>
- Mohammad Rezaei, M., Siadat, A., Dantan, J., & Tavakkoli-Moghaddam, R. (2018). A trade-off between productivity and cost for the integrated part quality inspection and preventive maintenance planning under uncertainty. *International Journal of Production Research*, 57(19), 5951–5973. <https://doi.org/10.1080/00207543.2018.1556411>
- Moroney, R., Phang, S.-Y., & Xiao, X. (2021). When do investors value key audit matters? *European Accounting Review*, 30(1), 63–82. <https://doi.org/10.1080/09638180.2020.1733040>
- Naser, K. H. M., & Hassan, Y. (2016). Factors influencing external audit fees of companies listed on Dubai Financial Market. *International Journal of Islamic and Middle Eastern Finance and Management*, 9(3), 346–363. <https://doi.org/10.1108/IMEFM-01-2015-0007>
- Naser, K., & Nuseibeh, R. (2008). Determinants of audit fees: Empirical evidence from an emerging economy. *International Journal of Commerce and Management*, 17(3), 239–254. <https://doi.org/10.1108/10569210710833635>
- Nyakurukwa, K., & Seetharam, Y. (2023). Investor reaction to ESG news sentiment: Evidence from South Africa. *Economia*, 24(1), 68–85. <https://doi.org/10.1108/ECON-09-2022-0126>

- Orquin, J. L., & Loose, S. M. (2013). Attention and choice: A review on eye movements in decision making. *Acta psychologica*, 144(1), 190–206. <https://doi.org/10.1016/j.actpsy.2013.06.003>
- Özcan, A. (2021). What factors affect the disclosure of key audit matters? Evidence from manufacturing firms. *International Journal of Management Economics and Business*, 17(1), 149–161. <https://doi.org/10.17130/ijmeh.796444>
- Ozlaniski, M. E. (2019). Bright lines vs. blurred lines: When do critical audit matters influence investors' perceptions of management's reporting credibility? *Advances in Accounting*, 45, 100416. <https://doi.org/10.1016/j.adiac.2019.04.001>
- Penman, S. H. (2007). Financial reporting quality: Is fair value a plus or a minus? *Accounting and Business Research*, 37(Suppl. 1), 33–44. <https://doi.org/10.1080/00014788.2007.9730083>
- 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 [Riesgo en la información financiera en el contexto del nuevo informe de auditoría en España]. *Revista de Contabilidad-Spanish Accounting Review*, 24(1), 48–61. <https://doi.org/10.6018/rcsar.363001>
- Pinto, I., & Morais, A. I. (2019). What matters in disclosures of key audit matters: Evidence from Europe. *Journal of International Financial Management & Accounting*, 30(2), 145–162. <https://doi.org/10.1111/jifm.12095>
- Pinto, I., Morais, A. I., & Quick, R. (2020). The impact of the precision of accounting standards on the expanded auditor's report in the European Union. *Journal of International Accounting, Auditing and Taxation*, 40, 100333. <https://doi.org/10.1016/j.intaccudtax.2020.100333>
- 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, L. M., & Zehms, K. M. (2024). It's a matter of style: The role of audit firms and audit partners in key audit matter reporting. *Contemporary Accounting Research*, 41(1), 529–561. <https://doi.org/10.1111/1911-3846.12902>
- Salehi, M., Mahmoudi, M. R. F., & Gah, A. D. (2019). A meta-analysis approach for determinants of effective factors on audit quality: Evidence from emerging market. *Journal of Accounting in Emerging Economies*, 9(4), 287–312. <https://doi.org/10.1108/JAEE-03-2018-0025>
- Sangchan, P., Habib, A., Jiang, H., & Bhuiyan, M. B. U. (2020). Fair value exposure, changes in fair value and audit fees: Evidence from the Australian real estate industry. *Australian Accounting Review*, 30(93), 123–143. <https://doi.org/10.1111/auar.12299>
- Schrader, C. L., & Sun, H.-L. (2019). How does the type of equity compensation of audit committee affect audit fees? *Advances in Accounting*, 45, 100411. <https://doi.org/10.1016/j.adiac.2019.02.001>
- 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>
- 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>
- 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/acch-52047>
- 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>
- Tahat, Y., Omran, M. A., & AbuGhazaleh, N. M. (2018). Factors affecting the development of accounting practices in Jordan: An institutional perspective. *Asian Review of Accounting*, 26(4), 464–486. <https://doi.org/10.1108/ARA-01-2017-0010>
- The World Bank. (2021). Jordan. Retrieved from <https://data.worldbank.org/country/JO>
- 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., & 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](https://doi.org/10.21511/ppm.17(3).2019.26)
- Velte, P. (2020). Corporate social responsibility and earnings management: A literature review. *Corporate Ownership & Control*, 17(2), 8–19. <https://doi.org/10.22495/cocv17i2art1>
- Verho, E. (2021). the effect of audit firm rotation on key audit matters: Evidence from European Union [Master's thesis, Hanken School of Economics, Helsinki].
- 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), 167–192. <https://doi.org/10.2308/HORIZONS-19-189>

## APPENDICES

### Appendix A

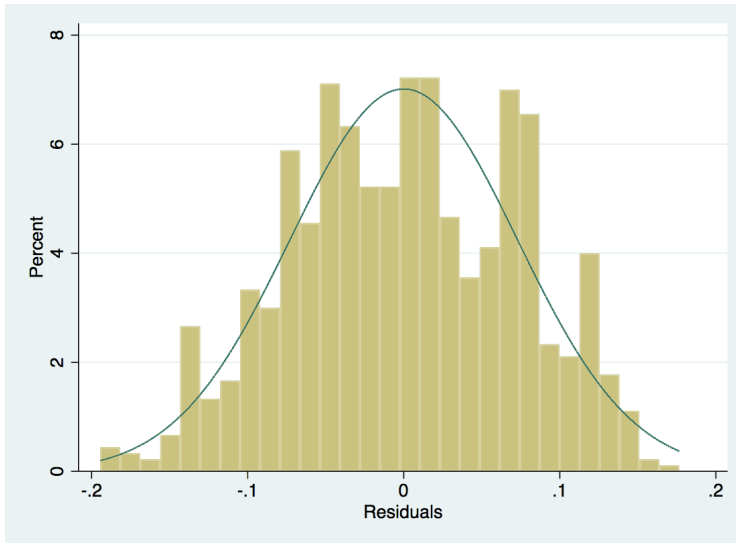


Figure A1: Histogram with normal curve of residuals (Source: Created by author)

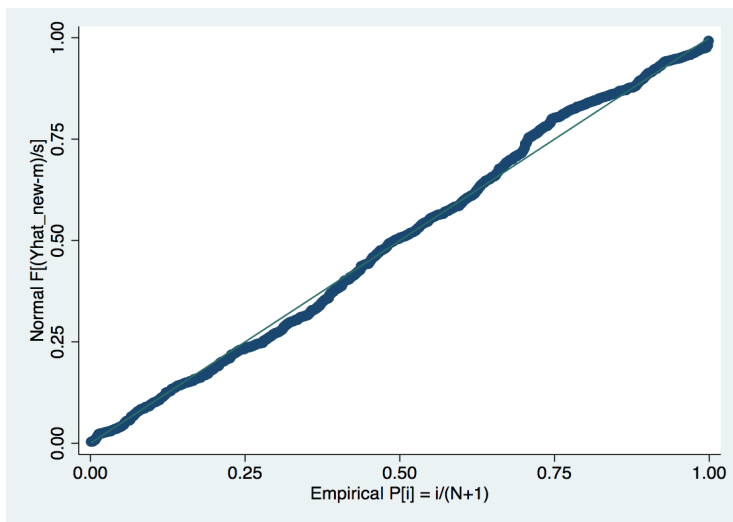


Figure A2: Probability plot of residuals (Source: Created by author)

## Appendix B

Table B1: *Ranking of type of KAM issued*

	Frequency	%
Revenue recognition	205	0.093
Inventory	90	0.041
Accounts receivable	28	0.013
Financial assets	98	0.044
Provisions	651	0.295
Taxation	40	0.018
Property, plant and equipment	91	0.041
Investments	190	0.086
Pensions	17	0.008
Impairments	218	0.100
IFRS-9	192	0.100
Biological assets	6	0.003
Acquisitions	25	0.011
Goodwill	34	0.015
Complex estimates of financial instruments	290	0.132
Total	2,205	100.00

Source: Created by authors

## Appendix C

Table C1: *Robustness analysis*

DV = KAM variables	Moderating COVID-19 [Coeff. (t)]	Excluding banking industry [Coeff. (t)]	Excluding Big4 [Coeff. (t)]	Excluding initial year [Coeff. (t)]	Endogeneity test [Coeff. (t)]
Intercept	0.072 (2.83)***	0.021 (0.71)***	0.071 (3.02)***	0.074 (2.62)***	0.765 (6.22)**
COVID-19	-0.003 (-0.390)				
AFS	0.071 (10.83)***	0.071 (14.77)***	0.067 (14.45)***	0.067 (13.18)***	0.065 (14.21)***
HFT	0.057 (8.62)***	0.065 (13.82)***	0.059 (12.69)***	0.060 (12.47)***	0.062 (13.44)***
HTM	0.024 (3.43)***	0.024 (4.25)***	0.025 (5.00)***	0.025 (4.48)***	0.031 (5.91)***
AFS* COVID-19	-0.007 (-0.840)				

(continued on next page)



Table C1 (Continued)

DV = KAM variables	Moderating COVID-19 [Coeff. (t)]	Excluding banking industry [Coeff. (t)]	Excluding Big4 [Coeff. (t)]	Excluding initial year [Coeff. (t)]	Endogeneity test [Coeff. (t)]
HFT*	0.003				
COVID-19	(0.360)				
HTM*	0.003				
COVID-19	(0.260)				
SIZE	0.000 (0.160)	0.003 (1.530)	-0.001 (-0.360)	0.000 (0.080)	-0.032 (-5.52)***
SUBS	0.002 (2.07)**	0.002 (1.960)*	0.002 (1.800)	0.001 (1.770)*	0.001 (2.01)**
ROA	0.000 (3.23)***	0.000 (3.14)***	0.000 (2.83)***	0.000 (2.90)***	0.000 (3.48)***
LEV	0.000 (4.55)***	0.000 (4.47)***	0.000 (3.96)***	0.000 (3.93)***	0.000 (6.58)***
GROWTH	-0.001 (-1.730)*	-0.001 (-1.670)*	-0.001 (-1.150)*	-0.001 (-1.160)	0.000 (0.150)
QRATIO	-0.001 (-2.84)***	-0.001 (-3.14)***	-0.001 (-2.30)**	-0.001 (-2.24)**	-0.002 (-5.78)***
BIG4	0.001 (0.270)	0.000 (0.110)		-0.003 (-0.670)	0.003 (0.630)
TENURE	-0.006 (-1.280)	-0.008 (-1.860)*	-0.008 (-1.570)	-0.008 (-1.600)	-0.008 (-1.760)
OPINION	0.005 (0.910)	0.009 (1.590)	0.003 (0.470)	0.003 (0.490)	0.009 (1.670)
INVMILLS					-0.120 (-5.92)***
Robust std. error	Yes	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes	Yes
Industry dummies	Sector	Sector	Sector	Sector	Sector
N	918	828	395	746	918
F-test	(22)***	(19)***	(18)%	(17)***	(20)***
R <sup>2</sup>	39.40%	42%	39%	40%	42%
Mean VIF	1.76	1.33	1.35	1.33	2.08

Notes: \*\*\*, \*\*, and \* indicate statistical significance at the 0.01, 0.05 and 0.10 levels, respectively, using a two-tailed test. This table presents the results of OLS regression of the moderating COVID-19 on audit fees and FV with firm-clustered standard errors and fixed effects for years and industry.