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The direct effect of the international standard on auditing – 701 requirements on audit profession concerning the reimbursement costs: case study of Jordanian finance industry

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Abstract

Purpose – The objective of this study is to present novel evidence regarding the impact of the Key Audit Matters (KAM) disclosure requirements of International Standard on Auditing – 701 (ISA) on the auditing profession concerning reimbursement costs in underdeveloped nations, Jordan.

Design/methodology/approach – A year-industry fixed-effects OLS regression model has been employed to test the developed hypotheses. The regression analysis of the period from 2005 to 2022 tests the presence of KAM disclosures in Jordanian finance business, while the regression analysis of the period from 2017 to 2022 tests the actual impact of KAM disclosure following the first implementation of ISA-701 in Jordan.

Findings – The analysis has verified that the presence and the proportions of KAM disclosures outlined in ISA-701 resulted to significant auditing compensatory expenses. The findings confirmed that KAM disclosures increase auditor workload, responsibility, complexity, and risk, consequently resulting in higher reimbursement expenses.

Practical implications – The findings of this study have the potential to serve as a basis for the development of a novel financial regulatory legislation or a regulated framework for disclosing significant occurrences. This paper provides new empirical evidence to standard-setters and policymakers regarding the requirement of ISA-701 for external auditors to disclose KAM. This study is advantageous for stakeholders, regulatory agencies, standard-setters, and audit report readers who are interested in KAM disclosures and the implementation of ISA-701. The results could inspire the academic community to obtain fresh data from emerging markets to ascertain the impact of KAM disclosure on audit practices.

Originality/value – To the author's knowledge, this study is one of the few empirical investigations into the impact of current additional disclosure rules on the audit profession concerning reimbursement costs. It provides preliminary evidence linking ISA regulations to corporate productivity in Jordan, a developing nation. Little is known about how developing nation auditors react to KAM disclosures' role in stakeholder protection and how their expanded reporting obligations influence them. This study examines audit behaviour in a weak legal setting, unlike most prior studies, which have been done in highly regulated systems.

Keywords Key audit matters, IAS-701, Audit profession, Middle East, Jordan

Paper type Research paper

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1. Introduction

This paper examines whether and in what way could the "International Standard on Auditing – 701 (ISA)" of "Key Audit Matters (KAM)" disclosure rules affect the audit profession in Jordan. The correlation assessment of the Jordanian stock market is unique (Alharasis, 2023). First, Jordan was among the first Middle Eastern (ME) countries to adopt "International Accounting and Auditing Standards (IAAS)" after more than 30 years. Second, Jordan's open economy policy encourages "Arab and non-Arab" investors into its capital market (Alharasis, 2023). Third, Jordan's particular economic reforms, such as liberal market privatisation and international economic links, contribute to EU and "the World Trade Organisation (WTO)" study into developing nations (Tahat *et al.*, 2018; Boonyanet and Promsen, 2018). Fourth, Jordan is the first Arab country that requires public firms to disclose their yearly audit reimbursement costs (Tahat *et al.*, 2018). Therefore, this paper discusses how that new auditing regulations affected audit profession, especially in Jordan for the first time Jordan (Alharasis *et al.*, 2023a). It utilises two factors of KAM to reach fresh conclusions on this field, like the presence of KAM and the proportion of KAM in firms' annual reports. It, moreover, explains the role of external auditors protecting stakeholders and business financial data. Examining the correlation among KAM and audit reimbursement costs may verify corporate operating performance, helping stakeholders make wise business decisions.

Due to the "International Auditing and Assurance Standards Board (IAASB's)" ISA-701 modification, external auditors must disclose important audit issues they find in their clients' annual reports. These new auditor duties released since 2016 by the IAAS. Users benefited from this transparency since it revealed business financial performance. More disclosures improve financial reporting (Hay *et al.*, 2021; Fariha *et al.*, 2022). Audit standards require auditors to detect and record any events that could materially affect the organisation in the financial statements (Hategan *et al.*, 2022). ISA-701 required auditors to include KAM in their reports to improve stakeholder communication.

Research on KAMs has primarily examined factors affecting the number of reported cases (Sierra-García *et al.*, 2019; Alharasis *et al.*, 2024; Suttipun, 2020) and the legal implications of expanded auditor reporting (Kachelmeier *et al.*, 2020; Asbahr and Ruhnke, 2019). Some research on KAM emphasises financial reporting quality and audit process (Asbahr and Ruhnke, 2019; Baatwah *et al.*, 2022; Camacho-Miñano *et al.*, 2021; Fera *et al.*, 2022; Pinto and Morais, 2019; Suttipun, 2021; Hategan *et al.*, 2022; Ecim *et al.*, 2023) have focused on the relationship between KAMs and various factors such as audit lag, tenure, fees, quality, financial distress, and going concern. This research has primarily concentrated on highly developed economies, such as the US and the UK, with some outliers (Kend and Nguyen, 2022; Segal, 2019; Abu and Jaffar, 2020; Bepari *et al.*, 2022; Abu *et al.*, 2021). Developmental economies' regulatory, economic, and legal settings require more research on auditors' enhanced reporting responsibilities, which the scientific literature has disregarded (Alharasis *et al.*, 2023b; Alharasis and Mustafa, 2024).

Mah'd and Mardini (2022) requested; first, a future investigation using an econometric model/real economic to overcome the subjectivity of qualitative evaluations of earlier research data. Similarly, some research states that the majority of prior evidence is based on qualitative methods and that additional research using the econometric method is needed to add clarity to the existing body of knowledge (Abdullatif *et al.*, 2023; Elmarzouky *et al.*, 2023a). Second, comparing audit report KAMs to corporate governance dimensions (i.e. audit reimbursement costs). The researchers noted the lack of research in this field, notably in ME. Third, testing KAM consequences ME's financial data. The scholars' potential noted that KAM disclosure has garnered attention in recent years and requires greater research, especially in ME. Abdullatif *et al.* (2023) also suggested studying the effects of KAMs on audit practises across lengthy time periods to improve assessments of different time periods and economic conditions and make steady and troublesome times more comparable.

Therefore, in contrast to previous studies, this paper contributes to auditing knowledge in a variety of different ways. First, the current study provides an objective confirmation of the previously reported models by using a Jordanian sample over a period of 18 years, beginning in 2005 and ending in 2022. Second, in contrast to earlier KAM research, which concentrated primarily on highly developed economies, the primary focus of this investigation is on a single underdeveloped nation, namely Jordan. Third, in contrast to prior research, the focus of this research is on the financial sector. This is due to the fact that Jordanian financial institutions were the first operating sector in the context of Jordan to be required to implement the "International Accounting and Auditing Standards (IAAS)" in 2005. Furthermore, there is limited evidence provided in the literature on finance industry as stated by prior research (Al Lawati and Hussainey, 2022; Alharasis *et al.*, 2023c). Fourth, finally and most importantly, in contrast to earlier studies, this analysis makes use of a modernised KAM checklist that consists of 15 components.

To assess the developed hypotheses, this study applies the Ordinary Least Squares regression approach to data acquired from Jordanian financial institutions during the period (2005–2022). This is because Jordanian financial institutions were the first industry in the Jordanian capital market to be compelled to apply IAAS since 1990, as well as the first to obligatory modify the ISA regulations, specifically for the ISA-701 of KAM disclosures in 2017. The financial industry is the most likely to completely conform with IAAS and make comprehensive disclosures on their operations. Testing KAM as a dummy variable (pre vs post-KAM implementation) from 2005 to 2022, the regression indicated that KAM disclosure of ISA-701 has a substantial effect on increasing the complexity and risk of the auditing profession, as well as the related auditing charges. Furthermore, the analysis confirmed that the current KAM disclosure requirements by ISA-701 strengthen the link between KAM disclosures and audit reimbursement costs as a result of the increase in the number of KAM disclosures as well as the workload and responsibility of auditors. This research is beneficial for those who are interested in the current state of KAM disclosures and the implementation of ISA-701, including stakeholders, regulatory bodies, standard-setters, and users of audit reports. The findings contribute to the improvement of legislation that control the auditing business in Jordan in accordance with the modernised standards of the IAAS. In addition, the findings are generalizable to the countries located elsewhere in the ME settings.

The rest of this paper is outlined as follows. Institutional context is covered in Sections 2. Literature evaluation and hypothesis development are in Section 3. The selected theorical foundation is explained in Section 4. Section 5 discusses research methodologies and data. Section 6 describes the results; Section 7 shows the robustness checks. Section 8 discusses the analysis implications to theory and practice. Section 9 concludes the paper and outlines the limitations, and potential directions for further study.

2. Institutional background

2.1 The development of ISA-701

The auditor's report is useful for standard-setters and regulators in established and emerging economies (Burke *et al.*, 2019). This casts doubt on ISA audit reports' usefulness. The standard audit report has been criticised and debated. Traditional audit reports are standardised but insufficient, uninformative, and opaque (IAASB, 2011; Carcello, 2012; Asare and Wright, 2012; Gold and Heilmann, 2019). Lack of information in the typical auditor's report can lead to poor investment decisions, resource allocation, unnecessary litigation, and investor distrust of the audit function (Asare and Wright, 2012). Financial statement consumers require greater audit disclosures and conclusions, especially risk-related information (Vanstraelen *et al.*, 2012; Mock *et al.*, 2013). The audit report focuses on audit procedures rather than customer auditing (Abdullatif and Al-Rahahleh, 2020). To avoid misperceptions, stakeholders have debated whether to make large adjustments to the auditor's report due to the information gap between the standard audit report and financial statements (Gold and Heilmann, 2019). The new reporting structure of regulators and professional groups makes audit reports and opinions more reliable. In response to the knowledge gap between independent auditors and stakeholders, the IAASB proposed new audit report criteria. Several IAASB auditing guidelines aim to increase public confidence in the auditing business. New KAM criteria were adopted in December 2016 under ISA-701. KAM is defined as IAASB (2015):

> those matters that, in the auditor's professional judgment, were of most significance in the audit of the financial statements of the current period.

These KAMs are included to provide more information about the auditor's observations, particularly those that are "important concerns, incidents, or hazards" or need "professional judgements" (IAASB, 2015). The disclosure of KAMs is expected to improve the audit report's communicative value and allow investors to focus on faulty financial statements (Sirois *et al.*, 2018). ISA-701 requires auditors to notify any concerns they believe financial statement readers should know about. Disclosing KAMs' actions may reduce stakeholder agency problem" knowing "asymmetry" and expectation gap (Velte, 2020). ISA-701's main purpose is to close the information gap, as stakeholders may lack the experience and professional competence to analyse financial statements. They need more valuable information from a third party to better understand company issues.

All at all KAMs are designed to offer "entity-specific" and "financial period-specific" information on their nature, why they are recognised, and how the audit firm handled them, according to ISA-701. This reporting does not result in particular audit views on individual accounts or replace audit opinion qualification where required (IAASB, 2016). Audit firms must record as KAMs topics that received substantial attention throughout the audit. The audit firm has some leeway in deciding which topics, how many KAMs to report, and how much detail to include in its report (Abdullatif *et al.*, 2023).

2.2 ISA-701 implementation in Jordan

Jordan has broad international and social relations. Jordan has had political stability in an otherwise volatile area for much of its modern history. Jordan has a unique geographic position and operates on a free market economy. Culture and politics have improved financial reporting and governance (The World Bank, 2021). Jordan draws a large number of international investors in today's globalised economy. Entrepreneurs, Jordanian authorities, and borrowers all employ external audits. Auditing produces more credible financial records, which encourages foreign investment and economic growth. Jordan's government need to issue updated regulations to stimulate international investment. External auditors in Jordan are required to adhere to ISA since 1990s. Despite limited natural resources, Jordan has worked tirelessly to strengthen its economic security (Abdullatif and Al-Rahahleh, 2020).

Jordan accepted the "International Accounting Standards Committee (IASC)" in 1988, which transformed accounting. The "Jordan Association of Certified Public Accountants (JACPA)" was established in 1989. Jordan's JACPA represents certified auditors. To minimise conflicts of interest and preserve quality, the JACPA establishes minimum remuneration for independent auditors. The "Jordanian Anti-Corruption Commission (JACC)", the "Companies Control Department (CCD)", and the "Jordan Securities Commission (JSC)" oversee external audits. In 1990, the IASC pushed JACPA to apply IAS for all firms. All businesses must provide audited financial reporting under the "Companies

Law" (Tahat *et al.*, 2018). Jordan's administration was established with the "Companies Law" of 1997. According to the "Jordan Securities Commission", the "Securities Act No. 23" of 1998 mandated all listed corporations to comply with the "International Financial Reporting Standards (IFRS)" and ISA auditing standards. As of December 15, 2016, Jordanian audit firms are required to apply ISA-701. Since 2017, Jordanian public listed firms' financial accounts have been audited using the extended audit report mandated by ISA, which includes reporting on KAMs (Abdullatif and Al-Rahahleh, 2020). Similar to IFRS, ISA-701 identifies KAMs using principles. Governance officials must be consulted to identify audit issues (IAASB, 2016).

An auditor analyses the likelihood of substantial misstatement, significant estimates and judgements, and major events or transactions within the reporting period when deciding if an issue presented to a governing body is a KAM (IAASB, 2016). Auditors record this process's KAMs separately (IAASB, 2016). Explain each audit issue's importance and resolution (IAASB, 2016). The audit report shall state no KAMs (IAASB, 2016). KAMs should focus users on essential audit areas, communicate with management and stakeholders, and refocus the auditor on risk assessment and response, which is central to modern audit practise (IAASB, 2015). This application improves consumer financial records (Tahat *et al.*, 2018). The information provided to investors and other users is greatly improved. Beyond "boilerplate" reports, auditors deliver more value. The standard improved audit report value and user trust (Abdullatif and Al-Rahahleh, 2020). As a case study, Jordan is chosen for its generalizability. ME accounting studies have grown due to shared history, government, language, and culture (Tahat *et al.*, 2018). IFRS/ISA has been used in Jordan for about 30 years, thus it is interesting to see how major auditing metrics affect audit charges.

3. Theoretical underpinning

Auditors' reports are improved by KAMs (Bédard *et al.*, 2016). "Knowledge asymmetry," conflicts of interest, and expectation gaps are all diminished by KAM disclosure, as stated in stakeholder and agency theories. Shareholders and other interested parties should be represented by auditors, according to agency notions (Hegazy and Kamareldawla, 2021). Besides the audit opinion on financial accounts, auditors may also reveal management's activities through KAM disclosures. Investors may gain access to critical information and faith in the system as a result of KAM's discoveries. According to stakeholder theory, companies risk losing touch with certain constituencies if they do not pay attention to them (Velte, 2020). According to Hill and Jones (1992), integrated two theories of agency-stakeholder theories. The "information asymmetry" issue is associated with theories of agency and signalling. By mitigating "information asymmetry" costs and addressing stakeholder disputes, the agency-stakeholder theory explains the impact of KAM reporting on investment choices (Suttipun, 2021). Nevertheless, KAMs may elicit negative reactions from some stakeholders, as demonstrated by behavioural agency theory. To determine KAM count factors, there are a number of primarily reasons. To start, according to Sirois *et al.* (2018), disclosing more KAMs might make audit reports more complicated. Second, while KAMs are interesting, an excess of them might lessen their influence (Orquin and Loose, 2013). Christensen *et al.* (2014) found that KAMs are appropriate for financial choices because to their briefness and credibility. In some cases, KAMs may impact investor behaviour by reducing "information asymmetry" (as stated in the reviewed literature). More than that, KAMs may bring attention to supplementary risk issues, curb unduly optimistic or aggressive accounting assumptions, and strengthen the reliability of audit reports.

Research on audit reports suggests that stakeholders would benefit from a rise in audit charges and the disclosure of KAMs (Ittonen and Peni, 2012; Mah'd and Mardini, 2022). In accordance with the agency theory, which explains the interaction between auditors and stakeholders, the primary goal of auditing is to increase trust in financial accounts (Mah'd and Mardini, 2022). The audit committee can improve audit costs, if it supervises and enforces increased audit coverage (Schrader and Sun, 2019; Velte and Issa, 2019). Financial analysis and investment decisions can be enhanced when auditors make KAMs accessible to everyone, which allows stakeholders to self-assess. Disclosure of financial information and audit results is thought to lessen "knowledge asymmetry" based on agency theory. Schrader and Sun (2019) state that agency and signalling theories support the notion that an audit is beneficial when the audit committee has greater power and requires more thorough coverage. As a result, audits and financial reporting should be made more transparent.

The tension between managers and shareholders is studied by agency theory and stakeholder theory (An *et al.*, 2011). While signalling theory provides rationale for value assessments, stakeholder theory encapsulates the purpose of financial openness. Auditors are reliable and useful monitoring instruments, according to signalling theory. The effects of information asymmetry on shareholders are the subject of both signalling theory and agency theory (Khlif and Achek, 2016). This type of auditor is believed to be raising red flags regarding the honesty of the company's disclosures in the signalling model (Sangchan *et al.*, 2020). Businesses may send positive signals to stock market investors by paying auditors more to boost "auditing quality" (Huang *et al.*, 2020). The stakeholder model states that when companies make public comments, it helps to even out the demands of various groups when resources are distributed. In contrast to agency theory, stakeholder theory recognises that managers have responsibilities to more than just the company. Therefore, stakeholder theory aids agency theory in narrowing its focus. Top management should provide more comprehensive financial information to all stakeholders so that everyone can make informed judgements about allocating resources. Since the latter does not necessitate "information asymmetry," it is possible to integrate theories of agency, stakeholders, and signalling (An *et al.*, 2011).

4. Literature review and hypotheses development

Research on KAMs has focused on financial reporting quality and audit process (Asbahr and Ruhnke, 2019; Baatwah *et al.*, 2022; Camacho-Miñano *et al.*, 2021; Fera *et al.*, 2022; Pinto and Morais, 2019; Suttipun, 2021; Hategan *et al.*, 2022; Kend and Nguyen, 2022; Segal, 2019; Abu and Jaffar, 2020; Bepari *et al.*, 2022; Abu *et al.*, 2021; Ecim *et al.*, 2023) have examined the relationship between KAMs and some audit factors. The majority of this research focuses on developed economies like the US and UK, with inconsistent outcomes. Developer economies' regulatory, economic, and legal environments require more research on auditors' increased reporting responsibilities, which the scientific literature has ignored (Alharasis *et al.*, 2023b). Abdullatif *et al.* (2023) suggested studying KAMs' effects on audit practises over long time periods to improve assessments of different time periods and economic conditions, and thus enhancing the capacity for comparisons. Consequently, this study explores whether the requirement of ISA-701 of KAM disclosure affects audit profession utilising agency, stakeholder, and signalling theories. Many organisations, notably the Public Company Accounting Oversight Board (PCAOB) and IAASB, have recommended audit report amendments that would require more transparency to make it more relevant to stakeholders (Bédard *et al.*, 2016). Extra disclosure from KAM was crucial. Uniquely, the auditor can customise the audit report to a specific organisation by how they frame this disclosure. ISA-701 requires auditors to use their professional judgement to decide which matters reported to governance bodies are most material and risky to the audit (IAASB, 2016). These details should make the audit report more effective for presenting audit results and more transparent (Köhler *et al.*, 2016). Although KAM reporting has many benefits, some have raised concerns about its drawbacks, including leaving too much to the auditor's discretion, reducing value through boilerplate reporting, and increasing the audit firm's client confidentiality risk (Segal, 2019).

One new development is the IAASB's ISA-701, which requires auditor reporting of KAMs for fiscal years ending after December 15, 2016. Auditing financial data with the application of ISA-701 of KAM disclosures, the auditor function is deemed to be crucial to the clarity of financial disclosures (Ecim *et al.*, 2023; IAASB, 2016). KAMs share more information to level the audit expectation gap (Segal, 2019). Financial statement users can better understand audits and assess investment risks when they are given details on the most serious issues encountered during an audit and how they were resolved. In other words, KAMs enhance the auditor's report (Bédard *et al.*, 2016). According to audit report research, disclosing KAMs should increase audit reimbursement costs and serve stakeholder interests (Ittonen and Peni, 2012; Mah'd and Mardini, 2022). Agency theory, which describes the auditor-stakeholder relationship, states that the auditing process's main purpose is to enhance financial statements' credibility (Mah'd and Mardini, 2022). Official records say that if the audit committee oversees and mandates additional audit coverage, audit charges can improve (Schrader and Sun, 2019; Velte and Issa, 2019). By making KAMs public, auditors help stakeholders self-assess and improve financial analyses and investment decisions. Agency theory suggests that financial reporting and audit openness reduces "knowledge asymmetry". If the audit committee has more control and needs more extensive audit coverage, agency and signalling theories say the audit is better (Schrader and Sun, 2019; Ghorbaniyan *et al.*, 2023). Thus, reporting transparency should improve financial reporting and audits.

Stakeholder theory and agency theory examine manager-shareholder conflict (An *et al.*, 2011). Stakeholder theory summarises the goal of financial transparency, but signalling theory justifies value judgements based on skewed accounting data. Signalling theory supports auditors as reliability and monitoring tools. Agency theory, like signalling theory, studies how asymmetric information affects shareholders (Khlif and Achek, 2016). According to the signalling model, such auditors raise concerns about the company's disclosure integrity (Sangchan *et al.*, 2020). To give favourable signals to equity market investors, some corporations may pay higher audit prices to compensate auditors for their time and effort to improve "auditing quality" (Huang *et al.*, 2020). According to the stakeholder model, firms' public remarks help balance the needs of different groups when allocating resources. Stakeholder theory, unlike agency theory, holds managers accountable to more stakeholders than simply the corporation. So, stakeholder theory helps agency theory concentrate. To ensure that everyone may make educated resource allocation decisions, top management should offer more complete financial information to all interested parties. The latter does not require "information asymmetry", therefore agency and stakeholders can be combined (An *et al.*, 2011).

Prior research has used numerous proxies to explain the link between KAMs and the audit profession based on contradicting reasoning. In light of the agency theory, a developed market study in the UK, France, Thailand, and the Netherlands (Barghathi *et al.*, 2021; Nguyen and Kend, 2021; Pinto and Morais, 2019; Suttipun, 2021) confirmed the positive relationship between KAMs and audit reimbursement costs and attributed this to higher client risks and complexity due to auditors' expanded responsibilities and the existence of the information asymmetry problem. Camacho-Miñano *et al.* (2021) and Fera *et al.* (2022) suggest that customers in financial hardship may pay higher audit fees to compensate auditors for the extra time and effort needed to send encouraging signals to stakeholders. As a result, firms may pay higher cost for audit to reimburse auditors for their time and effort in improving "auditing quality". Baatwah *et al.* (2022) validated the findings with Omani corporate data from underdeveloped nations. Consequently, and based on the theoretical foundation of this field of knowledge, the author of this study argued that disclosing KAMs requires auditors to perform additional audits as a response to KAMs. Overall, this study expects that disclosing KAMs requires auditors to perform additional audits, especially if audit samples for KAM-related items grow significantly by Jordanian finance industry. In fact, Jordanian financial institutions were the first in the Jordan to be required to implement IAAS in 2005 and the first to compulsory adapt the ISA requirements, especially for the ISA-701 of KAM disclosures. Consequently, auditors usually make extra efforts to support what's in the KAM section as their KAM efforts and ask for expensive reimbursements (Bepari *et al.*, 2024; Ashrafi *et al.*, 2024). Hence, the following hypotheses are proposed:

H1. For the Jordanian financial sector as a whole, the presence of KAM disclosures does have an impact on the auditing cost.

H2. For the Jordanian financial sector as a whole, the proportions of KAM disclosures do have an impact on the auditing cost.

Overall, this study has built on the prior theoretical framework implying that independent auditors are mostly responsible for discovering accounting data breaches connected to "agency problems". The capacity of the auditor to detect such violations is a factor in the efficacy of the audit (Alharasis, 2023). So far, this is the first research that has used economic models to look at how the KAM disclosures that are required by ISA-701 might affect audit costs in ME nations, specifically Jordan. By examining this association over a somewhat prolonged length of time, from 2005 to 2022, offering an 18-year test, it does update previous analysis. Additionally, this study mainly focuses on one impoverished country in ME, specifically Jordan, as opposed to previous KAM studies that mostly focused on highly developed economies. In addition, the financial industry, which was the first to implement the ISA rules, is the primary focus of this research, in contrast to other businesses. Crucially, this analysis differs from previous research in that it uses a 15-item KAM checklist that takes into account both the study's setting and the updated items of ISA-701. Furthermore, according to some studies, most of the previous evidence originates from qualitative sources, and more econometric studies are needed to clarify the current body of knowledge (Abdullatif *et al.*, 2023; Elmarzouky *et al.*, 2023a). In this regard, Mah'd and Mardini (2022), moreover, necessitate an econometric model/real economic study by future research to overcome the subjectivity of qualitative evaluations of earlier research data. The scholars' potential noted that KAM disclosure has garnered attention recently and needs more research, especially in ME.

5. Sampling and data collection

5.1 The collection of data

The data was gathered from 2005 to 2022 Jordanian public listed company's annual reports on Amman Bursa website. First, Hypothesis 1 was investigated utilising the whole 2005–2022 analysis period. In 2005, the examination began to compare audit professions before and after the inclusion of KAM items in the firm's annual reports (pre vs post-KAM). Second, Hypothesis 2 was examined over the period 2017 and 2022. The analysis began in 2017, when ISA-701 went into effect in Jordan. In 2017, Jordanian corporations first demanded KAM disclosures from external auditors using ISA-70. Both models' study ends in 2022 due to a lack of data afterwards. The total approved sample for testing Hypothesis 1 is shown in panel A of Table 1. The initial sample contained 235 public enterprises; however, because the study focused on the financial industry, 63 manufacturing companies were excluded, as well as 70 firms with missing data. The overall sample size is 102 firms (1836 firm-year observations). The entire acceptable sample for Hypothesis 2 testing is shown in panel B of Table 1. The original sample of 235 public companies excluding 63 manufacturing companies, 46 companies with missing data, and 36 companies with inadequate KAM disclosure. The ultimate sample size is 90 firms (540 firm-year observations).

5.2 Research design and variables measurement

5.2.1 Research design. This analysis examines the correlation among KAM disclosure and audit reimbursement costs in underdeveloped nations. KAM auditing models are used to estimate customer risk and complexity. Following the scientific approach of selecting the best estimator for this study, "ordinary least squares (OLS) regression" is used, with the applicability of OLS regression in this context confirmed by the "Hausman and Breusch-Pagan Lagrange multiplier (LM) tests." Recent works (Al Lawati and Hussainey, 2022; Albitar *et al.*, 2021; Ecim *et al.*, 2023) and those used in Jordan (Alharasis, 2023; Alhababsah, 2019) all corroborate the choice of OLS regression. Hence, applied here is a year-industry fixed-effects OLS regression. The proposed research paradigm tests hypotheses using modified equations:

$$REIM\_COST = \delta 0 + \delta 1 KAM\_dummy + \delta 2 SIZE + \delta 3 SUB + \delta 4 ROA + \delta 5 DEBIT + \delta 6 GROWTH + \delta 7 QRATIO + \delta 8 BIG4 + \delta 9 CHANGE + \delta 10 OPINION + FE + \varepsilon. \tag{1}$$

$$REIM\_COST = \delta 0 + \delta 1 KAM + \delta 2 SIZE + \delta 3 SUB + \delta 4 ROA + \delta 5 DEBIT + \delta 6 GROWTH + \delta 7 QRATIO + \delta 8 BIG4 + \delta 9 CHANGE + \delta 10 OPINION + FE + \varepsilon. \tag{2}$$

Several control variables were considered in this analysis, including those from earlier auditing research, following Alharasis (2023) and Elmarzouky *et al.* (2023a). The variables: *SIZE, SUB, ROA, DEBIT, GROWTH, QRATIO, BIG4, CHANGE* and *OPINION*.

5.2.2 Measuring the dependent variable: audit profession. Increased audit samples for KAM disclosures can increase auditor workload. The necessity to produce proof to substantiate the KAM section's allegations about the auditor's KAM-related actions usually justifies further efforts (Camacho-Miñano *et al.*, 2021). *REIM_COST* is the dependent variable in this study. Following prior research (Mehnaz *et al.*, 2022; Alharasis, 2023), *REIM_COST* is calculated as the total audit fees deflated by total assets, in order to conduct a robustness analysis.

5.2.3 Measuring the independent variable in interest: key audit matters. Data was collected and processed using qualitative content analysis. Each organization's audit report is reviewed numerous times, emphasising on KAM parts. This involved examining each KAM independently. 344 KAM items were coded into 50 groups. According to IFRS recognition,

	Panel A: Hypothesis 1 Total firms	Panel B: Hypothesis 2 Total firms
Preliminary sample	235	235
(−) Firms belong to manufacturing business	(63)	(63)
(−) Firms with missing financial data and/or quit the market because of Covid-19 effect	(70)	(46)
(−) Firms with missing KAM data	–	(36)
Total sample	*102*	*90*

Source(s): Created by author

Table 1. Sample choice technique

measurement, presentation, and disclosure standards, prior research underlined subcategories (Segal, 2019; Kend and Nguyen, 2022; Sierra-García *et al.*, 2019). Company and year-by-year statistics were collected. The 15 overarching themes were generated after identifying the 50 categories (Mah'd and Mardini, 2022; Ecim *et al.*, 2023). Taking into mind the specifics of Jordan's accounting and disclosure structure, the checklists were built based on previous research to calculate the number of KAMs (Mah'd and Mardini, 2022; Kend and Nguyen, 2022). The number of times 15 key KAMs from ISA-701 occurred in Jordanian auditing reports were counted (Mah'd and Mardini, 2022; IAASB, 2015). To test the effect of the IAS-701 requirements on the audit reimbursement cost, two KAM variables were utilised. First, the *KAM_dummy* variable is utilised to test the presence of KAM disclosures. *KAM_dummy* is measured as a dummy variable as, if the auditors' report mentions a KAM, assign one and zero otherwise. Second, the *KAM*. An unweighted KAM checklist for each audit report were created (see Table 2: KAM checklist). The proportions of KAM (*KAM* variable), is measured as dividing the KAM's real score of each firm by the checklist's total KAM following prior research (Mah'd and Mardini, 2022; Ecim *et al.*, 2023; Mah'd and Mardini, 2022) using the following equation:

$$KAM = \sum_{i=1}^{k} \mathbf{kd}\boldsymbol{i} \Big/ \mathbf{k}$$

where, $kd = 1$ if the item is disclosed in the annual report, and 0 otherwise, and k is the total KAM items.

5.2.4 Measuring the control variables. Control factors from auditing literature are considered. Starting with client complexity, *SIZE* influences business size, and decentralised organisations are thought to have agency concerns and greater audit fees. Auditor time and effort must be increased to avoid "information asymmetry" (Alhababsah, 2019). Other client complexity indicators include subsidiaries (*SUBS*). *SUBS* raise audit rates for difficult clients. "Auditing costs" rise to compensate for their time spent understanding client disclosure obligations. Second, customer risk attributes are regulated in the models. The model is account for return on assets *(ROA)* and sales growth (*GROWTH*). Auditing theory

Table 2.
Ranking of type of KAM issued

Type of KAM issued	Frequency	Percentage %
1. Revenue recognition	193	8
2. Inventory	86	4
3. Accounts receivable	241	10
4. Financial assets	95	4
5. Provisions	630	27
6. Taxation	40	2
7. Insurance	33	1
8. Property, plant, and equipment	85	4
9. Investments	189	8
10. Pensions	17	1
11. Impairments	240	10
12. IFRS 9	186	8
13. Acquisitions	23	1
14. Goodwill	29	1
15. Complex estimates of fair value accounting	290	12
Total	*2,229*	*100*

Source(s): Created by author

states that high-profit firms spend more for audits. To demonstrate profitability and reduce agency costs, such companies must reveal more financial data. In contrast, debit ratio (*DEBIT*). Corporate external auditors charge more for weak financial results. Auditing costs are higher for high-debit clients because they require particular audit risk assessment. Client risk is also shown by quick ratio (*QRATIO*), which confirms liquidity. Reduced quick ratio, reduced customer financial risk, and lower audit risk equals lower audit charges. Auditor characteristics are controlled by *BIG4*. Reimbursement costs rise dramatically due to Big-4. To prevent litigation and gain customers, Big-4 firms charge extra for superior audits. Third, engagement characteristics for auditor tenure were also modified to the model (*CHANGE*) and unqualified opinion (*OPNION*). Long-term auditors charge more since they learn "client-specific" information and audit better (Abdillah *et al.*, 2019). Fair financial statements are easier to audit and earn unqualified views, therefore auditors' charges less. Variables are defined in Table 3.

6. Results and discussion

6.1 Descriptive statistics and correlation

Table 4 illustrates the two tested models' descriptive statistics. Panel A shows that audit reimbursement costs factor (*REIM_COST*) has a mean (median) of 9.261 (1.065). The key audit matters (KAM) dummy variable has a mean (median) of 0.311 (0.463). Panel B reports a mean (median) audit cost factor (*REIM_COST*) of 9.377 (1.150). KAM percentage has a mean (median) value of 0.147 (0.076). After ISA-701 was introduced to promote audit openness and eliminate "information asymmetry" (Abdullatif *et al.*, 2023), Jordanian external auditors confirmed 15% of KAM disclosers on average. The 2005–2022 study data must meet all four

Variable	Label	Sign	Measurement
Audit profession	*REIM_COST*		Total audit fees deflated by total assets
Number of Key Audit Matters	*KAM*	(+)	Total of KAM reported in the audit report, measured by the following equation $KAM = \sum_{i=1}^{k} \mathrm{kd}i/\mathrm{k}$ Where, $kd = 1$ if the item is disclosed, and 0 otherwise, and k is the total number of KAM.
KAM_dummy	*KAM_dummy*	(+)	A dummy variable coded 1 for the years following the application of ISA-701 (2017–2022), 0 otherwise (2005–2016)
Client size	*SIZE*	(+)	The natural Log of a firm's total assets
Number of subsidiaries	*SUB*	(+)	The number of firm's subsidiaries/branches
Return on assets	*ROA*	(+)	Net income by total assets
Debit ratio	*DEBIT*	(+)	Total debt divided by the total assets
Sales growth	*GROWTH*	(–)	Current year's sales to last year's sales
Quick ratio	*QRATIO*	(+)	Total firm's current assets minus inventory by total liabilities
Big4	*BIG4*	(+)	Is a dichotomous variable that is set to 1 if the auditor company is among the largest Big-4 auditing firms (PwC, KPMG, Deloitte or E&Y) and to 0 otherwise
Auditor tenure	*CHANGE*	(–)	Auditor tenure of three years, coded 1 if the audit firm did not change, 0 otherwise
Unqualified opinion	*OPINION*	(–)	Dummy variable coded 1 if the firm receives an unqualified opinion, 0 otherwise

Source(s): Created by author

Table 3. Variables definition and measurement

Table 4.
Descriptive statistics

	Panel A: Hypothesis 1					Panel B: Hypothesis 2				
Variable	Mean	Median	Std. Dev	Min	Max	Mean	Median	Std. Dev	Min	Max
REIM_COST	9.261	1.065	9.084	6.908	12.848	9.377	1.150	9.307	6.908	12.848
KAM						0.147	0.076	0.167	0.000	0.278
KAM_dummy	0.311	0.463	0.000	0.000	1.000					
SIZE	17.297	1.809	17.075	11.828	24.049	17.390	1.908	17.243	12.794	24.049
SUB	2.137	3.364	1.000	0.000	18.000	2.361	3.497	1.000	0.000	18.000
ROA	1066.456	599.590	1054.000	25.000	2134.000	967.126	577.218	933.000	25.000	2134.000
DEBIT	1259.874	737.429	1241.000	29.000	2513.000	1304.384	739.978	1330.000	29.000	2513.000
GROWTH	1.416	2.563	1.012	−2.739	19.830	1.353	2.289	1.011	−2.739	19.830
QRATIO	2.998	6.687	1.068	−0.504	49.364	3.009	6.911	1.007	−0.504	49.364
BIG4	0.389	0.488	0.000	0.000	1.000	0.430	0.495	0.000	0.000	1.000
CHANGE	0.638	0.481	1.000	0.000	1.000	0.735	0.442	1.000	0.000	1.000
OPINION	0.873	0.333	1.000	0.000	1.000	0.855	0.353	1.000	0.000	1.000
N			*1836*					*540*		

Note(s): All variables are defined in Table 3
Source(s): Created by author

regression analysis test requirements to proceed. To guarantee data suitability for regression analysis, "normality, linearity, homoscedasticity, and multicollinearity" tests are performed (see Appendix 1).

Table 5 shows "Pearson correlation matrices". The multicollinearity test finds regression model independent variable correlations. The correlation coefficient shows no association between independent variables. Further, all parameters are winsorized at 1 and 99% to reduce outliers.

6.2 Univariate analysis

Table 6 shows parametric (independent *t*-test) results. The 2005–2022 analysis data were used to compare audit reimbursement costs (*REIM_COST*) in pre-vs post-ISA-701 of KAM disclosure rules. The table shows the substantial difference in the mean of the *KAM_dummy* variable, as evaluated by the t-value. The subsamples include 570 post-ISA-701 firm-year observations and 1266 pre-ISA-701 data. Table 4 shows that the mean audit reimbursement costs reported has changed significantly from pre-ISA-701 (9.192) to post-ISA-701 (9.414), with t-value = −5.0721, showing that KAM items have developed. This is seen by the sharp rise in KAM reports. This study confirms Abdullatif *et al.*'s (2023). Auditor earnings increase after IAAS disclosures and regulations, according to auditing theory. IAAS, KAM, requires external auditors to perform more tasks, which motivates them to learn more about client finances and the risk of financial misstatements to reduce litigation risk and reputation damage. In this situation, higher audit charges is required from clients to mitigate the information asymmetry problem auditors monitor firms performance and disclosures and alert stakeholders.

6.3 Regression analysis and discussion

Table 7 provides a summary of the results obtained from the study models. Model 1 illustrates how KAM (KAM versus non-KAM) influences reimbursement costs, whereas Model 2 demonstrates how KAM disclosures directly influence reimbursement costs. Models 1 and 2 exhibited *p*-values that were extremely significant at the 0.01 level, showing R^2 values that ranged from 66% to 73%. This is consistent with studies conducted in low-income countries. This is encouraging, and it is in line with what was found in earlier research (Alharasis, 2023; Elmarzouky *et al.*, 2023a).

Both Model 1 and Model 2 exhibit a correlation that is favourable between KAM reports and auditing expenses (Coeff. = 0.242, Rob. t = 2.09) and (0.580, Rob. t = 2.02) respectively. Recent research (Nguyen and Kend, 2021; Barghathi *et al.*, 2021; Fera *et al.*, 2022; Elmarzouky *et al.*, 2023b; Pinto and Morais, 2019; Suttipun, 2021; Zeng *et al.*, 2021; Camacho-Miñano *et al.*, 2021; Al Lawati and Hussainey, 2022) backs up this assertion.

Companies with a larger share of "agency problem" are more likely to reveal more KAM to external auditors in order to limit the danger of future unreported difficulties in their customers' financial statements. This conclusion lends credence to the convergence of agency, signalling, and stakeholders' theories. This discovery lends further credence to Baatwah *et al.*'s (2022) findings. There is a possibility that increased KAM audit sample sizes will raise the duties of auditors. The auditor's need to provide evidence to support the statements made about their behaviour in the KAM section typically warrants the expenditure of additional time. Clients that are experiencing financial difficulty are expected to pay expense audits (Camacho-Miñano *et al.*, 2021). This provides auditors with compensation for the additional time and effort required in comparison to a regular audit. After the implementation of ISA-701, auditors were put under a lot of pressure to perform the tasks that were demanded by ISA in order to offer information to stakeholders (Bepari *et al.*, 2024; Ashrafi *et al.*, 2024). This was especially true for clients whose financial statements

Table 5.
Correlation matrix

	Variables	1	2	3	4	5	6	7	8	9	0.10	11	12
1.	*REIM_COST*	1.000											
2.	*KAM*	0.136***	1.000										
3.	*KAM_dummy*	0.107***	0.889***	1.000									
4.	*SIZE*	0.764***	0.100***	0.0529**	1.000								
5.	*SUB*	0.286***	0.0590**	0.021	0.339***	1.000							
6.	*ROA*	0.0940***	−0.0477*	−0.0685***	0.105***	−0.118***	1.000						
7.	*DEBIT*	0.448***	0.0996***	0.0726***	0.449***	0.004	0.025	1.000					
8.	*GROWTH*	−0.0637***	−0.028	−0.018	−0.0394*	0.021	0.033	−0.025	1.000				
9.	*QRATIO*	−0.136***	−0.0687***	−0.0459*	−0.158***	−0.009	−0.0919***	−0.193***	0.017	1.000			
10.	*BIG4*	0.535***	0.0866***	0.0960***	0.462***	0.147***	0.0876***	0.220***	−0.0572**	−0.0745***	1.000		
11.	*CHANGE*	0.0807***	0.0922***	0.123***	0.0895***	0.0877***	−0.022	0.0402*	−0.035	−0.009	−0.008	1.000	
12.	*OPINION*	−0.004	−0.018	−0.014	0.002	−0.159***	0.110***	−0.034	0.002	0.012	0.011	0.016	1.000

Note(s): This table summarizes the Pearson correlation matrix statistics for the outcome and explanatory variables, respectively
** and * correlations indicate statistical significance at the 0.05 and 0.01 levels, respectively (2-tailed)
All variables are defined in Table 3
Source(s): Created by author

contained a significant level of conflict of interest (Castka *et al.*, 2020). They are going to tremendous lengths in order to protect their reputation and avoid legal action. The findings provide that KAM and "auditing quality" are positively associated. The findings also demonstrate that more KAM disclosures mean higher agency conflict and greater reimbursement costs. Therefore, the analysis accepts the developed hypotheses 1 and 2.

Audit fees by KAM vs non- KAM period			
Variable	Mean		*t*-value(sig)
	Post-KAM (*KAM_dummy* = 1) N = 570 Obs	*Pre-KAM* (*KAM_dummy* = 0) N = 1,266 Obs	
PRICE	9.414	9.192	*(−5.0721)****

Note(s): *, **, and *** indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively
Source(s): Created by author

Table 6.
Univariate analysis

DV = *REIM_COST* Variables	Expected sign (*H1/2*)	Model (1) The presence of KAM	Model (1) The proportion of KAM
Intercept		2.904 (15.24)***	2.139 (7.88)***
KAM	(+)		0.580 (2.02)**
KAM_dummy	(+)	0.242 (2.09)**	
SIZE		0.340 (29.57)***	0.375 (22.01)***
SUB		0.017 (4.32)***	0.011 (1.570)
ROA		0.000 (4.85)***	0.000 (7.41)***
DEBIT		0.000 (7.90)***	0.000 (3.87)***
GROWTH		−0.015 (−2.65)***	−0.003 (−0.390)
QRATIO		−0.002 (−1.230)	0.001 (0.300)
BIG4		0.464 (15.79)***	0.517 (10.24)***
CHANGE		0.038 (1.320)	0.002 (0.040)
OPINION		−0.029 (−0.810)	−0.010 (−0.150)
Robust		*Yes*	*Yes*
Fixed effects		*Year & SUBINDS*	*Year & SUBINDS*
N		*1,836*	*540*
F-Test		*(29)****	*(17)****
R^2		*66.07%*	*72.26%*
Mean VIF		*2.60*	*1.37*

Note(s): Significant results at the 0.01, 0.05, and 0.10 levels of a two-tailed test are denoted by ***, **, and *, respectively
This table displays the outcomes of an ordinary least squares *(OLS)* regression of *KAM* on audit profession *(REIM_COST)*. Included here Robust *t*-statistics and standard errors adjusted for year and industry cluster effects
Source(s): Created by author

Table 7.
Regression results

The current analysis' conceptual frameworks operate under the assumption that it is the responsibility of external auditors to locate accounting data breaches that are related to "agency problem" situations. According to Gul *et al.* (2013), the success of an audit is partially dependent on the auditor's ability to identify violations of the rules being audited. According to the author's knowledge, this is one of a few examinations evaluating the empirical impact of the adoption of ISA-701 requirements to disclose the important audit matter on auditing practice in developing countries and the first in Jordan using econometric models (Abdullatif *et al.*, 2023; Al Lawati and Hussainey, 2022; Mah'd and Mardini, 2022). This is accomplished by analysing data pertaining to Jordan from 2005 until 2022, so providing an established model with a test case spanning 18 years (2005–2022).

7. Robustness check

7.1 Endogeneity test relative to auditor type

According to Sangchan *et al.*'s (2020) findings, the Big4 seem to be the natural preference of the customers. In order to account for the possibility of self-selection bias on the side of the Big4, the estimator known as the "Heckman two-stage" is utilised in the models of "auditing costs" that are utilised the most frequently. In the first part of the process, probit regression was applied to generate a new variable that was given the name "Inverse Mills Ratio (INMILLS)". This variable was then used to update the models that were already in place. The findings from the secondary stage of estimation are consistent with the findings from the first stage of analysis (see Appendix 2).

7.2 Exclusion the crisis years

After omitting the "Global Financial Crisis (GFC)" (i.e. the year of 2008, 102 year-firm observations) and the Covid-19 crises (i.e. the years 2020–2022, 306 firm-year observations) from the overall study, the hypotheses were re-evaluated. The findings of the secondary studies are consistent with the findings of the primary study. Although the results are not disclosed but can be provided upon request.

7.3 Exclusion of firms operating in the banking industry

In order to assist compensate for the chance that the findings of the regression were influenced by the particular qualities of the banking industry, the analysis was re-evaluated by omitting observations from the banking industry (72 firm-year observations). This helped to adjust for the likelihood that the conclusions of the regression were impacted. The findings are consistent with what was observed in the preliminary test (see Appendix 3).

8. Research implications

8.1 Theoretical implications

In order to bridge the gap in norms between auditors and preparers, this study analyses how KAM disclosures affect audit reimbursement costs to bring attention to the relevance of new ISA audit standards and stress the necessity of compliance. The impact of KAMs on audit charges in Jordan's emerging economy correlation has not been previously investigated in light of stakeholder, agency, and signalling theories in the context of ME, Jordan in particular. KAM disclosure reduces "knowledge asymmetry," conflicts of interest, and expectation disparities between the agent and the owner, in accordance with agency and stakeholder theories. The information asymmetry problem connects the signalling theory and the agency theory. Auditors should represent all stakeholders and shareholders, according to the agency theory (Hegazy and Kamareldawla, 2021). As an additional component to the financial account audit opinion, auditors may also divulge information regarding management's activities via KAMs. The disclosures made by KAM gave additional users access to vital data and strengthened system confidence. External auditors, who serve as a monitoring instrument, communicate vital information to stakeholders. According to the stakeholder theory, failure to prioritise specific groups within an organisation can result in their alienation (Velte, 2020). Hill and Jones (1992) developed a framework that integrated the concepts of behavioural agency theory and agency-stakeholder theory. The agency-stakeholder theory posits that investment decisions can be elucidated through the lens of KAM reporting, which operates to mitigate "information asymmetry" and settle disputes among stakeholders (Suttipun, 2021). Nevertheless, behavioural agency theory demonstrates that certain stakeholders might respond negatively to KAMs. Three primary justifications exist for identifying KAM count factors: Prior to that, an increase in KAM may add complexity to audit reports (Sirois *et al.*, 2018). Furthermore, while KAMs are intriguing (Orquin and Loose, 2013), an excessive number of them can diminish their effectiveness. Furthermore, KAMs are credible and concise, which renders them appropriate for financial decision-making (Christensen *et al.*, 2014). The literature review suggests that KAMs have the potential to mitigate "information asymmetry" and exert an impact on investor conduct under specific circumstances. KAMs can also identify additional risk issues, prevent excessively optimistic or aggressive accounting assumptions, and enhance the credibility of audit reports (Alkhwaldi *et al.*, 2024).

According to the findings of the analysis, it is possible that KAM disclosures could result in greater audit transparency (Reid *et al.*, 2019). This facilitates comprehension of the auditing process among regulatory agencies, policy makers, and governance authorities in Jordan (ACCA, 2018). Particularly for lesser organisations, KAMs enhance the credibility and value of investigations (Moroney *et al.*, 2021). Significant risk exposures and discretionary financial reporting will be disclosed to management. Enhanced auditor monitoring ought to result in improved decision-making, financial controls, and investor reporting, according to the principles of signalling theory (Asbahr and Ruhnke, 2019). Once KAMs have been identified, interactions between the auditor and governance team can become more fruitful, potentially reducing the cost of auditing through a systematic approach to identifying and resolving issues (Segal, 2019). Auditors ought to prioritise the achievement and documentation of audit objectives, given the heightened scrutiny of audit reports by stakeholders and the general public (Kachelmeier *et al.*, 2020). The audit expectation gap might narrow as consumers of audit reports gain comprehension of the audit process (Ecim *et al.*, 2023). As a result, this study contributes substantially to the body of knowledge in KAM and auditing by integrating agency, stakeholder, and signalling theories in a single framework (Alharasis and Alkhwaldi, 2024).

8.2 Practical implications

The goal of this research is to evaluate if the existence of KAM disclosures as required by ISA-701 has had an impact on the audit profession, as well as to investigate the direct impact that the proportions of such disclosures have had on audit reimbursement costs. The stated assumptions were tested using data from Jordanian financial institutions collected between 2005 and 2022. The regression analysis confirmed that the inclusion of KAM disclosures in auditing reports in the context of Jordan increased the complexity and risk of the auditing process, as well as the auditor's responsibilities in front of stakeholders, resulting in stakeholders requesting higher-priced audits. In other words, the disclosure of KAM in audits has had a significant impact on field rules and policies. KAMs are those that, in the auditor's professional view, were the most important for the financial statement audit. As a result, the current analysis sought to determine how the existence of KAM disclosure as required by the ISA-701 affects the auditing profession. To attract international investment and strengthen the economy, the Jordanian government has implemented KAM reporting in an effort to promote transparency and coordination between auditors and relevant stakeholders.

The disclosure of KAM in auditing research has a wide variety of policy implications, including reporting requirements and communication strategies. Given the analysis confirms the significant role of KAM on audit quality by Jordanian firms, audit firms may need to develop new communication strategies to effectively explain the value of KAM to various stakeholders. Policies might be put in place to assist auditors in providing clear and straightforward explanations of KAM. When it comes to protecting the efficiency and usefulness of the audit process in Jordan, officials must find a balance between expanding transparency and maintaining efficiency. Policies may need to be revised to mandate the inclusion of KAM in audit reports. This is done to make sure that stakeholders understand the most important aspects of the audit and financial statements. The discovery and exposure of KAM increases auditors' accountability for their professional decisions. Policies may need to be improved/enhanced to reflect such new requirement, which may affect liability considerations. Quality control and training policies may need to be revised to ensure that auditors are appropriately trained to identify and communicate KAM. This may necessitate updating both the educational curricula and professional development activities. Since auditing standards and regulations have altered to allow KAM disclosure, policies may be implemented to ensure that auditors adhere to these standards and meet regulatory obligations. Policies may be developed to encourage ongoing monitoring and evaluation of the efficacy of KAM disclosures. This may entail undertaking frequent reviews and modifications to ensure that the disclosures remain meaningful and relevant. As a result, the findings of this study provide light on the significant consequences of KAM disclosures after ISA-701 for enterprises operating in Jordan, which should aid authorities in their attempts to control and supervise the auditing sector. Political leaders, legislators, authorities, and the auditing sector may all benefit from the results as they evaluate the rising framework of accounting systems in developing nations, such as Jordan. Thus, the findings may help to improve the regulations that govern Jordan's auditing industry.

9. Conclusion, limitations and future research

The purpose of this study is to determine whether the presence of KAM disclosures as requested by ISA-701 has had an effect on audit reimbursement costs, and to investigate the direct effect that the proportions as well. The data of Jordanian financial institutions that span the period (2005–2022) have been used to test the proposed hypotheses. The following findings were obtained from the regression analysis: The first finding is that, from 2005 to 2022, the research using KAM as a dummy variable revealed that disclosing ISA-701 via KAM greatly raises auditing complexity, risk, and expenditures accordingly to minimise the "asymmetry information" problem. Secondly, the study demonstrated that the current KAM disclosure requirements under ISA-701 enhance the association between KAM disclosures and audit reimbursement costs because of the increased burden and obligation of auditors, as well as the increasing amount of KAM disclosures. Put another way, the regression analysis that was conducted using data from the emerging economies setting in Jordan confirmed that the inclusion of these items or disclosures in audit reports has made the auditing process more complex and riskier, while also increasing the auditor's responsibilities in front of stakeholders. As a result, stakeholders willing to pay more reimburse auditors.

This research has the potential to serve as a benchmark for the issuance of a distinct policy or standard for revealing any kind of adverse event in accordance with financial reporting and disclosure procedures. It is abundantly obvious, in light of the findings of the inquiry, that the KAM disclosure plays a significant role in the improvement of the disclosure amount provided by managers to stakeholders. The proportions of KAM items created increased audit charges for the same reason as the previous reasoning. The findings of this research provide policymakers and standard-setters with up-to-date empirical knowledge regarding the ramifications of adopting the ISA-701, which requires extra disclosures on the KAM by external auditors. This information may be found in the form of the research's results. As a result, this investigation is useful for stakeholders, regulatory agencies, standard-setters, and readers of audit reports who are curious about the current state of KAM disclosure and how ISA-701 is being implemented in emerging countries. As a consequence of this, the findings are more likely to have academic implications in the form of promoting additional evidence and expanding this data to other emerging nations for the purpose of getting a clear explanation of the genuine influence that reporting KAM has on audit profession.

To the best of the author's knowledge, this investigation is one of the very few empirical research that has been conducted to explore the consequence of the KAM disclosures on audit profession, with a particular focus on the influence of disclosures on KAM made by external auditors on the cost of auditing. As with any other investigation, the sample size and time range may limit the conclusions' usefulness. Future research should broaden this technique to include a variety of situations and settings from developing countries, and this analysis can be extended to include data from 2023. Furthermore, the study's findings point to new directions for future research. Based on the study's findings, future research could investigate the impact of Covid-19 on the proportion of KAM disclosures, with other auditing areas such as internal assurance, going concern, and the role of business governance legislation.

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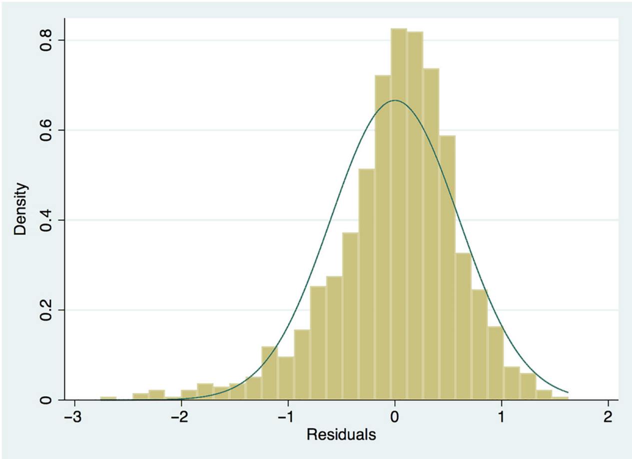
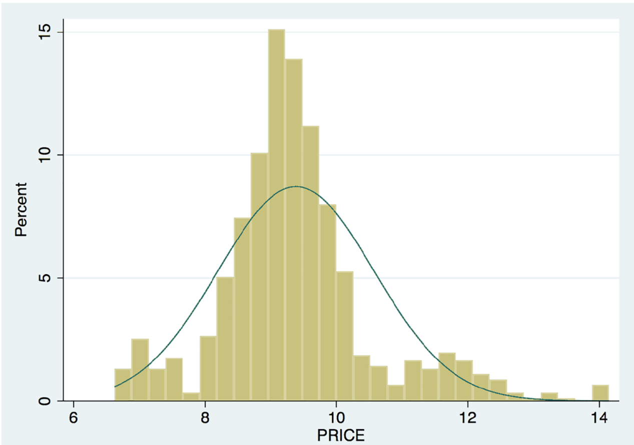
(The Appendix follows overleaf)

Appendix 1



Source(s): Created by author

Figure A1.
Histogram with normal curve of residuals



Source(s): Created by author

Figure A2.
Histogram of the dependent variable

Appendix 2

DV = *REIM_COST* Variables	Model (1) The presence of KAM	Model (2) The proportion of KAM
Intercept	*−6.673*	*−5.337*
	*(8.77)****	*(5.11)****
KAM		0.773
		(2.80)***
KAM_dummy	0.316	
	(2.91)***	
SIZE	0.776	0.713
	(21.66)***	(15.12)***
SUB	0.019	0.002
	(4.73)***	(0.310)
ROA	0.000	0.001
	(11.18)***	(10.05)***
DEBIT	0.000	0.000
	(8.73)***	(1.210)
GROWTH	−0.059	−0.019
	(−9.45)***	(−2.25)**
QRATIO	−0.004	0.014
	(−2.19)**	(3.49)***
BIG4	0.449	0.512
	(15.35)***	(10.28)***
CHANGE	0.055	0.030
	(2.01)**	(0.690)
OPINION	−0.071	−0.056
	(−2.01)**	(−0.830)
INVMILLS	1.824	1.303
	(13.43)***	(7.05)***
Robust	*Yes*	*Yes*
Fixed effects	*Year & SUBINDS*	*Year & SUBINDS*
N	*1836*	*540*
F-Test	*(30)****	*(30)****
R^2	*68.46%*	*73.87%*
Mean VIF	*2.18*	*2.81*

Note(s): Significant results at the 0.01, 0.05, and 0.10 levels of a two-tailed test are denoted by ***, **, and *, respectively
This table displays the *OLS* regression of *KAM* on audit profession *(REIM_COST)* controled for potential auditor self-selection bias with Robust *t*-statistics and standard errors adjusted for year and industry cluster effects
Source(s): Created by author

Table A1.
Heckman test

Appendix 3

DV = *REIM_COST* Variables	Model (1) The proportion of KAM
Intercept	*3.976*
	*(11.45)***
KAM	0.697
	(2.31)**
SIZE	0.260
	(11.78)***
SUB	0.019
	(2.71)***
ROA	0.000
	(8.67)***
DEBIT	0.000
	(3.01)***
GROWTH	−0.007
	(−0.900)
QRATIO	0.000
	(0.130)
BIG4	0.515
	(10.72)***
CHANGE	0.042
	(0.930)
OPINION	−0.082
	(−1.210)
Robust	*Yes*
Fixed effects	*Year & SUBINDS*
N	*468*
F-Test	*(17)****
R^2	*53.87%*
Mean VIF	*1.34*

Note(s): Significant results at the 0.01, 0.05, and 0.10 levels of a two-tailed test are denoted by ***, **, and *, respectively
Note: This table displays the outcomes of an ordinary least squares *(OLS)* regression of KAM on audit profession *(REIM_COST)* 72 of excluding banking industry observations. Included here Robust *t*-statistics and standard errors adjusted for year and industry cluster effects
Source(s): Created by author

Table A2. Excluding banking industry

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