

## **Factors Affecting the Level of Key Audit Matters Disclosure: Evidence from Jordan**

*Khalid Ali Alduneibat<sup>1</sup>*

### **ABSTRACT**

The current study aimed at investigating the level of disclosure of Key Audit Matters (KAMs) in the audit reports of Jordanian companies listed in the Amman Stock Exchange (ASE) as required by the International Standard on Auditing 701 (ISA 701). The study also aimed at examining the factors affecting the level of KAM disclosure. In order to accomplish the objectives of the current study, 324 annual audit reports from 2017 through 2019 of 108 companies are examined. Potential KAM issues are recognized through companies' audit reports, while corporate characteristics are gathered from companies' annual reports. Three major analytical methods are applied to analyze the defined model and the recruited data, including descriptive statistics, correlation and ordinary least squares (OLS) regression analysis. The results of the study demonstrate that the mean of KAM-disclosure level is 1.58, which is considered to be relatively low. Positive relationships are attested between the number of KAMs disclosed and the independent variables: size, leverage, indebtedness, auditors' fees and big-four (audit firm size). However, the results suggest that there are negative relationships between the level of KAMs disclosed and two independent factors: profitability and modified opinions. Additionally, the results of the study revealed that accounts' receivables and provisions represent the highest level of KAM reporting ratio. This study significantly contributes to the body of literature addressing the awareness of KAM-disclosure level and its determinant factors in Jordan. The study recommends that KAM disclosure in Jordan should receive more attention from preparers and users of financial statements.

**Keywords:** Key audit matters, IAS 701, Amman Stock Exchange.

1. Associate Professor of Accounting, Accounting Department, Faculty of Business, Tafila Technical University, Tafila, Jordan.  
draldoneibat.khaled@yahoo.com

Received on 12/10/2021 and Accepted for Publication on 28/6/2022.

## العوامل المؤثرة في مستوى الإفصاح عن أمور التدقيق الرئيسية: دليل من الأردن

خالد علي الذنيبات<sup>1</sup>

### ملخص

هدفت هذه الدراسة إلى فحص مستوى الإفصاح المتعلق بأمور التدقيق الرئيسية (KAMs) في تقارير التدقيق للشركات الأردنية المدرجة في بورصة عمان (ASE) كما هو مطلوب بموجب معيار التدقيق الجديد ISA 701، كما هدفت إلى فحص العوامل التي تؤثر في مستوى هذا الإفصاح. ولتحقيق هدف الدراسة؛ استخدم الباحث تقارير المحاسب القانوني المستقل في 108 شركات أردنية للفترة 2017-2019 بواقع 324 تقريراً. تم تحديد أمور التدقيق الرئيسية من خلال تقارير تدقيق هذه الشركات. وأخذت خصائص الشركة وخصائص المدققين من التقارير المالية السنوية للشركات الأردنية. تم تطبيق ثلاث طرق تحليل رئيسية هي: الإحصاء الوصفي، والارتباط، وتحليل انحدار المربعات الصغرى العادية (OLS) لتحليل نموذج الدراسة واختبار الفرضيات. وأظهرت نتائج الدراسة أن متوسط الإفصاح عن أمور التدقيق الرئيسية (KAMs) هو 1.58، وهذا يعتبر منخفضاً نسبياً. نتائج الدراسة بينت وجود علاقة إيجابية بين مستوى KAMs المفصّل عنها والمتغيرات المستقلة التالية: حجم الشركة، والرافعة المالية، والمديونية، وأتعاب المدقق، ومكتب التدقيق باعتباره big-four، بينما تشير النتائج إلى وجود علاقة سلبية بين مستوى KAMs والمتغيرين التاليين: الربحية، والرأي المعدّل. كذلك بينت الدراسة أن حسابات المدينين والمخصصات تمثل أعلى نسبة من KAMs. وتساهم الدراسة الحالية بشكل كبير في الأدبيات المحاسبية الخاصة بالوعي بمستوى الإفصاح عن KAMs، وتكشف العوامل التي تؤثر على هذا المستوى في الأردن كدولة ناشئة. ويتوقع أن تستقطب عدداً من الباحثين والمهتمين في هذا الموضوع لزيادة قدرتهم على تفعيل وتطبيق نتائجها. وتعتبر الدراسة مهمة لمعدي البيانات المالية، والمدققين، والمؤسسات التنظيمية، والمعنيين بحوكمة الشركات، وأصحاب الاختصاص لأنها كشفت المستوى العام المنخفض للإفصاح عن أمور التدقيق الرئيسية في الأردن والعوامل المؤثرة فيه. وتوصي الدراسة بأن تولي الأطراف ذات العلاقة كافة مستوى الإفصاح عن أمور التدقيق الرئيسية مزيداً من الاهتمام.

الكلمات الدالة: مسائل التدقيق الرئيسية، IAS 701، بورصة عمان.

1. أستاذ مشارك، قسم المحاسبة، كلية الأعمال، جامعه الطفيلة التقنية، الطفيلة، الأردن.

draldoneibat.khaled@yahoo.com

تاريخ استلام البحث 2021/10/12 وتاريخ قبوله 2022/6/28.

## INTRODUCTION

The agency theory, proposed by Jensen and Meckling (1976), suggests that the agents' interests conflict with the interests of shareholders of the company. The theory expands this notion by indicating that, in cases of information-asymmetry existence, managers can have an advantage over shareholders regarding information from the company (Hayes, 2013). Agency theory stipulates the importance of auditing in the business environment, as the audit report is considered indispensable and the most valued report to investors and company shareholders for decision-making and decreasing the information gap (Özcan, 2021). Auditors use this report to communicate to the users of the report and inform them about the company's financial statements.

Audit reports are subjected to frequent appreciation because of limitations on appropriate information for decision-making; for that, audit standards have been updated systematically (PCAOB, 2017). where the new audit standard proposes the alignment between stakeholders and auditors, as it provides opportunities for stakeholders to engage with a new set of useful information provided by the auditor (Suttipun, 2020) and build investor confidence (Özcan, 2021). Previous amendments to the IAS700 have been tackled by Al-Dhuneibat et al. (2008) and Khadash et al. (2011) who discussed the role of the amendments in reducing the expectation gap from the Jordanian perspective.

The International Auditing and Assurance Standards Board (IAASB) issued in 2015 the revised auditor report (IAS 701) "Communicating Key Audit Matters (KAMs) in the Independent Auditor's Report", with an effective date of December 2016 (IAASB, 2015). The principal goal of this change was to enhance the audit function, transparency and quality of audit reports, that directly increases communicative value by producing useful information to the users of financial reports (Köhler et al., 2020; Pratoomsuwan & Yolrabil, 2020; Zeng et al., 2021). To achieve this goal, a new section called Key Audit Matters (hereafter KAMs) was

added to the auditor's report (Boolaky, 2016; ACCA, 2018). According to the IAASB (2015, paragraph 11), KAM is defined as the "matter that, in the auditor's professional judgment, is considered as the most significant in the audit of the financial statements". Hence, it expands the auditor's role by requiring the disclosure of the most significant risks facing the client in the auditor's opinion (IAASB, 2015).

As KAM disclosure is based on agency theory, it can be suggested that KAMs function as communication devices between auditors and stakeholders. They may decrease information asymmetries and conflict of interests, reduce information gaps between management and shareholders, enhance the financial reports' understanding of the auditor's task and responsibility and increase the quality of financial statements (Velte, 2019; Gold et al., 2020; Intagool et al., 2020; Kachelmeier et al., 2020). Furthermore, Özcan (2021), Gold et al. (2020) and Reid et al. (2019) argued that the disclosure of KAMs decreases the chance of aggressive accounting behavior. Therefore, KAM disclosure can be a valuable means that efficiently alleviates agency conflicts led by information asymmetry in large companies which may face agency problems (Özcan, 2021).

KAMs are chosen from matters related to the current period communicated with those in charge of governance (IAASB, 2015, Para. 8); thus, the new structure for audit reports required under ISA 700 represents the most significant changes in recent times (Alduneibat, 2019; Sierra et al., 2019). Indeed, KAM is not an Emphasis of Matter (EOM) paragraph and is not a substitute of a modified opinion of preparer's view on the financial reports (KPMG, 2019). It is not a replacement of required disclosures in the financial statements or uncertainty about going concern issues (Saeed, 2020).

Although the Law of Accountancy number 73 of

the year 2003 and its modifications made KAM reporting compulsory for all companies listed in ASE, only a few studies in Jordan, as a developing country that adopts and adapts the international auditing standards (IASs) as released by the IASSB, have been conducted. A thorough review of the related literature demonstrated insufficient information on KAM disclosure; for example, the study of Fayad et al. (2019) in Jordan discussed the investor's reaction to the disclosure of KAMs, yet factors affecting KAM disclosure were not addressed. Also, Abdullatif & Al Rahahleh (2020) explored the application of ISA 701 on KAMs in Jordan, but they did not examine the factors affecting KAM level. Algam et al. (2021) analyzed whether audit quality decreases management earnings in shareholding corporations through improving key audit matters in Jordan. Nevertheless, their study did not explore factors contributing to the level of KAM disclosure. Thus, it could be stated that KAM-disclosure factors and levels are relatively not investigated in Jordan. Whilst abundant studies have examined factors affecting KAM-disclosure levels in developed countries and economies, few studies have attempted to investigate this subject from an emerging-market-perspective.

The current study emphasizes employing the agency theory in structuring and formulating the hypotheses regarding KAM disclosure. The motivation for this study stems from the importance of KAM disclosure in general, together with the need to know the level of KAM disclosure in Jordan, to analyze the factors that appear at this level. The levels of KAM disclosure can differ according to both corporate and audit firm characteristics. Thus, recognizing the type and number of KAMs disclosed by Jordanian companies and examining the most important factors which might be associated with their disclosure during the period 2017-2019 are considered a gap in the literature.

Many researchers (Ferreira & Morais, 2020; Suttipun, 2021; Velte, 2019; Pinto, 2018; Lennox et al., 2022) indicated that the size of the company positively impacts KAM-disclosure level; that is, large-sized companies have more audit work and, therefore, tend to disclose more KAMs

than smaller companies. Likewise, (Gutierrez et al., 2018; Liao et al., 2019; Lennox et al., 2019; Reid et al., 2019) argued that companies with a high leverage ratio may face more financial risk, therefore disclosing more KAMs. With regard to indebtedness variables, previous studies, such as Ireland (2003), Ye et al., (2011) and Andreicovici et al. (2020), demonstrated that companies with a high level of debt or losses have indications of greater financial risk. This matter required more attention and effort from auditors to reduce their responsibility and, therefore, they disclosed more KAMs. Ferreira & Morais (2020) and Choi et al. (2019) showed a positive relationship between the number of KAMs disclosed and the auditor being a member of the big four. The result of Abdullatif & Al Rahahleh's (2020) study revealed that the big four audit firms tend to disclose more KAMs compared to non-big-four audit firms. Such results are expected, as the big- four audit firms are expected to have highly qualified staff who are better trained and have higher financial resources, greater access to information technology and follow the regulations concerning the disclosure of KAMs (Velte, 2018). Furthermore, Özcan (2021) argued that the appointment of a big-four audit firm is positively related to the number of KAM disclosures in Turkey. Sierra (2019) and Choi et al. (2019) indicated that companies paying higher audit fees tend to show more KAMs. However, Bedard et al. (2014), Almulla & Bradbury (2018) in New Zealand and Gutierrez et al. (2018) in the UK found that audit fees did not increase much as a result of reporting more KAMs, Özcan (2021) argued that the auditor's opinion, being modified, shows a negative relationship with the number of KAMs. Thus, when the auditor's opinion is modified, fewer KAMs are disclosed in the audit report (Ferreira & Morais, 2020). On the other hand, Velte (2018) and Pinto & Morais (2019) revealed that when auditors issue an unqualified opinion, they may present

a larger number of reported KAMs. This means that receiving modified opinions significantly increases the probability of disclosing more KAMs.

This study is expected to contribute to the research pool on KAM disclosure, where to the best of the researcher's knowledge, no study has provided an analysis of the determinants of KAM disclosure in Jordan from 2017 to 2019. Therefore, this study aims to add to the minuscule knowledge of ISA 701, in particular KAM-disclosure levels in the annual financial reports listed in the Amman Stock Exchange (ASE) by determining the factors affecting the level of this disclosure. The factors representing corporate characteristics that may affect the KAM-disclosure level are: size, leverage ratio, profitability, auditor's fees, indebtedness, big-four auditors and auditor's opinion. The study's main questions are: (1) What is the level of KAM reporting of companies listed in the ASE? and (2) What factors may affect KAM disclosure in Jordanian companies during the period 2017-2019?

The remainder of the study is organized as follows: the second section introduces a summary of the literature review and study hypotheses. In section three, the study focuses on the research methods and sample selection. The fourth section includes the results and a discussion based on the correlation and regression analyses used. Finally, the study conclusions, limitations, further research developments and recommendations are presented.

## **2. Literature Review and Study Hypotheses**

### **2.1 Literature Review**

After applying (IAS 701), it has been noted that empirical studies on KAM disclosure are growing radically (Bédard et al., 2016). Some of these studies focused on the consequences of KAM disclosure (e.g. accounting quality), with mixed results (Lennox et al., 2017; Gutierrez et al., 2018), while other studies focused on the impact of KAMs on audit fees, auditors' judgment and audit quality (Bedard et al., 2015; Reid, Carcello, Li & Neal, 2019), as well as the impact of KAMs on auditor's liability (Backof et al., 2018)

in the USA and the impact of KAMs on management-reporting practices. Other recent studies analyzed a number of selected variables, including size, leverage, profitability and gender diversity, as determinants of KAM-disclosure levels (Boonyanet et al., 2018 in Thailand; Sierra et al., 2019 in the United Kingdom; Suttipun, 2020 in Thailand). On the other hand, some studies included alternative variables tackling the financial reporting quality, audit quality and readability measures (Lary & Taylor, 2012; Velte, 2019 in the United Kingdom; Shamsuddin, 2020 in Malaysia). Furthermore, Gold & Heilmann (2019) in Germany examined whether the execution of KAMs in auditors' reports affects managers' reporting behavior. Lennox et al. (2018) in the UK investigated three potential explanations for why investors do not find the additional auditor risk disclosures to be informative. Backof et al. (2018) explored the impact of KAMs on auditor liability and the impact of KAMs on management reporting practices. Srijunpetch (2017) in Thailand confirmed that the issue of KAMs has no relationship with stock return; however, it showed that the issues of KAMs, size and leverage have a significant impact on the volume of stock traded. Kitiwong & Srijunpetch (2019) further explored a country's cultural characteristics on determining the disclosure of KAMs and have found that strong uncertainty-avoidance is more likely to enhance disclosure of industry-common KAMs. Andreicovici et al. (2020) in the United Kingdom examined the impact of the new audit report on firms' financial disclosure decisions, focusing on goodwill impairment as a key audit matter (KAM).

Having the efficiency of capital markets, regulators and legal environment, as well as the complexity of investors, conformity with International Standards on Auditing (ISA) in developing countries is questionable (Hopper et al., 2017). Similarly, Abdullatif (2016) and Abdullatif et al. (2019) analyzed factors affecting the

quality of auditing in developing countries, such as poor corporate governance, weakness of minority shareholders, ownership concentration and the dominance of family businesses that require lower-quality audits and pay lower audit fees. In such cases, it seems that applying a new audit standard, such as IAS 7, will be relatively difficult.

The main purpose of KAMs is not limited to improving the quality of information for financial-statement users; however, according to ACCA (Association of Chartered Certified Accountants, 2018), there are three additional 'hidden' benefits of KAMs to the financial-reporting process. Firstly, KAMs encourage better conversations between the auditor and those responsible for governance, which contributes to better governance. Secondly, KAMs help the auditor focus on the areas of the audit requiring the most careful judgment, which contributes to higher audit quality. Thirdly, KAMs give preparers incentives for revisiting financial reporting and disclosures in areas related to those KAMs, which, in turn, leads to better financial reporting.

According to the IAASB (2012), an audit is an independent examination and expression of an opinion on a firm's financial statements by an appointed auditor following terms of appointment and complying with the relevant statutory and performance requirements. An audit report is the final report of audit assignment that auditors issue to their clients containing a true and fair view regarding the firm's financial statements (Suttipun, 2020). It should be noted that the pass/fail (unqualified/qualified) audit report no longer exists, since there have been several modifications that have taken place in the audit reports to provide a more commutative value to enhance the report's purpose and informational value (Church et al., 2008; Carrington, 2014; Pinto et al., 2019; Gold et al., 2020).

Regarding KAMs, in addition to being useful for investors, ACCA (2018) identified three benefits of KAM disclosure, including stimulating better governance, supporting better audit quality and encouraging better corporate reporting. In contrast, Lennox et al. (2017) argued

that investors do not believe that KAM information increases informative content. One of the most significant changes to the audit report is the addition of the KAM section that produces useful information for investors (IAASB, 2011: para. 23). The auditor is responsible for deciding which matters are the most relevant to include in the KAM paragraph (Dogan & Arefaine, 2017). KAMs give investors a feeling of where an auditor puts most of his/her effort (ACCA, 2018). Three factors should be taken into account when a KAM is selected: (a) areas of higher assessed risk of material misstatement, (b) significant auditor judgments relating to areas in the financial statements that involved significant management judgments, including accounting estimates that have been identified as having a high estimation uncertainty, (c) the effect on the audit of significant events or transactions that occurred during the period (IFAC, 2016).

Although ISA 701 defines what must be included in KAMs generally, it does not stipulate how KAMs themselves are to be disclosed. The disclosure of KAMs puts auditors in a difficult position, as they must disclose additional information about the company, but they should not disclose such information which may harm the company or affect the relationship with the client (IFAC, 2015; Iwanowicz, 2019). Pinto et al. (2019) discussed the distinction between the conflict inherent in KAM disclosure (i.e., to disclose or not to disclose KAMs) from a conflict in judgment (i.e., to consider the transaction significant or not). In solving this conflict, the auditor may choose to disclose all KAMs, choose some, not disclose at all or delay the disclosure of KAMs (the use of confrontation if he/she is risk-taking – seeking or avoiding if he/she is risk-averse). Consequently, the auditor will trade-off between factors that influence his/her decision in cases where he/she feels that there could be an adverse consequence of disclosing a KAM. This could be

because he/she feels that a KAM disclosure would lead to more accountability, commitment, responsibility and loss of reputation (Segal, 2017; Bédard et al., 2019).

According to Sierra et al. (2019), the majority of previous studies confirmed that the information disclosed in the KAM section does not exercise an influence on investors' decision-making. Also, Choi et al. (2019) found that KAMs have no effect on the audit expectation gap. Abdullatif & Al Rahahleh (2020) claimed that auditors in Jordan disclosed KAMs as a matter of official compliance only. Auditors use industry-specific KAMs to avoid problems with their clients. Industry-specific KAMs reflect having the same KAMs for all companies in the industry rather than each one alone (entity-specific). This matter indeed reduces the value and importance of KAM disclosure. On the other hand, Boolaky (2016), who shed light on German companies and Segal (2019) who discussed KAMs in South Africa, were not able to demonstrate a substantial effect of including KAMs in the audit report on bank directors' perceptions of the quality of the financial statements as well as on their credit-approval decisions.

Sirois et al. (2017) and Suttipun (2020) showed that even though KAMs enhance the communication value of audit reports, by providing greater quality and transparency about the activities performed by the auditors, more KAMs increase the complexity and, thus, can dilute their importance. Moreover, Orquin & Loose (2013) suggested that KAMs attract the users' attention and make the related disclosures in the financial statement more salient. However, Christensen et al. (2014) argued that increasing the number of KAMs can also reduce the effectiveness of their signaling. Furthermore, because KAMs are more concise and credible than other disclosures, users may rely on these disclosures as substitutes to the main disclosure in the notes to the financial statements (Li et al., 2017). Abdullatif & Al Rahahleh (2020) argued that, even though KAM reporting is mandatory in ASE since 2016, there are different levels of reporting among listed companies, which is similar to the case discussed by Pratoomsuwan & Yolrabil (2018) in Thailand.

This matter may be considered as normal, since companies are not yet costumed to the new audit report.

As mentioned above, KAM disclosures are based on the agency theory that decreases information asymmetries and conflicts of interest between management and shareholders. Sierra et al.'s (2019) results showed two facts: firstly, the number (volume) and nature of KAMs depend on factors that affect the level of disclosure. Secondly, the type and number of KAMs disclosed are influenced by both the auditor and the client characteristics. KAMs cover a variety of topics; they represent the items of financial-position statement and income statement (e.g. provision, revenue recognition, inventory, accounts' receivables, ... etc.) (see Table 2).

## 2.2 Study Hypotheses

Boonyanet et al. (2018) found no relationship between the size of the company and the level of KAM disclosure in Thailand. In contrary, (Suttipun, 2021; Velte, 2019; Pinto, 2018; Lennox et al., 2022) indicated that the size of the company positively impacts KAM-reporting level, as they argued that large-sized companies have more audit work and, therefore, tend to disclose more KAMs than smaller companies. Reynolds et al. (2000) stated that larger clients influence auditors' decisions; they assumed that financial factors motivate auditors to agree with clients' decisions in order to keep valuable clients. According to the agency theory, larger companies are more concerned with meeting social expectations than smaller companies are. Therefore, to test the relationship between company size and KAM disclosure, this study hypothesizes that:

**H1:** *A positive relationship exists between the size of the company and the level of KAM disclosure.*

Leverage as an independent variable measured by the relation between long-term debt and total assets is

assumed to have a positive impact on KAM disclosure (Gutierrez et al., 2018; Liao et al., 2019; Lennox et al., 2019; Reid et al., 2019). Companies with a high leverage ratio have inherent financial risk. According to Özcan (2021), KAM disclosure may represent signals of this risk and provide more information to the users of financial statements. Based on this argument and in line with the agency theory, the level of KAM disclosure tends to be high and the following hypothesis can be assumed:

**H2:** *A positive relationship exists between leverage and the level of KAM disclosure.*

Concerning profitability, Pinto (2018) and Velte (2019) found a negative impact of profitability measured by ROA (return on assets) on KAM-disclosure level. Similar to the analysis of Ousubcharoenchai (2005), we can justify the result if companies provide higher profit or greater performance, which in turn increases ROA. In this case, auditors tend to provide less disclosure of their opinions on auditing reports to retain profitable clients. On the other hand, if a company experiences loss or profit reduction, caused by the higher risk that affects audit reporting, society and the community, it will be more concerned and will demand more disclosure of KAMs (Velte, 2019). Auditors of less profitable companies with greater operational risk are pressured to disclose more KAMs to ensure their independence (Ferreira & Morais, 2020). Other studies, such as Ishak (2021) in the case of Malaysia and Suttipun (2020) in Thailand, could not find any influence of ROA on audit reporting. Therefore, this study hypothesizes that:

**H3:** *A positive relationship exists between profitability (ROA) and the level of KAM disclosure.*

Additionally, regarding the indebt variable, previous studies, such as Ireland (2003), Ye et al. (2011) and Andreicovici et al. (2020), demonstrated that companies with a high level of debt or losses have indications of greater financial risk. This matter requires more attention and effort from auditors to reduce their responsibility and, therefore, disclose more KAMs. The study will suggest the following hypothesis:

**H4:** *A positive relationship exists between the company's indebtedness and the level of KAM disclosure.*

Little research with mixed results has been carried out to examine the possible association between KAMs and audit fees. Pinto & Morais (2019) in Europe found that higher client risks and higher audit fees resulted in greater numbers of KAM received by the firms. Sierra (2019) and Choi et al. (2019) indicated that companies paying higher audit service fees tend to show more KAMs, which means a positive relationship between KAM level and fees, imputed to the need of more effort from auditors and more potential liabilities. On the other hand, Bedard et al. (2014), Almulla & Bradbury (2018) in New Zealand; Gutierrez et al. (2018) and Reid et al. (2019) in the UK found that audit fees did not increase much as a result of reporting more KAMs. They justified the results that additional efforts required to disclose more KAMs are insignificant and audit firms bear no extra fees. For these mixed results, this study hypothesizes that:

**H5:** *A positive relationship exists between audit fees and the level of KAM disclosure.*

Based on the agency theory, shareholders ask firms to be audited by one of the big-four audit firms. Such demands are expected as the big-four audit firms are more qualified in terms of human capital, more trained, higher in financial resources, have greater access to information technology, have more independence and follow the regulations concerning the exposure of KAMs (Velte, 2018). The results of Ferreira & Morais (2020) and Choi et al. (2019) showed a positive relationship between the number of KAMs disclosed and the auditor being one of the big four. Abdullatif & Al Rahahleh (2020) argued that the big-four audit firms tend to disclose more KAMs compared to non-big-four audit firms. Furthermore, Özcan (2021) suggested that the appointment of a big-four audit firm is positively related to the number of KAM disclosures



in Turkey. Alzoubi (2016) argued that big-four firms provide high-quality external audits. Based on this argument, the following hypothesis is established:

**H6:** *A positive relationship exists between a company being audited by a big-four firm and the level of KAM disclosure.*

If the auditors are not able to acquire appropriate and sufficient audit evidence or if there are material misstatements in the financial statements, auditors should issue a modified opinion. The type of audit opinion might directly affect the disclosure of KAMs. Özcan (2021) argued that the auditor's opinion, being modified, shows a negative relationship with the number of KAMs. Thus, when the auditor's opinion is modified, fewer KAMs are disclosed in the audit report (Ferreira & Morais, 2020). On the other hand, Velte (2018) and Pinto & Morais (2019) revealed that when auditors issue an unqualified opinion, they may present a larger number of reported KAMs. This means that receiving modified opinions significantly increases the probability of disclosing more KAMs. Audit firms do so to keep their reputation and reduce litigation risk (Özcan, 2021). According to these mixed results, this study hypothesizes the following:

**H7:** *A positive relationship exists between the auditor's modified opinion and the level of KAM disclosure.*

### 3. Research Methods

#### 3.1 Data and Sample Selection

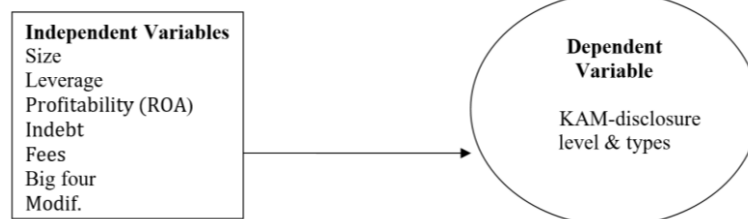
To examine the level of KAM disclosure in Jordanian companies and the variables that affect this level, data was

collected mainly from KAM paragraphs in the auditors' reports of Jordanian companies listed in the Amman Stock Exchange (ASE) during the period 2017-2019. 324 companies were recruited. Companies that operate in the financial sector (Banks, Insurance, Financial Services) were excluded due to the nature of their data, standards applied therein, distinctive operating and regulatory nature. Evidence from Europe in the study of Pinto (2018) revealed that the financial sector is a very regulated sector, which in turn reduces the need to disclose KAMs. Consequently, adding financial companies to the sample of the current study may decrease the average of KAM disclosure.

### 3.2 Study Framework, Model and Variables

#### 3.2.1 Study Framework

Based on the previous studies of (Ireland (2003), Ye et al. (2011), Boonyanet et al. (2018), Gutierrez et al. (2018), Choi et al. (2019), Lennox et al. (2019), Liao et al. (2019), Reid et al. (2019), Sierra et al. (2019), Andreicovici et al. (2020), Suttipun (2020) and Özcan (2021)), the following independent variables have been used in this study: size, profitability, indebt, leverage, which represent company characteristics; and fees, auditors' opinions, a big-four company, which represent auditors' characteristics. The justification for selecting these variables is based on the importance of such variables in KAM disclosure, as reported in prior studies. Figure 1 demonstrates the study's framework.



**Figure (1)**  
**Study's hypothetical framework**

### 3.2.2 Study Model

Based on the previous studies, the current study uses the following regression model to examine the relationship between the independent variables and the dependent variable (number of KAMs in auditors' reports). The equation is as follows:

$$\text{KAMs} = \beta_0 + \beta_1 \text{Size}_{i,t} + \beta_2 \text{Leverage}_{i,t} + \beta_3 \text{ROA}_{i,t} + \beta_4 \text{indebt}_{i,t} + \beta_5 \text{Fees}_{i,t} + \beta_6 \text{big four}_{i,t} + \beta_7 \text{Modif}_{i,t}$$

### 3.2.3 Study Variables

#### Dependent Variable

KAMs: Key Audit Matters disclosed in the audit report.

#### Independent Variables

Size: natural logarithm of total assets.

Leverage: total debt divided by total equity.

Profitability: company's ability to generate profit from assets employed. It is equal to net earnings divided by total assets (Rahman et al., 2019), (ROA) (in JD).

Indebt: measured as the ratio between total liabilities and total assets.

Fees: natural logarithm of audit fees (in JD).

Audit firm: a dummy variable, when the audit company is one of the big four (Deloitte, EY, KPMG, Price Waterhouse Coopers), its value is one, otherwise it is 0.

Modif.: when the company has a qualified opinion, an adverse opinion or a disclaimer of opinion on its audit report (Omer et al., 2020), this variable takes the value of one, otherwise it is 0.

### 3.3 Methodology

To measure the level of KAM disclosure in Jordanian companies listed in ASE during the period 2017-2019 and to examine variables that may impact the level of KAM disclosure, a sample of 324 annual audit reports was examined. Companies with no annual reports during 2017-2019 are excluded. Using ordinary least squares (OLS) regression, the model of the study is tested. It should be noted that data was recruited *via* the electronic ASE site. Table 1 shows the number of companies in each sector. Table 2 portrays a summary of KAMs by sector.

**Table 1**  
**Numbers of companies' financial reports analyzed by sector\***

Industry	Manufacturing	Real Estate	Service	Total
Number of companies	52	25	31	108

\* The main classification currently used by the ASE.

Results in Table 2 reveal that accounts' receivables represent the highest ratio with a total of 15.82% of KAMs reported in the annual audit reports of the sampled companies, followed by provisions with a percentage of 14%, then revenues with 14 % and inventories with 12%. No company in any sector disclosed loan issues. Nearly 50% of total KAMs disclosed were from the manufacturing sector,

followed by the service sector with 30% and the real-estate sector with 20%. In total, there were 512 KAMs reported across 324 audit reports. These results regarding the types of KAMs appear to be similar to those of Özcan (2021), Fayad et al. (2019), Gold et al. (2020) and Suttipun (2020).

**Table 2**  
**Summary of KAMs by sector**

<b>KAM type / sectors (2017-2019)</b>	<b>Manufacturers 52 companies</b>	<b>Services 25 companies</b>	<b>Real Estate 31 companies</b>	<b>Total</b>	<b>KAM Percentage</b>
Provisions	35	31	6	72	14.00%
Revenue Recognition	28	32	10	70	14.00%
Inventories	51	7	2	60	12.00%
Accounts' Receivables	52	21	8	81	15.82%
Investment Evaluation	21	9	15	45	8.80%
PPE	25	17	10	52	10.20%
Good Will	11	5	1	17	3.40%
Fair Value Measurement	8	2	3	13	2.55%
Income Taxes	2	2	0	4	0%
Leases	2	8	2	12	2%
Loans	0	0	0	0	0%
Projects under Construction	2	7	9	18	4%
Biological Assets	5	0	0	5	1%
Investment Property	2	6	30	38	7.50%
Contingent Liabilities and Assets	3	2	4	9	1.80%
Sales	1	0	1	2	0%
IT System	0	0	1	1	0%
Financial Instruments	3	0	0	3	1%
Non-current Assets Held for Sale	4	2	2	8	2%
Others	2	0	0	2	0%
Total	257	151	104	512	100%
KAM% per Industry	50%	30%	20%	100%	

## 4. Results and Discussion

### 4.1 Descriptive Statistics

To explore the level of KAM disclosure in the annual audit reports of a sample of 108 companies listed in ASE, the mean, median, maximum and minimum values, together with the standard deviation, are presented for the dependent variable, KAM, in Table 3. The total number of reported dependent variables reveals 512 KAMs. The average reporting was 1.58 KAMs for each company, with a maximum value of 6 KAMs, a minimum value of 0 KAMs and a standard deviation of 1.847. Among those, provisions,

revenue recognition, inventories and accounts' receivables were the most common issues disclosed. Comparing the mean of disclosure in Jordan with those of other countries, Brazil 2.4, the United Kingdom 4.1 and France 2 (Ferreira & Morais, 2020), we can see that the level of KAM disclosure in Jordanian companies is practically low. Such results are consistent with the result of Fayad et al. (2019) and Abdullatif & Al Rahahleh (2020) who suggested that the level of KAM disclosure in Jordan is small. This low average of disclosure is ascribed to low

compliance with ISA in Jordan, as well as lower demand for high-quality audits and a weak legal system that does not penalize auditors for substandard compliance.

**Table 3**  
**Descriptive statistics for the dependent variable**  
**(key audit matters (KAMs))**

	<b>KAM</b>
Mean	1.58
Median	1
Maximum	6.00
Minimum	0.00
Std. Dev.	1.847
Skewness	0.957
Kurtosis	4.4368
Jarque-Bera	103.1659
Probability	0.000
Sum	512
Sum Sq. Dev.	506
Observations	324

Table 4 summarizes the descriptive statistics of

independent variables. The mean, median, maximum and minimum values and standard deviation are presented for all independent variables. The average size of companies reached JD 100 million and varied from JD 31 million to 144 million with a standard deviation of JD 2.31 million. The financial leverage variable, which measured the ability to use debt, has an acceptable level of leverage with a mean of 1.21. Concerning the companies' performance gauge, the return on assets (ROA) has a minimum value of -61.34, a maximum value of 40.70 and a mean value of -0.027, which indicates that the ROA is not positive. That is, the companies considered do not have the power to produce profit related to their assets. Moreover, the indebtedness variable has a mean value of 36.34, which indicates that companies might not fund their assets by their liabilities. The fees ranged from JD 800 to DJ 81,200 with a mean of JD 8,700 (see Table 4). The mean of the big-four variable was 47.22, which implies that a big-four firm has audited less than a half of the companies in the ASE. Finally, a total of 15.5% of Jordanian companies have disclosed their modified opinion.

**Table 4**  
**Descriptive statistics for the independent variables**

	<b>Size</b>	<b>Leverage</b>	<b>ROA</b>	<b>Fees</b>	<b>Indebt</b>	<b>Big-four</b>	<b>Modif.</b>
Mean	1.00	1.2106	-0.027	12824.	0.3624	0.4722	0.1550
Median	0.314	0.4100	0.93	8700.0	0.3000	0.0000	0.0000
Maximum	1.44	26.110	40.70	81200.	0.9700	1.0000	1.0000
Minimum	0.410	0.0000	-61.34	800.00	0.0000	0.0000	0.0000
Std. Dev.	2.31	2.8089	9.76	12143.	0.2439	0.4998	0.3624
Skewness	3.84	5.9559	-1.125	3.4560	0.6645	0.1112	1.9056
Kurtosis	17.76	44.096	11.198	17.388	2.5203	1.0123	4.6313
Jarque-Bera	49.85	32954	1301.0	4575.9	35.939	72.002	309.35
Probability	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Sum	4.33	523.010	-12.00	55275	156.59	204.00	67.000
Sum Sq. Dev.	2.27	3400.6	41059	6.34	25.655	107.6	56.608
Observations	324	324	324	324	324	324	324

#### 4.2. Correlation Results

Table 5 presents the Pearson correlation matrix for the dependent and independent variables. Most of the variables correlated positively with KAM, except for two variables including ROA and modified opinion. The VIF (variance inflation factor) that has a value of 3.062 indicates that multi-

collinearity does not exist in the study, since the VIF value is less than 10. Although the values of correlations are significant, the values are not strong enough to cause multi-collinearity problems in this study (see Table 5).

**Table 5**  
**Pearson correlation analysis**

Variable	KAM	FEES	INDEBT	BIG-4	LEV	MODIF.	ROA	SIZE
KAM	1.000*							
FEES	0.443*	1.000						
INDEBT	0.346*	0.243*	1.000					
BIG-FOUR	0.320*	0.280*	0.273*	1.000				
LEVERAGE	0.263*	0.373*	0.571*	0.395*	1.000			
MODIF.	-0.211*	-0.226*	0.290*	0.323*	0.281*	1.000		
ROA	-0.250*	0.136*	-0.231	0.169*	-0.151*	-0.358	1.000	
SIZE	0.392*	0.632*	0.325*	0.328*	0.243*	0.281*	0.412*	1.000

\* Correlation is significant at the 0.05 level (two-tailed), Variance inflation factors (VIF) =3.062.

#### 4.3 Regression Results

Table 6 shows the results of the ordinary least squares regression analysis; the coefficient, the std. error, the (t) statistic of each of the variables, with adjusted  $R^2$  and F-statistic. Adjusted  $R^2$  for the model is 0.640, which indicates that the independent variables explain a high portion of the level of disclosure of KAMs. The probability of F-value points to the study model's goodness of fit.

Results show a positive impact of corporate size on KAM disclosure ( $\beta_1 = 0.358$ ). Audit reports of large companies tend to disclose more KAMS than smaller companies. These results may be attributed to the notion that large companies often face agency problems; the disclosure of more KAMS serves as a valuable mechanism that mitigates agency conflicts. Furthermore, large companies normally have advanced complex works which need more effort from auditors, resulting in more KAMs. The results of the study coincide with the results of Pinto (2018), Velte (2019), Suttipun (2020), Lennox et al. (2022) and Özcan (2021).

Regarding the leverage and indebtedness variables, positive and significant coefficients ( $\beta_2 = 0.437$ ,  $\beta_4 = 0.460$ , respectively) were attested, which means that companies with high ratios of debt and leverage have more KAMs. This results in unfavorable financial ratios, more financial problems and risks. In this case, shareholders and investors demand, according to the agency theory, more information or KAMs in the audit reports. Such results are consistent with those of Ferreira & Moraes (2020).

As the research hypothesized, the study supposed that companies with greater fees present more KAMs. Fees show a positive and significant coefficient ( $\beta_5 = 0.443$ ), which means that an audit company with high fees can reveal more KAMs to keep their reputation. Auditors increase their audit fees, because disclosing more KAMs may cause a higher litigation risk against auditors when misstatements are subsequently revealed (Kitiwong & Sarapaivanich,

2020). This result is consistent with the results of Pinto (2018) and Sierra et al. (2019).

The big-four audit companies may disclose more KAMs in their audit reports, because they are qualified, more experienced and specialized. Table 6 shows that the coefficient of the variable (big-four) is positive ( $\beta_6=0.425$ ) and statistically significant, which suggests that these audit firms recognize more KAMs. This result can be explained by that big-four firms disclose more KAMs in their reports to show their experience, professional ability and compliance with IAS 701. Another explanation for this finding may be that big-four auditors tend to perform less conservatively in their auditing procedures. Such results are in conformity with the spirit of the agency theory. Furthermore, the results are consistent with the studies of Pinto (2018), Velte (2018), Sierra et al. (2019), Ferreira & Morais (2020), Choi et al. (2019) and Abdullatif & Al Rahahleh (2020), who found that firms audited by big-four companies report more KAMs than those audited by non-big-four firms. However, the results are inconsistent with the findings of Bédard et al. (2014), Gutierrez et al. (2016) and Özcan (2021), who found that big-four audit companies disclosed less KAMs, because they need to enhance their reputation, gain credibility, avoid possible litigation costs and carry out more conservative auditing procedures. Based on the above results, H1, H2, H4, H5 and H6 are all accepted.

Moreover, since the independent variable ROA has a negative coefficient ( $\beta_3=-0.321$ ), it is implied that ROA has a negative effect on KAMs. Companies with high profitability measured by ROA are not at risk and, therefore, needless work from auditors. Thus, fewer KAMs are

required when compared to companies with less or low ROA. The results of the current study are consistent with the studies of Pinto (2018), Velte (2019) and Ferreira & Morais (2020), who found a negative impact of ROA on KAMs, but are inconsistent with our expectations and the result of Suttipun (2020) who found a positive relationship between ROA and KAMs. According to the agency theory, when the company declares profit, shareholders will be satisfied and will not demand more information, such as KAMs, to be disclosed. The same result, obtained by Backof et al. (2018), revealed that investors may not consider the additional auditor-risk disclosures to be informative.

Lastly, the results in Table 6 showed a negative coefficient ( $\beta_7=-0.641$ ) for the Modif. variable. To have a modified auditor opinion implies that something is wrong at that moment; auditors have a small margin for negotiating regarding the fulfillment of the international accounting standards (Cipriano, 2017). According to the essence of the agency theory, when the company has a modified auditor's opinion, it should disclose fewer KAMs in the audit report. This means that the modified opinion may obviate the KAM disclosure. This result is consistent with Velte (2019), Ferreira & Morais (2020) and Suttipun (2020), but inconsistent with our expectations and Özcan (2021) who argued that having modified opinions is not necessary to increase the possibility of more KAMs. Based on the last two results, hypotheses H3 and H7 are rejected.

**Table 6**  
**Regression results for the dependent variable (KAM)**

Variable	Coefficient	Std. Error	t-statistic	Prob.
SIZE	0.358	3.14	13.279	0.0011
LEVERAGE	0.437	0.023	11.594	00016
ROA	-0.321	0.005	-3.305	0.0028
INDEBT	0.460	0.28	15.173	0.0000

FEES	0.340	6.06	15.492	0.0000
Big-four	0.425	0.11	12.023	0.0000
MODIF.	- 0.641	0.152	9.271	0.0002
C	0.764	0.115	16.629	0.0000
R-squared	0.654	Mean dependent var.		1.58
Adjusted R-squared	0.640	S.D. dependent var.		1.18
S.E. of regression	0.567	Akaike info criterion		3.04
Sum squared residue	509.59	Schwarz criterion		3.11
Log likelihood	-647.66	Hannan-Quinn criteria		3.07
F-statistic	11.07	Durbin-Watson stat.		1.88
Prob. (F-statistic)	0.000			

## 5. Conclusion

This study aims to identify the volume of KAM disclosure for Jordanian companies and examine the factors that influence this disclosure. An average of 1.58 KAM disclosure was obtained by each company yearly, which is considered a low KAM number. The study uses data from the ASE's website to stratify the regression model and generate descriptive statistics. Data related to the year 2020 was excluded from the study because of the Covid-19 pandemic and its expected effect on the financial statements. The results, on the first hand, as expected, divulge a positive relationship between KAM disclosure and size, leverage, indebtedness, fees and the big-four audit firms. On the other hand, a negative relationship between profitability and modified opinion has been attested. This study tries to enhance knowledge about Key Audit Matters in the existing audit reports by examining the association with determinant characteristics for the disclosure of KAMs. It is vital to

emphasize that the study focuses on the latest period (2017-2019) and it encompasses different determinants of KAM disclosure from previous studies. As with any study, the main limitation is concerned with the sample, which excluded the financial-sector companies. Furthermore, this study only used data covering 3 years and did not cover the year 2020. Future studies could consider and test other variables, such as corporate governance, audit rotation, liquidity, ownership and gender affecting KAM disclosure. Having obtained a greater awareness concerning KAM disclosure for that time period, it is expected that the practice of disclosing KAMs in Jordan will be increased. This will not only be a matter of formal compliance, but companies may also react in a different way after becoming familiar with the new reporting form.

## 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.S. 2020. Applying a New Audit Regulation: Reporting Key Audit Matters in Jordan. *International Journal of Auditing*, 24 (2): 268-291.
- Abdullatif, M., Alhadab, M., & Mansour, I. 2019. Determinants of Related Party Transactions in Jordan: Financial and Governance Factors. *Australasian Accounting, Business and Finance Journal*, 713 (1): 44-75. <https://doi.org/10.14453/aabfj.v13i1.4>
- Al-Dhuneibat, A., Abbadi I., Nufal, M., & Abdul-

- Raheem, B. 2008. Analytical Study of the Opinions of CPAs and Financial Managers of the Shareholding Companies in Jordan about the Modifications of International Auditing Standard No. 700. *Jordan Journal of Administrative Sciences*, 4 (3): 311-331.
- Alduneibat, K. 2019. Impact of Amendments of the Certified Public Accountants' Report According to ISA 700 on Narrowing the Expectations Gap and Improving the Communication of the Audit Result to the Users of Financial Statements: Evidence from Jordan. *The Jordan Journal of Business Administration*, 15 (3): 285-309. <https://doi.org/10.35516/0338-015-003-002>
- Almulla, M., & Bradbury, M.E. 2018. Auditor, Client and Investor Consequences of the Enhanced Auditor's Report. Working paper. Retrieved from: <file:///C:/Users/Admin/Downloads/SSRN-id3165267.pdf>. <https://doi.org/10.2139/ssrn.3165267>
- Alqam, M.A., Hamshari, Y.M., & Ali, H.Y. 2021. The Mediating Effects of Key Audit Matters on the Relationship between Audit Quality and Earnings Management: Evidence from Jordan. *Humanities and Social Sciences Letters*, 9 (4): 403-416.
- Alzoubi, E.S.S. 2016. Audit Quality and Earnings Management: Evidence from Jordan. *Journal of Applied Accounting Research*, 17 (2): 170-189.
- Andreicovici, I., Jeny, A., & Lui, D. 2020. *Do Firms Respond to Auditors' Red Flags? Evidence from the Expanded Audit Report* (June 24, 2020).
- Association of Chartered Certified Accountants (ACCA). 2018. *Key Audit Matters: Unlocking the Secrets of the Audit*. Available at: <https://www.accaglobal.com/gb/en/professional-insights/global-profession/key-audit-matters.html>.
- Backof, A.G., Bowlin, K., & Goodson, B.M. 2018. *The Importance of Clarification of Auditors' Responsibilities under the New Audit Reporting Standards*. Working Paper. <http://dx.doi.org/10.2139/ssrn.2446057>
- Bédard, J., Gonthier-Besacier, N., & Schatt, A. 2019. Consequences of Expanded Audit Reports: Evidence from the Justifications of Assessments in France. *Auditing: A Journal of Practice and Theory*, 38 (3): 23-45. <http://dx.doi.org/10.2308/ajpt-52339>
- Boolaky, P. K., & Quick, R. 2016. Bank Directors' Perceptions of Expanded Auditors' Reports. *International Journal of Auditing*, 20 (2): 158-174. <https://doi.org/10.1111/ijau.12063>
- Boonyanet, W., & Promsen, W. 2018. Key Audit Matters: Just Little Informative Value to Investors in Emerging Markets? *Chulalongkorn Business Review*, 41 (1): 153-183.
- Carrington, T., & Johed, G. 2014. How the Business Press Stabilizes and Destabilizes Notions of Audit Failure: Organizations and the Media. *Organizing in a Mediatized World*, 30: 116. doi:10.4324/9780203068052-18
- Choi, J.H., Cho, K., & Park, S.H. 2019. The Effects of the Disclosure of Key Audit Matters on Audit Efforts and Audit Fees: Moderating Effects of Bargaining Power, Auditor Tenure and Auditor Size. *Korean Accounting Review*, 44 (6): 191-229. doi:10.24056/kar.2019.09.007
- 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>
- Church, B.K., Davis, S.M., & McCracken, S.A. 2008. The Auditor's Reporting Model: A Literature Overview and Research Synthesis. *Accounting Horizons*, 22 (1): 69-90. <https://doi.org/10.2308/acch.2008.22.1.69>
- Cipriano, M., Hamilton, E.L., & Vandervelde, S.D. 2017. Has the Lack of Use of the Qualified Audit Opinion Turned It into the "Rotten Kid" Threat? *Critical Perspectives on Accounting*, 47: 26-38. <https://doi.org/10.1016/j.cpa.2016.10.001>
- Dogan Bozan, B., & Arefaine, B. 2017. *The Implementation of ISA 701-Key Audit Matters: Empirical Evidence on Auditor Adjustments in the*



- New Audit Report*. <https://www.diva-portal.org/smash/get/diva2:1134640>.
- Fayad Altawalbeh, M.A., & Alhajaya, M.E.S. 2019. The Investors' Reaction to the Disclosure of Key Audit Matters: Empirical Evidence from Jordan. *International Business Research*, 12 (3): 50. doi:10.5539/ibr.v12n3p50
- Ferreira, C., & Morais, A. I. 2020. Analysis of the Relationship between Company Characteristics and Key Audit Matters Disclosed. *Revista Contabilidade & Finanças*, 31 (83): 262-284. doi:10.1590/1808-057x201909040
- Gold, A., & Heilmann, M. 2019. *The Consequences of Disclosing Key Audit Matters (KAMs): A Review of Academic Literature*. 93: 5. <http://doi.org/10.5117/mab.93.29496>
- Gold, A., Heilmann, M., Pott, C., & Rematzki, J. 2020. Do Key Audit Matters Impact Financial Reporting Behavior? *International Journal of Auditing*, 24 (2): 232-244. doi:full/10.1111/ijau.12190
- Gutierrez, E., Minutti-Meza, M., Tatum, K.W., & Vulcheva, M. 2018. Consequences of Adopting an Expanded Auditor's Report in the United Kingdom. *Review of Accounting Studies*, 23 (4): 1543-1558. doi:10.1007/s11142-018-9464-0
- Hayes, A. 2013. *Introduction to Mediation, Moderation and Conditional Process Analysis: A Regression-based Approach*. New York, NY: The Guilford Press.
- Hopper, T., Lassou, P., & Soobaroyen, T. 2017. Globalization, Accounting and Developing Countries. *Critical Perspectives on Accounting*, 43: 125-148. <https://doi.org/10.1016/j.cpa.2016.06.003>
- IAASB. 2012. *Improving the Auditor's Report*. New York: International Federation of Accountants.
- IAASB. 2015. *Auditor Reporting-Key Audit Matters*. IFAC. Available at: <http://www.ifac.org/sites/default/files/publications/files/Auditor-ReportingToolkitKAMOverview.pdf>.
- Intagool, W., Sampet, J., & Suwanmongkol, W. 2020. Communication Value of Key Audit Matters in Auditor's Report of Companies in Services Industry Listed in the Stock Exchange of Thailand. *Business Review Journal*, 12 (1): 69-83. Retrieved from: <https://so01.tci-thaijo.org/index.php/bahcuojs/article/view/169693>
- Ireland, J. 2003. An Empirical Investigation of Determinants of Audit Reports in the UK. *Journal of Business Finance & Accounting*, 30 (7-8): 975-1016. doi:10.1111/1468-5957.05417
- Ishak, Z., & Abidin, S. 2021. Audit Fees' Determinants: A Study on the Impact of Key Audit Matters Reporting and Other Factors. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12 (3): 1695-1704. doi:10.17762/turcomat.v12i3.993
- Iwanowicz, B. 2019. Key Audit Matters in Audit Reports of Selected Public Interest Entities. *Zeszyty Teoretyczne Rachunkowości*, 105 (161): 9-16. doi:10.5604/01.3001.0013.6052
- Jensen, M.C., & W.H. Meckling. 1976. Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3 (4): 305-360.
- 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*, Forthcoming. <https://doi.org/10.1111/1911-3846.12583>
- Khadash, H., Alzowai I., & Nassar, M. 2011. The Effect of ISA 700 (Revised) "The Independent Auditor's Report on Narrowing the Audit Expectations Gap": An Empirical Investigation from the Perspectives of Auditors, Preparers of Financial Statements, Investors and Academicians. *Jordan Journal of Administrative Sciences*, 7 (4): 594-624.
- 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. doi:10.1108/maj-09-2019-2410
- Köhler, A., Ratzinger-Sakel, N., & Theis, J. 2020. The

- Effects of Key Audit Matters on the Auditor's Report's Communicative Value: Experimental Evidence from Investment Professionals and Non-professional Investors. *Accounting in Europe*, 17 (2): 105-128. doi:10.1080/17449480.2020.1726420.
- KPMG. 2019. *Key Audit Matters-Auditor's Report Snapshot*. Available at: <https://assets.kpmg/content/dam/kpmg/1k/pdf/key-audit-matters-aug-2019.pdf>
- Lary, A.M., & Taylor, D.W. 2012. Governance Characteristics and Role Effectiveness of Audit Committees. *Managerial Auditing Journal*, 27 (4): 336-354. doi:10.1108/02686901211217969.
- Lennox, C.S., Schmidt, J., & Thompson, A. 2017. *Is the Expanded Model of Audit Reporting Informative to Investors: Evidence from the UK*. doi:10.2139/ssrn.2619785
- Lennox, C.S., Schmidt, J.J., & Thompson, A.M. 2022. Why Are Expanded Audit Reports Not Informative to Investors? Evidence from the United Kingdom. *Review of Accounting Studies*, 1-36.
- Li, L., Qi, B., Tian, G., & Zhang, G. 2017. The Contagion Effect of Low-quality Audits at the Level of Individual Auditors. *The Accounting Review*, 92 (1): 137-163. doi:10.2308/accr-51407
- Liao, L., Minutti-Meza, M., Zhang, Y., & Zou, Y. 2019. Consequences of the Adoption of the Expanded Auditor's Report: Evidence from Hong Kong. *SSRN Electronic Journal*. doi:10.2139/ssrn.3392449
- Omer, W.K.H., Aljaaidi, K.S., & Yusof, M.A.M. 2020. Effectiveness Score of the Board of Directors and Modified Audit Opinion: Empirical Evidence from Malaysian Publicly-listed Companies. *The Journal of Asian Finance, Economics and Business*, 7 (8): 289-296. doi:10.13106/jafeb.2020.vol7.no8.289
- Orquin, J.L., & Loose, S.M. 2013. Attention and Choice: A Review on Eye Movements in Decision-making. *Acta Psychologica*, 144 (1): 190-206. doi:10.1016/j.actpsy.2013.06.003
- Ousubcharoenchai, T. 2005. *The Relationship between Earning Quality and Auditor's Report*. Master Thesis of Accountancy Program, Chulalongkorn University, Bangkok.
- Özcan, A. 2021. *What Factors Affect the Disclosure of Key Audit Matters? Evidence from Manufacturing Firms Listed in Borsa Istanbul for the Accounting Period of 2019*.
- 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. doi:10.1111/jifm.12095
- Pratoomsuwan, T., & Yolrabil, O. 2018. The Key Audit Matter (KAM) Practices: The Review of First-year Experience in Thailand. *Nida Business Journal*, 23 (2): 63-91. doi:10.1108/jaar-10-2019-0147
- Pratoomsuwan, T., & Yolrabil, O. 2020. Key Audit Matters and Auditor Liability: Evidence from Auditor Evaluators in Thailand. *Journal of Applied Accounting Research*, 21 (2).
- Public Company Accounting Oversight Board (PCAOB). 2017. *The Auditor's Report on an Audit of Financial Statements When the Auditor Expresses an Unqualified Opinion and Related Amendments to (PCAOB) Standards*. Washington. <https://pcaobus.org/Rulemaking/Docket034/2017-001-auditors-report-final-rule.pdf>
- Rahman, M.M., Meah, M.R., & Chaudhory, N.U. 2019. The Impact of Audit Characteristics on Firm Performance: An Empirical Study from an Emerging Economy. *The Journal of Asian Finance, Economics and Business*, 6 (1): 59-69. doi:10.13106/jafeb.2019.vol6.no1.59
- Reid, C., Carcello, J., Li, C., & Neal, T.L. 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. doi:10.1111/1911-3846.12486
- Reynolds, J.K., & Francis, J.R. 2000. Does Size Matter?

- The Influence of Large Clients on Office-level Auditor Reporting Decisions. *Journal of Accounting and Economics*, 30 (3): 375-400.
- Saeed, A. 2020. **Key Audit Matters**. Available at: <https://www.concepttips.com/key-audit-matters>.
- Segal, M. 2017. ISA 701: Key Audit Matters – An Exploration of the Rationale and Possible Unintended Consequences in South Africa. *Journal of Economic and Financial Sciences*, 10: 376-391.
- Segal, M. 2019. Key Audit Matters: Insight from Audit Experts. *Meditari Accountancy Research*, 27: 472-494. <https://doi.org/10.1108/MEDAR-06-2018-0355>
- Shamsuddin, A. 2020. *Impact of Key Audit Matters (KAMs) Disclosure on Audit Quality: Malaysian Perspective*. doi:10.15405/epsbs.2020.12.05.8
- 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. doi: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>
- Srijunpetch, S. 2017. Key Audit Matters in an Auditor's Report and Response of the Stock Exchange of Thailand. *Journal of Accounting Profession*, 13 (38): 22-37.
- Suttipun, M. 2020. Factors Influencing Key Audit Matters Reporting in Thailand. *Asian Journal of Accounting Perspectives*, 13 (1): 26-39. doi:10.22452/ajap.vol13.no1.2
- Suttipun, M., & Swatdikun, T. 2021. KAMs Reporting and Financial Performance: Empirical Evidence from Thai Listed Companies. *The Journal of Asian Finance, Economics and Business*, 8 (4): 841-848. <https://doi.org/10.13106/jafeb.2021.vol8.no4.0841>
- Velte, P. 2019. Associations between the Financial and Industry Expertise of Audit Committee Members and Key Audit Matters within Related Audit Reports. *Journal of Applied Accounting Research*, 21 (1): 185-200. doi:10.1108/jaar-10-2018-0163
- Woudenberg, J., van der Hel–van Dijk, L., & Kamerling, R. 2021. Auditor's Reporting in the Dutch Market of Public Interest Entities: Exploring New Developments in a Diverse Market. *Accounting in Europe*, 1-25. doi: 10.1080/17449480.2021.1912371
- Ye, P., Carson, E., & Simnett, R. 2011. Threats to Auditor Independence: The Impact of Relationship and Economic Bonds. *Auditing: A Journal of Practice & Theory*, 30 (1): 121-148. doi:10.2308/aud.2011.30.1.121
- 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.