Alexandria Journal of Accounting Research
Issued by the Accounting Department, Second Issue, May, 2024, Vol. 8

Does KAMs Disclosure Affect Trade Credit Decision? Evidence from Egypt

Dr. Rasha Mohamed El-Haddad
School of Business Administration, Ahram Canadian University
rasha.elhaddad@acu.edu.eg

Prof. Khaled Hussainey
Bangor Business School
Bangor University
k.hussainey@bangor.ac.uk

Abstract

This study aims to provide evidence on the effect of disclosing Key Audit Matters (KAMs) in the new audit report on the trade credit in Egypt. It investigates the association between KAMs disclosed by auditors and the trade credit decisions. A sample of Egyptian listed non-financial firms was used, and data were collected from their annual financial reports during 2018-2021 to be analyzed. Regression analysis was carried out to test the hypotheses. The results suggest that KAMs disclosure in the new audit report will affect the trade credit decisions. A significant positive effect of disclosed KAMs on trade credit offered to customers has been found. Also, the authors found that KAMs disclosure positively affect trade credit received from suppliers.

This paper provides empirical evidence of the impact of KAMs disclosure on trade credits decision. There is no study that has yet examined the association between disclosed KAMs in new audit report and trade credit offered and received.

Keywords: Trade credit, Key Audit Matters, Audit report, Emerging economies, Egypt.

Paper type: Research paper

Received on 26/5/2024, accepted on 1/7/2024.

هل الإفصاح عن أمور المراجعة الأساسية يؤثر على قرار الائتمان التجاري؟ دليل من مصر

ملخص البحث

تهدف هذه الدراسة الى تقديم دليل على تأثير الإفصاح عن أمور المراجعة الأساسية في تقرير المراجعة الجديد على الائتمان التجاري في مصر. كما تقوم بدراسة الارتباط بين أمور المراجعة الأساسية التي يفصح عنها المراجع وقرارات الائتمان التجاري. وقد تم الاعتماد على عينة من شركات مصرية غير مالية مسجلة في البورصة لتجميع البيانات من التقارير المالية السنوية لتلك الشركات خلال الفترة من 2018 حتى 2021 لتحليلها. وقد تم تطبيق أسلوب تحليل الانحدار لاختبار الفروض.

تقترح نتائج البحث وجود تأثير للإفصاح عن أمور المراجعة الأساسية على قرارات الائتمان التجاري وقد وجد تأثير إيجابي قوي لأمور المراجعة الأساسية المفصح عنها على الائتمان التجاري الممنوح للعملاء. كذلك وجد الباحثون ان الإفصاح عن أمور المراجعة الأساسية يؤثر إيجابيا على الائتمان التجاري الممنوح من الموردين. هذه الدراسة تقدم دليل عملي على تأثير الإفصاح عن أمور المراجعة الأساسية على قرارات الائتمان التجاري. لا يوجد دراسة حتى الآن تختبر الارتباط بين أمور المراجعة الأساسية المفصح عنها في تقرير المراجعة الجديد والائتمان التجاري الممنوح والمستلم.

الكلمات المفتاحية: الائتمان التجاري، أمور المراجعة الأساسية، تقرير المراجعة، الاقتصادات الناشئة، مصر.

1. Introduction

In the last few years, the rapid development in financial markets increased around the world due to investment trends and investors incentives. The common sources of financing used in organizations are debt financing and trade credit. Trade credit in various businesses has a significant impact on investments. Nowadays, making decisions regarding trade credit has become an important matter that requires attention and investigation. Factors that affect offered and received trade credit have been introduced in contemporary research. At the same time, the development was accompanied by enormous demand for valid and reliable information to be used by users in making decisions. Investors are concerned about the information disclosed in financial reports (Garanina, 2023). In addition, trade credit financing decisions in organizations depend on information. Audit reports are important tools to deliver information to financial statement users. So, audit firms examined the information reliability through the audit report (Vaziri and Azadi, 2017) to improve users' confidence.

Financial and economic crises affected public confidence in the accuracy of financial statements (Bédard *et al.*, 2014). The consequences of the global crisis in 2008 and financial scandals such as Enron led to criticizing the audit profession. As a result, users demanded auditors to communicate any problems early in their report. Theoretically and practically, the traditional disclosure method could not satisfy increased information demand of investors (PCAOB, 2016). The conventional auditor's report provides minimum information which may result in wrong decisions and reduced investors' confidence (Asare and Wright, 2012). Prior research found a gap between the required information by users and what is available through a company's audited financial statements and the auditor's report (Gold and Heilmann, 2019). To cope with issues related to the information asymmetry International Auditing and Assurance Standards Board (IAASB) issued a new standard to disclose KAMs in the audit report starting from December 2016.

The amendments to audit reports occurred after the global financial crises to prevent a new crisis from taking place (Matta and Feghali, 2020).

Investors and suppliers may find it hard to obtain important information for their financial analysis. Suppliers request the businesses to present reliable information to allow them to continue receiving finance. Audit reports should satisfy the needs of users to enhance their confidence in the information disclosed. Nowadays, the disclosure of important matters in audit reports has become necessary and a requirement by many parties. It is expected that KAMs disclosure will satisfy suppliers, which, in turn, will affect the trade credit.

Previous research documented factors such as firm characteristics, corporate governance, and disclosure quality that may influence trade credit decisions (Shi, 2022; Wang and Li, 2022; Xiu *et al.*, 2021; Wang *et al.*, 2020). Although the importance of trade credit, there are few studies that explored the consequences of disclosing matters and corporate voluntary disclosure on trade credit (e.g., Haj-Salem and Hussainey, 2021; Ceustermans *et al.*, 2017). Thus, the effect of disclosing KAMs in new audit report on trade credit can be considered as a new research area that still needs more discussion in academic research.

On the other side, prior literature focused on the KAMs disclosure in new audit report and its implications on auditing profession (Gold and Heilmann, 2019; Ascenso and Pais, 2021). Another research examined the role of KAMs disclosure in enhancing the audit quality (Reid *et al.*, 2019; Hegazy *et al.*, 2022). Limited studies focus on the impact of risk disclosure on the trade credit (Haj-Salem and Husssainey, 2021). No research discussed disclosing KAMs effect, as a recent requirement in the audit report, on the trade credit decisions. Thus, our paper aims to address this research gap by examining the influence of KAMs disclosure on trade credit received and offered.

Most developing countries are adopting International Standards on Auditing (ISA) and disclosing KAMs. Egypt as an emerging economy may have different business characteristics, that mostly vary between small

businesses and mid-market enterprises where they are privately owned with limited number of employees to serve limited geographical areas, from those in developed countries and that may need unique standard requirements. This may affect the level of compliance with the international standards and the level of disclosure. In general, businesses, especially small projects, mostly prefer to depend on financing by trade credit. In addition, Small and Medium Enterprises (SMEs) in developing countries like Egypt face challenges to access finance and credit. Current economic conditions such as currency fluctuations and the impact of global crises such as the Covid-19 pandemic influence Egypt's banking sector, which in turn, affect loans and interest rates. So, Egyptian institutions especially small businesses searched for better source of finance and found that trade credit financing is suitable.

Information disclosure reduces information asymmetry and allows users to make better decisions. So, disclosing KAMs may affect supplier's decision to offer trade credit to customers. It is noted that there is an absence of studies that investigate the effect of KAMs disclosure on trade credit in developing countries. The pioneer role of Egypt in the middle east ensures the priority to focus on Egyptian institutions to study the effect of disclosing KAMs on trade credit decisions. Therefore, the lack of research motivates us to explore whether the application of KAMs disclosure affects the trade credit in business institutions.

The aim of the current research is to examine the effect of disclosing KAMs in the new audit report on the trade credit in Egypt. It can be achieved by answering the research question "Does KAMs disclosure in audit report affect the trade credit decision". By answering this question, regulators and academics will be able to identify the effect of disclosing KAMs on supplier's decision to offer trade credit to customers and customer ability to receive trade credit. The importance of answering this question appears in guiding regulators to find the impact of disclosing KAMs on trade credit decisions in Egyptian institutions.

The study contributes to the growing research by exploring the effect of disclosed KAMs on trade credit. It focuses on the KAMs disclosure in audit report and its impact on trade credit. To the best of our knowledge, the first evidence on the effect of KAMs disclosure on trade credit has been offered by current research. The researchers added methodological contribution by examining KAMs disclosure and its impact on trade credit for a sample of Egyptian listed non-financial companies during 2018-2021 to achieve the research objective. 272 firm-year observations have been considered in the analysis and a positive impact of KAMs disclosure on trade credit, in Egyptian listed firms, has been found. The findings may be useful to regulators as they provide a better understanding of the impact of communicating KAMs in the new audit report on suppliers' decisions and trade credit for businesses. The remainder of current research proceeds as follows: the next section presents a background, and third section shows prior literature and formulates research hypotheses. Then, sections 4 and 5 discuss the research methodology and show the results. The last sections conclude results and recommend for future research.

2. Background:Egyptian Context

Small and medium enterprises (SMEs) in Middle East and North Africa (MENA) confront obstacles in accessing finance and credit (Otman, 2021; Dornel *et al.*, 2020). They finance their activities using different ways that have major implications for financial inclusion and private sector development. One of these ways is payment facilities from suppliers and prepayments from clients, known as "trade credit". To improve the competitiveness of private sector and allow SMEs to enhance the level of financial inclusion, MENA countries require better trade credit (Dornel *et al.*, 2020). Egypt, as one of MENA's main countries, has acquired enormous economic characteristics associated with encouraging SMEs development. In general, Egyptian firms tend to be financed through equity capital and short-term loans such as trade credit. Nowadays, the main direction is providing

more attention to trade credit in Egyptian institutions, especially SMEs, to enhance the financial inclusion.

On the other side, Egypt is one of pioneering countries in the MENA region that regulators have adopted international standards. Egypt made great efforts to align corporate financial reporting requirements with the International Accounting Standards (IAS) and to close the compliance gap in both accounting and auditing practices. Consequently, important improvements in Egyptian Auditing Standards as benchmarked against ISA have been achieved.

Although most of Egyptian audit firms still do not disclose KAMs in their audit report, the big 4 and audit firms with international affiliation issue their new audit report including KAMs. So, the new development in ISA and issuing new auditing standard (701) requiring KAMs disclosure in the audit report may need more attention from researchers and regulators. In addition, training arrangements may be required to qualify Egyptian auditors to follow the new standard requirements and issue the new report.

Recent studies investigated the impact of disclosure on trade credit in developed countries. Researchers choose non-financial sector to be examined in the current study because this sector represents a significant part of the economy in Egypt. It is noted that this sector contributed to funding the economic sectors by 40 percent during the past 12 months and played a significant role in providing finance for all sectors and businesses in Egypt (Ascenso and Pais, 2021). The most important source of finance for firms in developing countries like Egypt and many firms, especially young and small, in developed countries is trade credit (Cull *et al.*, 2023). In addition, trade credit is one of the most preferred ways to finance non-financial institutions including industrial and commercial companies due to continuous changes in the interest rates. That will help to improve financial inclusion for the economic development in Egypt.

3. Literature Review and Research Hypotheses

3.1 Literature Review

Investors in their businesses depend on capital and financing from various sources to operate the companies. The most preferred financing source for businesses is trade credit that refers to short-term loans provided by suppliers when firms buy goods (Xu *et al.*, 2020). Also, it is believed that trade credit may help institutions obtaining bank loans because it is considered a good indicator (Andrieu *et al.*, 2018). In addition, trade credit as a widely used source of finance can be considered as an alternative method for firms that have difficulties in obtaining loans from banks.

On the other side, the auditing profession obtained the attention of regulating bodies reflected in continuous reforms to the audit reports during the last decade. Amendments to the audit report were necessary to reduce the information gap between users and auditors. Many reforms have been conducted recently to present the new audit report that discloses KAMs. The disclosure of KAMs can be considered as a recent research topic that gained the attention of academics and regulators around the world. The expected role of KAMs disclosure in reducing information asymmetry may support trade credit decisions.

3.1.1. Determinants of Trade Credit in Emerging Economies

Trade credit is a financing method that can be considered as a form of commercial financing without paying interest in relation to the repayment period. So, it is encouraged globally by regulators as a suitable method for businesses to finance short-term growth. Commercial theories support that using trade credit widely may establish a long-term relationship and enhance the constancy of customers to the firms' products (Cheng and Pike, 2003) and develop their markets by attracting new customers (Van Horen, 2005). Nowadays, most institutions search for better sources to finance their businesses and find that trade credit is a widely used method.

Prior literature explored trade credit financing from the perspectives of demand and supply where from the customer demand aspect, when a business is subject to credit rationing, trade credit is an important alternative financing source for firms (Shi, 2022). On the other side, from the supplier's perspective, trade credit can decrease information asymmetry between suppliers and customers (Cheng and Pike, 2003).

The main factors that affect trade credit are firm characteristics and macroeconomic conditions (Ahmed *et al.*, 2014). They include financial and nonfinancial firm characteristics as firm size and corporate strategy (Chu, 2021). Moreover, information disclosure quality influences trade credit. It has been found that a higher information disclosure quality by firms increases the trade credit where corporate information disclosure can decrease credit risk (Chen *et al.*, 2014).

Consequently, contemporary research discussed the determinants of trade credit involving firm size, profitability, liquidity, inventory turnover and bank accessibility where, Vaidya (2011) assessed the determinants of trade credit in the Indian context as an emerging economy and found that the results are quite different from those for developed countries. Also, Ahmed et al. (2014) examined firm specific variables such as firm size and liquidity and found them significantly related to trade credit. In addition, Yazdinejad and Jokar (2019) explored internal and external factors affecting trade credit in developing countries and found that internal factors such as inventory turnover payable payment period affect the volume of trade credit and external factors such as banks' availability may impact the volume of trade credit. Also, Machokoto *et al.* (2022) documented a decrease in trade credit that is clear for firms in developed nations relative to those in emerging economies.

3.1.2 The Consequences of KAMs Disclosure

Many studies discussed the KAMs disclosure (Gutierrez *et al.*, 2018; Bédard *et al.*, 2019) to assert the importance of disclosing the critical matters to enhance information value and reduce information asymmetry. On 15 January 2015, the IAASB issued a new International Standard on Auditing

(ISA) 701, which relates to disclosing KAMs in audit reports of public entities (Kitiwong and Sarapaivanich, 2020) and became effective for periods ending on or after 15 December 2016 (Gold and Heilmann, 2019).

In Egypt, a translated version of (ISAs) are applied in audit firms which means they follow ISAs requirements for KAMs. However, in practice only the big 4 and some auditing firms with international affiliation disclose KAMs in their audit report (Hegazy *et al.*, 2022). Although the requirements may differ in detail, standard setters and regulators have concluded that it is necessary to disclose additional information about risk-related matters in the audit report (Gold and Heilmann, 2019).

Moreover, various research examined the effects of KAMs disclosure on investor behavior and market reaction and found mixed results (Lennox *et al.*, 2023; Gutierrez *et al.*, 2018; Almulla and Bradbury, 2021). Smith (2023) evidenced that KAMs disclosure enhances investors' readability of the audit report, while Gutierrez *et al.* (2018) found no significant change in investors' reactions and Lennox *et al.* (2023) showed that users found these disclosures not informative.

3.1.3. The Impact of KAMs Disclosure on Trade Credit

Although prior research discussed the determinants of trade credit including information disclosure, no study discussed the effect of KAMs disclosure on trade credit decisions. Shi (2022) suggested that disclosing information by the customers affects the information environment of the suppliers and examined the influence of implementing the industry information disclosure on trade credit financing in China and found that disclosing industry-specific information increases obtaining trade credit. Based on agency and signaling theories and previous related results, it is expected that KAMs disclosure will positively impact the trade credit financing. Despite huge research on the impact of information disclosure on trade credit, still nothing about the influence of disclosing KAMs on trade credit is recognized. To fill the gap, our paper tests whether KAMs disclosure facilitates trade credit decisions.

3.2 Hypotheses Development

3.2.1 Consequences of KAMs Disclosure on Trade Credit Offered

KAMs disclosure in new audit reports may have consequences for users, auditors, and audited organizations. Li (2020) studied the format and quantity of disclosed KAMs and summarized the influence of KAMs disclosure from three aspects: users of financial reports, auditors, and the audited firm.

Fundamental research investigated the effects of KAMs disclosure in the auditor's report. Some studies discussed the effect of disclosing KAMs on the report user (Sirois *et al.*, 2018; Köhler *et al.*, 2020). Almulla and Bradbury (2021) examined the impact of the enhanced auditor's report in New Zealand on audit quality, client disclosures and investors. They found no incremental effect related to the introduction of KAM disclosures and it may lead to information redundancy. On the other side, a study by Matta and Feghali (2020) aimed to explore the impact of KAMs on financial information quality and found that reporting by using KAMs adds value to the audit report, reduces information asymmetry, increases confidence in the audited financial statements and reduces the expectation gap.

There were debates regarding the reform in the audit report and the influence on auditor responsibility and audit quality, where many studies explored the effect of disclosing KAMs on auditor liability and audit fees (Gimbar *et al.*, 2016; Kachelmeier *et al.*, 2017; Sirois *et al.*, 2018; Lennox *et al.*, 2023; Köhler *et al.*, 2020) and found mixed results. Audit practitioners and academics thought that disclosing KAMs will increase auditor liability and audit litigation risk. In contrast, Brasel et al. (2016) provided experimental evidence that KAM disclosures decrease auditor liability judgments. Also, researchers expected that KAMs disclosure will enhance audit quality and increase audit fees (Hegazy *et al.*, 2022) whereas Reid *et al.* (2019) found no evidence of significant changes in audit quality (Rautiainen *et al.*, 2021) or audit costs (Rahaman *et al.*, 2022) when implementing the new report. Furthermore, Al Lawati and Hussainey (2022) explored whether KAMs disclosure affects audit quality and found positive effect. KAMs disclosure also

affects the attitudes of the audited firms and managers' decision making (Bentley *et al.*, 2018; Li, 2020). Bentley *et al.* (2018) tested the effect of KAMs disclosure on managers' decisions and found that KAMs disclosure can formulate strategic managerial responses.

Recently, the importance of trade credit has attracted the attention of academics and regulators. Thus, some studies discussed the factors affecting the trade credit and other studies explored the relationship between the disclosure and trade credit financing (Ceustermans *et al.*, 2017; Haj-Salem and Husssainey, 2021). According to Signaling theory and reducing information asymmetry some studies investigated disclosure to decrease the information asymmetry. Prior literature linked disclosures to trade credit financing as a study by Ceustermans *et al.* (2017) that found a positive relation between voluntary disclosure and the level of trade credit. Also, Haj-Salem and Husssainey (2021) examined the impact of risk disclosure practices on trade credit and hypothesized that risk disclosure may decrease information asymmetry. They found that risk disclosure positively affects trade credit.

Based on previous studies, it is expected that KAMs disclosure will significantly affect the trade credit offered by the institutions to their customers. So, the research hypothesis can be formulated as the following:

H1: There is a positive effect of disclosed KAMs on trade credit offered by the institutions to their customers.

3.2.2 Consequences of KAMs Disclosure on Trade Credit Received

Some studies started investigating the effect of annual report readability and disclosure on trade credit obtained from suppliers (Ceustermans *et al.*, 2017; Xu *et al.*, 2020; Li *et al.*, 2024). Xu *et al.* (2020) evaluated the influence of the readability of annual reports on firms' ability to obtain trade credit from suppliers and indicated that firms with more readable annual reports are likely to benefit from more trade credit received.

Furthermore, prior research suggested that information disclosed by customers influences suppliers' decisions (Li and Wang, 2016; Peng and

Wang, 2018; Chen *et al.*, 2021). It has been evidenced that information disclosure in the capital market is important for suppliers to have information about their customers' operations which enables suppliers to realize the payment ability of their customers (Cheng and Pike, 2003). Chen *et al.* (2014) found that a higher information disclosure quality by firms increases trade credit, indicating that firm information disclosure can help suppliers better evaluate customers' credit risk. Also, Yang et al. (2020) suggested that industry-specific information disclosure can reduce the information asymmetry between customers and suppliers and help suppliers better assess customers' default risk, thereby allowing customers to receive more trade credit from suppliers. Finally, previous studies have found that information disclosure quality impacts customers' access to trade credit (Chen and Wang, 2010; Chen *et al.*, 2014; Wang *et al.*, 2020; Wang and Li, 2022; Xiu *et al.*, 2021).

Based on the agency theory, disclosing KAMs will reduce the information asymmetry, which in turn, may increase the trade credit received from the suppliers. How much trade credit suppliers are willing to offer depends on the credit qualification and the ability of customers to pay in the future. KAMs disclosed is expected to affect the suppliers' decisions, which in turn, directly and significantly affect the trade credit received.

The current research depends on prior literature to estimate that KAMs disclosure in the audit report significantly impacts trade credit financing. Disclosed KAMs are important for the supplier's decision-making and affect the information environment, which in turn, influences the trade credit obtained by the institutions. Thus, the researchers formulated the following hypothesis based on the above expectations:

H2: There is a positive effect of disclosed KAMs on trade credit received from the suppliers.

4. Research Methodology

4.1 Data, Sample, and Variables

The sample involves data from firms listed in Egyptian Stock Exchange (EGX 100) during the period 2018 - 2021. This period has been chosen to be after applying the new auditing standards and issuing the new audit report in 2017. At the same time, the period of spreading Corona-Virus around the world in 2020 and 2021 has been considered to measure if there is any effect of this crisis on the analysis.

Non- financial segment in Egypt is widely seen as underpenetrated. It is thus expected to witness considerable growth due to Egypt's favorable demographics and increased support from Egyptian government. So, trade credit financing is widely used in most commercial and industrial sectors in Egypt. As a result, the non- financial sector was selected, while financial institutions were excluded from the sample. The researchers gathered data from firms' annual financial reports and audit reports published on the 'Mubasher' website, for KAMs and financial variables.

The data were collected from firms registered in Egyptian Stock Exchange, where the sample exemplifies 83 non-financial firms in different sectors: Food & Tobacco, Real Estate and construction and tourism, primary resources, Industrial products, cars, textiles and pharm, shipping, telecommunication, technology, media, and educational services, Building and packaging material, Energy, supportive and financial services. The researchers excluded 15 firms due to incomplete data. The final sample is 68 non-financial firms that includes a total of 272 firm-year observations.

Table 1: Sample selection

Industry	Number of Firms	Observations
Food and Tobacco	9	36
Real Estate and construction and tourism	19	76
primary resources	7	28
Industrial products, cars, textiles and pharm	12	48
Shipping	4	16
telecommunication, technology, media, and educational services	5	20
Building and packaging material	5	20
Energy, supportive and financial services	7	28
Total	83	332
less: Incomplete Data	(15)	(60)
Final sample	68	272

As shown in table (1), the Real Estate, Construction and Tourism sector represents 19 firms of the total sample which is considered as the largest sector and the industrial products, cars, textiles and pharm sector comes after to present 12 firms. Also, Food and Tobacco represents 9 firms, and the primary resources sector includes 7 firms. In addition, both the telecommunication and building sectors represent 5 firms, while the Shipping sector can be considered as the smallest one representing 4 firms. Finally, the number of firms after excluding firms with incomplete data is 68 firms with 272 observations, which represents the final sample of the study.

4.2 Variables and Measurements: Regression Models

Regression analysis was conducted to test hypotheses 1 and 2.

4.2.1 The Independent Variable for Models 1 and 2: Measure of KAMs Disclosure

The number of disclosed KAMs has been collected manually to measure the independent variable KAMs (Mah'd & Mardini, 2022). "ISA 701: Communicating Key Audit Matters in the Independent Auditor's Report." obligates the auditors to disclose the KAMs in the new audit report.

4.2.2 The Dependent Variable for Model 1: Trade Credit Offered (TCO)

Model (1) was used to test the effect of KAMs disclosed on TCO:

$$\hat{y}_1 = \hat{B}_0 + \hat{B}_1x_1 + \hat{B}_2x_2 + \hat{B}_3x_3 + \hat{B}_4x_4 + \hat{B}_5x_5 + \hat{B}_6x_6 + \hat{B}_7x_7 + \hat{B}_8x_8 + \hat{B}_9x_9 + \hat{B}_{10}x_{10} + \hat{B}_{11}x_{11} + \hat{B}_{12}x_{12} + \hat{B}_{13}x_{13} + \hat{B}_{14}x_{14} + \hat{B}_{15}x_{15} + \hat{B}_{16}x_{16} + \hat{B}_{17}x_{17}$$

$\hat{y}_1$: trade credit offered (TCO)

x_1: KAMs

x_2: firm leverage [LEV]

x_3: firm size [AS]

x_4:Liquidity [LIQ]

x_5: profitability [ROA]

x_6: Food and Tobaco

x_7: Real estate, Construction and Tourism

x_8: Primary Resources

x_9: Industrial products, cars, textiles and pharm

x_{10}: Shipping

x_{11}: Telecommunication, technology, media and educational services

x_{12}: Building and packaging material

x_{13}: Energy, supportive and financial services

x_{14}: year 2018

x_{15}: year 2019

x_{16}: year 2020 (Covid − 19) pandemic

x_{17}: year2021

Where $\hat{y}_1$ refers to trade credit offered from the firm to the customer and x 1 refers to the number of KAMs disclosed. According to prior research, the trade credit offered was computed by various methods, one of them is dividing accounts receivable by the total assets (e.g., Ahmed *et al.*, 2014).

4.2.3 The Dependent Variable for Model 2: Trade Credit Received (TCR)

The following model was applied to examine the impact of KAMs disclosed on TCR:

$$\hat{y}_2 = \hat{B}_0 + \hat{B}_1 x_1 + \hat{B}_2 x_2 + \hat{B}_3 x_3 + \hat{B}_4 x_4 + \hat{B}_5 x_5 + \hat{B}_6 x_6 + \hat{B}_7 x_7 + \hat{B}_8 x_8 + \hat{B}_9 x_9 + \hat{B}_{10} x_{10} + \hat{B}_{11} x_{11} + \hat{B}_{12} x_{12} + \hat{B}_{13} x_{13} + \hat{B}_{14} x_{14} + \hat{B}_{15} x_{15} + \hat{B}_{16} x_{16} + \hat{B}_{17} x_{17}$$

$\hat{y}_2$: trade credit received (TCR)

Where $\hat{y}_2$ refers to trade credit received by the firm from the suppliers. Following prior research (e.g., Ceustermans *et al.*, 2017; Xu *et al.*, 2020; Haj-Salem and Hussainey, 2021) trade credit received was computed by dividing accounts payable by the total assets.

4.2.4 Control Variables for Models 1 and 2

The researchers selected the control variables based on prior research (Bédard *et al.*, 2019; Reid *et al.*, 2019; Al Lawati and Hussainey, 2022) as well as these factors may be associated to both trade credit offered and received. The researchers control firm characteristics that affect trade credit such as firm leverage, size, liquidity, and profitability. In terms of the firm's industry and year, they control for the period (selected years 2018,2019,2020,2021) and industry (8 sectors selected from non-financial industry) measured as dummy variables that is one if during the selected year or sector and otherwise is zero.

As shown in Table (2) $x1$ (KAMs) refers to Key Audit Matters, $x2$ (LEV) refers to leverage of the firm, x_3 (AS) refers to firm size, x_4 (LIQ) refers to firm liquidity, x 5 (ROA) refers to firm profitability. Finally, $x6$: $x13$ (Ind.) refers to 8 sectors selected from non-financial industry, $x14$: $x17$ (Yr.) refers to the selected 4 years (2018-2021).

Table 2: Variables definition

Type	Code	Proxy
Independent Variable		
Key Audit Matters	KAMs	Measured by counting the number of KAMs disclosed
Dependent Variables		
Trade Credit Offered	TCO	Computed by dividing accounts receivable / the total assets
Trade Credit Received	TCR	Computed by dividing accounts payable / the total assets
Control variables		
Leverage	LEV	Measured by dividing total debt / total assets
Size	AS	Measured by natural log of total assets
Liquidity	LIQ	Measured by current assets to current liabilities ratio
Profitability	ROA	Measured by Return on assets (computed by net income / total assets)
Industry	Ind	Sectors selected from non-financial industry
Year	Yr.	Selected 4 years (2018:2021)

5. Empirical Results and Discussion

5.1. Descriptive Statistics

As shown in table (3), the results indicate that the average number of disclosed KAMs in the audit report annually is about 2 KAMs. The value of KAMs is between 0.00 and 9 that clarifies the maximum number of KAMs found in one of the non-financial firms is 9, with a minimum of zero. Also, the analysis shows the number of several types of KAMs disclosed in the audit reports of selected firms including amendments in Egyptian financial standards, revenue recognitions, expected consequences of Covid-19 outbreak on operational plans, assets, and liabilities.

On the other side, the results show that the average of trade credit offered is 14% and the maximum trade credit offered is 88% with a minimum 0, while the value of trade credit received is between 1% minimum and 78% maximum with an average of 10%.

Regarding the control variables, the value of profitability ranges from 12.42% to 5.08% with an average of 0.0006%, which ensures that some companies achieve high profits. Also, the value of leverage is between a minimum negative result –7.93 and a maximum amount 15.05 with an acceptable mean of 2.573. In addition, the value of company size is between 4.15 and 8.78 with a mean of 6.35. Finally, the value of liquidity is between 0.01 and 13.87 with an average of 1.83.

Table 3: Descriptive Statistics.

Variables	Min	Max	Mean	Std. Dev.
KAMs	.00	9.00	1.2941	1.41953
TCO	.00	.88	.1393	.16376
TCR	.01	.78	.1049	.12950
ROA	-12.42	5.08	.0006	1.14342
LEV	-7.93	15.05	2.5732	2.14000
AS	4.15	8.78	6.3526	.66647
LIQ	.01	13.87	1.8380	1.88220

5.2 Correlation Analysis

Table 4: Pearson's Correlation Analysis

	Variables		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	KAMs	Corr.	1																		
		Sig.																			
2	TCO	Corr.	0.96	1																	
		Sig.	0.116																		
3	TCR	Corr.	0.64	0.495	1																
		Sig.	0.025	0.000																	
4	ROA	Corr.	-0.04	0.36	0.033	1															
		Sig.	0.428	0.553	0.59																
5	LEV	Corr.	0.149	0.277	0.139	0.075	1														
		Sig.	0.014	0.000	0.022	0.216															
6	AS	Corr.	0.159	0.113	0.077	0.134	0.222	1													
		Sig.	0.008	0.043	0.206	0.027	0.000														
7	LIQ	Corr.	0.137	-0.54	-0.146	0.087	0.17	-0.01	1												
		Sig.	0.24	0.373	0.016	0.15	0.005	0.848													
8	Ind_1	Corr.	.002	.002	-.068	-.146	.009	-.183	-.128	1											
		Sig.	.976	.977	.267	.016	.885	.002	.035												
9	Ind_2	Corr.	.067	.061	-.073	-.038	.070	-.018	-.148	-.243	1										
		Sig.	.273	.319	.232	.532	.252	.769	.014	.000											
10	Ind_3	Corr.	.004	.103	.112	-.031	-.114	.158	.151	-.132	-.211	1									
		Sig.	.950	.090	.066	.609	.061	.009	.013	.029	.000										
11	Ind_4	Corr.	-.028	.026	.079	.188	.114	.113	.171	-.181	-.288	-.157	1								
		Sig.	.641	.672	.192	.002	.060	.063	.005	.003	.000	.010									
12	Ind_5	Corr.	.105	.030	-.045	-.031	.090	.029	-.047	-.098	-.156	-.085	-.116	1							
		Sig.	.083	.622	.457	.608	.139	.633	.439	.108	.010	.164	.057								
13	Ind_6	Corr.	-0.093	.333**	0.111	.150*	-0.076	-0.079	0.062	0.110	.175*	0.095	.130*	0.070	1						
		Sig.	0.128	0.000	0.067	0.013	0.209	0.195	0.305	0.070	0.004	0.116	0.032	0.247							
14	Ind_7	Corr.	0.018	0.019	-.178**	-.23*	-0.008	0.012	.166*	-0.11	-.17*	-0.09	-.13*	-0.07	-0.07	1					
		Sig.	0.765	0.750	0.003	0.000	0.894	0.842	0.006	0.070	0.004	0.116	0.032	0.247	0.192						
15	Ind_8	Corr.	-0.086	0.020	0.064	0.101	-.140*	-0.034	-0.05	-.13*	-.21*	-0.11	-.15*	-0.08	-0.09	-0.09	1				
		Sig.	0.156	0.749	0.292	0.097	0.021	0.573	0.350	0.029	0.000	0.059	0.010	0.164	0.116	0.116					
16	Y_1	Corr.	-0.028	0.067	0.028	-0.012	-0.070	0.002	0.054	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				
		Sig.	0.644	0.274	0.649	0.840	0.253	0.974	0.372	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
17	Y_2	Corr.	-0.004	-0.010	-0.010	0.020	-0.018	0.056	-0.02	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.33*	1		
		Sig.	0.954	0.874	0.871	0.747	0.771	0.360	0.680	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000			
18	Y_3	Corr.	0.014	-0.014	0.014	-0.012	0.051	-0.032	-0.02	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.33*	-.33*	1	
		Sig.	0.817	0.815	0.816	0.848	0.402	0.603	0.736	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	0.000		
19	Y_4	Corr.	0.018	-0.043	-0.032	0.004	0.036	-0.026	-0.09	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-.33*	-.33*	-.33*	1
		Sig.	0.773	0.483	0.599	0.942	0.551	0.669	0.886	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	0.000	0.000	

Table (4) presents the correlation matrix. It shows a positive significant correlation between KAMs disclosure and trade credit received (TCR), leverage (LEV) (significant at 0.05), firm size (AS) (significant at 0.01) and Shipping (Ind. 5) (significant at 0.1). Also, a positive correlation but not significant between KAMs disclosure and trade credit offered (TCO), liquidity (LIQ) has been found. Also, there is a positive and significant correlation between trade credit offered (TCO) and both leverage (LEV) and firm size (AS). On the other side, there is a negative correlation and non-significant between KAMs and profitability (ROA), Industrial products (Ind.4), Telecommunication (Ind. 6), Primary Resources (Ind 8), 2018 (Yr1) and 2019 (Yr2).

5.3 Regression Analysis

Tables (5) and (6) report the empirical results. Model (1) tests H1, which examines the effect of KAMs disclosure on trade credit offered from the firms to their customers. Model (2) tests H2, which investigates the impact of KAMs disclosure on trade credit received. Both models are significant, and their P-values are below 0.1, reflecting their validity. r^2 for the first model is 0.08 and the second model is 0.041.

Table 5. Significance test results of regression coefficient

Model 5: Trade Credit Offered

Variables	Coefficients	t - test	Significance
B_0	.012	-.084	.933
$KAMs$	.012	0.138	.025
LEV	.067	4.026	.000
AS	-.002	1.083	.280
LIQ	-.069	-.040	.969
ROA	.250	.200	.842
$Ind1$	0.067	2.032	0.034
$Ind2$	0.02	1.03	0.000
$Ind3$	.063	1.807	.072
$Ind4$	.023	.771	.441

$Ind5$	.033	.764	.446
$Ind6$	-.090	-2.112	.036
$Ind7$	.044	1.092	.276
$Ind8$	-.037	-1.045	.297
$Yr1$	.022	.319	.750
$Yr2$	.066	.945	.346
$Yr3$	0.09	1.25	0.00
$Yr4$	.011	.155	.877

Dependent variable	r	r^2	r^2 $adjusted$	**SE of Estimate**	**ANOVA**	
					F	***p-value***
TCO	0.387	0.15	0.103	0.15	3.88	0.000

$$\hat{y}_1 = 0.012 + 0.012\ KAMs + 0.67LEV - 0.02\ AS - 0.06\ \text{LIQ} + 0.25\ ROA + 0.067\ Ind1 + 0.02\ Ind2 + 0.063\ Ind3 + 0.023\ Ind4 + 0.33Ind5 - 0.09Ind6 + 0.044Ind7 - 0.037Ind8 + 0.022Yr1 + 0.066Yr2 + 0.09Yr3 + 0.011Yr4$$

(1)

Where:

$\hat{y}_1$: $trade\ credit\ offered\ (TCO)$

Table (5) summarizes the results from estimating equation 1. In model (1), the estimated coefficient for KAMs is positive and statistically significant at 0.05 which explains the effect of disclosing KAMs on offering more trade credit to customers. The results show a positive and significant effect of KAMs disclosure on Trade credit offered. Thus, the first hypothesis (H1) is accepted. Based on disclosing KAMs, the trade credit offered from the firm to the customers will be increased. This is so, because KAMs disclosure gives an indication of the financial situation of customers they need trade credit financing, which in turn, encourages suppliers to offer trade credit to their customers. our result is consistent with prior research (e.g., Yang *et al.*, 2020; Shi, 2022)

Concerning the coefficients of control variables, it has been found that leverage is positively and significantly associated with trade credit offered.

Indeed, firms with high leverage are more likely to offer more trade credit to their customers. This is on contrary with our expectation that there is a negative association between leverage and trade credit, according to financing and pecking order theory, more solvent and liquid firms tend to rely less on trade credit (Haj-Salem and Hussainey, 2021). Additionally, the coefficients are positive and significant for most industry sectors. Therefore, to validate the results, a further analysis was run to examine whether the offered trade credit differs across types of industries and years in this study. Specifically, a t-test was run to further identify the statistical effects on trade credit offered to the customer based on industry type and year.

As shown in the table, coefficients for Food (Ind.1), Primary resources (Ind. 3), Real estate (Ind.2), and year 2020 (Yr3) are positive but negative for telecommunication (Ind. 6) and non-significant for the rest, regression model in this case is accepted. On the other side, the profitability, size, and liquidity of the firm have no effect. Large firms with more profits and liquid assets will not affect offering the trade credit to the customers.

Table 6. Significance test results of regression coefficients

Model 6: Trade Credit Received

Variables	Coefficients	t – test	Significance
B_0	0.033	-.412	.681
$KAMs$	0.43	0.867	.025
LEV	.103	1.655	.009
AS	.092	1.411	.159
LIQ	-.127	-2.090	.038
ROA	-.021	-.336	.737
$Ind1$	-0.114	2.032	0.034
$Ind2$	-0.125	0.063	.070
$Ind3$	.177	2.737	.007
$Ind4$	.206	3.026	.003
$Ind5$	.026	.421	.674
$Ind6$	-.050	-.728	.467
$Ind7$	.242	3.801	.000

$Ind8$	-.025	-.377	.706
$Yr1$	.043	.612	.541
$Yr2$	-.011	-.155	.877
$Yr3$	0.15	0.984	0.00
$Yr4$	.010	.136	.892

Dependent variables	r	r^2	r^2 $adjusted$	**SE of estimate**	**ANOVA**	
					F	***p-value***
TCR	0.392	0.16	0.104	0.123	3.014	0.000

$$\hat{y}_2 = 0.033 + 0.43KAMs + 0.103LEV + 0.092AS - 0.127LIQ - 0.021ROA - 0.114Ind1 - 0.125Ind2 + 0.177Ind3 + 0.206Ind4 + 0.026Ind5 - 0.05Ind6 + 0.242Ind7 - 0.025Ind8 + 0.043Yr1 - 0.011Yr2 + 0.15Yr3 + 0.01Yr4 \quad (2)$$

In model 2, the results show that the coefficient for $KAMs$ is positive and significant (at level of significance 0.05), which indicate a positive and significant relationship between KAMs disclosure and trade credit received at the confidence level of 95% and that evidenced hypothesis 2. Therefore, the second hypothesis (H2) is accepted. The result could be explained according to agency theory, where KAMs disclosure reduce information asymmetry. This result suggests that increasing KAMs disclosure in audit reports will encourage suppliers to provide trade credit to the companies. This may be due to disclosing KAMs will improve the confidence of suppliers, which in turn, increase the trade credit received from them by the company. The results offer practical implications for non-financial firms to increase the level of KAMs disclosure to reduce the information asymmetry between users, which in turn, may help companies to receive more trade credit. These findings are consistent with previous research that clarify the impact of disclosure on trade credit (e.g., Ceustermans *et al.*, 2017; Xu *et al.*, 2020; Haj-Salem and Hussainey, 2021).

Regarding control variables, the coefficients for leverage, number of segments in the industry (i.e., primary resources, industrial products, building

and packaging material) and year 2020 are positive and significant. The analysis shows that leverage is positively affecting trade credit received from customers. The results suggest that the type of industry will affect receiving trade credit from suppliers. Moreover, the time (years) may have an impact on trade credit received, where received trade credit by companies has been increased in year 2020 (Covid-19 pandemic period). That may be due to the difficult circumstances that faced most industries as well as considerable number of companies suffered during this time.

5.4 Discussion

As expected, findings of current research evidenced the positive and significant effect of KAMs disclosure on trade credit offered. The finding is consistent with agency theory, where disclosing KAMs will reduce information asymmetry and increase the user's confidence, which in turn, allows suppliers to offer more trade credit to their customers. Also, our research found a positive and significant impact of disclosing KAMs in the audit reports on trade credit received from suppliers. Our results are consistent with the results of the study by Haj-Salem and Hussainey (2021) that evidenced the effect of information disclosure on trade credit. Thus, our study can be considered as a pioneer in presenting the positive correlation between KAMs disclosure and trade credit decisions.

Although our analysis found that size and liquidity of the firm have no effect on trade credit, this finding is inconsistent with what has been found in prior literature whether a positive (Vaidya 2011) or negative coefficients (Petersen and Rajan, 1997). Moreover, firms' profitability has no effect on offering trade credit to their customers. This result is contrary to what has been found in the literature where a significant positive (Petersen and Rajan, 1997; Bougheas *et al.*, 2009) and negative coefficients are common (Burkart and Ellingsen, 2004; Vaidya, 2011; Ahmed *et al.*, 2014; Wilson and Summers, 2002).

As noted, previous results provide implications to regulators to shed light on the importance of disclosing KAMs in the audit report to increase the

disclosure, which in turn, increase the trade credit offered to customers. Auditors may need to disclose more KAMs in audit reports as well as trade credit offered will be increased. In addition, it has been found that leverage positively affects the trade credit offered to customers in Egyptian non-financial firms. Also, it has been found that profitability (ROA), liquidity (LIQ), and size (AS) have a non-significant effect on trade credit offered, indicating that profitable large and high liquidity companies may offer no more trade credit to their customers. At the same time, some segments in the industry such as: primary resources, food, Real estate have a positive and significant impact on the trade credit offered at the level of confidences of 90%, 95%, and 100% respectively, which indicates that the type of industry influences the trade credit offered to the customers. In addition, the time affects offering trade credit to customers appeared in the significant positive impact of year 2020 (Yr3) at the level of confidence of 100% that refers to Covid-19 period explaining an apparent impact of the pandemic in this year on the trade credit offered to customers during this time.

On contrast, other control variables like liquidity (LIQ) and other segments in the industry (i.e., food and real estate) have negative and significant coefficients. A negative and significant association has been found between liquidity and trade credit received, which suggests that firms with a lower liquidity ratio tend to receive more trade credit. This finding is in line with our expectation and consistent with prior research (e.g., Petersen and Rajan, 1997; Haj-Salem and Hussainey, 2021) and inconsistent with another research (Ahmed *et al.*, 2014). Other coefficients are non-significant for the rest variables such as profitability and size, regression model in this case is accepted. So, no association was found between profitability and trade credit which is consistent with (Ceustermans *et al.*, 2017; Haj-Salem and Hussainey, 2021) and inconsistent with (Vaidya, 2011). Also, size has no effect on receiving trade credit and this is inconsistent with research that found a positive effect of size on trade credit received (Ceustermans *et al.*, 2017).

6. Additional Analyses

The researchers presented additional analyses using the same sample but based on different measures for dependent variables (trade credit offered and trade credit received) and the independent variable (KAMs disclosure) to examine the impact of KAMs on trade credit offered and received. Table (7) shows the correlation analysis between KAMs disclosure and trade credit offered and received. Researchers conducted the analysis to support the results of the previous analysis by using other measures to calculate trade credit offered and received. Trade credit offered was calculated by dividing accounts receivable by total sales and trade credit received was computed by dividing accounts payable by purchases. KAMs were considered as dummy variable where companies that disclose number of KAMs less than 2 will take 0 and the companies that disclose number of KAMs more than 2 take 1. The data analyzed and the results were presented as follow:

Table 7: Pearson's Correlation Analysis

	Variables		1	2	3
1	KAMs	Corr.	1		
		Sig.			
2	TCO	Corr.	0.68	1	
		Sig.	0.026		
3	TCR	Corr.	0.59	0.531	1
		Sig.	0.031	0.000	

The correlations, as shown in table (7), between all variables indicate that there is no multicollinearity problem (Gujarati and Porter 2009). Note that there is a positive correlation and significant between each of the variables TCO, TCR and KAMs disclosure.

6.1. Impact of KAMs Disclosure on Trade Credit Offered

In this additional analysis, researchers examine whether KAMs disclosure could improve trade credit offered to customers or decrease it. It is believed that disclosing KAMs in the audit reports would affect trade credit offered to

customers through providing adequate information to help users in the decision-making process.

The results of this additional analysis are shown in Table (8). The table shows that the estimated coefficient (KAMs) is positive and significant. This suggests that KAMs disclosure in audit reports will present useful information which affect offering trade credit to customers.

Model (1) Trade Credit Offered

Table 8: Impact of KAMs disclosure on trade credit offered

	Coefficients	t - test	Significance
B_0	.021	0.42	0.22
B_1	.08	0.125	0.03

Dependent variables	r	r^2	r^2 $adjusted$	SE of estimate	ANOVA	
					F	*p-value*
TC offered	0.523	0.27	0.20	0.12	2.15	0.000

regression model in this case is

$$\hat{y} = \hat{B}_0 + \hat{B}_1 x_1$$

$$\hat{y}_1 = 0.021 + 0.08\ x_1$$

Where

$\hat{y}_1 : trade\ credit\ offered$

$x_1 : KAMs$

The analysis provides practical implications for regulators to support the companies to disclose KAMs in their audit report to help decision makers in offering trade credit to customers.

6.2. Impact of KAMs Disclosure on Trade Credit Received

Table 9 shows that the coefficients for KAMs and trade credit received are 0.125 and 0.52 respectively which are positive and significant. So, H2 is accepted, which states that there is a positive effect of disclosed KAMs on trade credit received from the suppliers. That confirm the effect of KAMs disclosure by providing information to enhance trade credit received.

Model (2) Trade Credit Received

Table 9: Impact of KAMs disclosure on trade credit received.

	Coefficients	t - test	Significance
B_0	0.125	0.52	0.032
B_1	0.52	0.421	0.012

Dependent variables	r	r^2	r^2 $adjusted$	SE of estimate	ANOVA	
					F	*p-value*
TC received	0.415	0.17	0.10	0.11	2.05	0.000

regression model in this case is

$$\hat{y}_2 = 0.125 + 0.52x_1$$

Where

$\hat{y}_2$: *trade credit received*

The above results support the research hypotheses (H1, H2) that assume significant and positive effect of KAMs disclosure on trade credit offered and received. It can be concluded that analyzing data based on different measures for the dependent and independent variables present the same results which evidence the impact of disclosing KAMs on trade credit offered and received.

7. Conclusion

This study investigates the impact of KAMs disclosure on trade credit decisions for Egyptian non-financial listed companies during 2019–2022. The researchers examined the effect of disclosing KAMs in audit reports on the trade credit offered to customers. Also, they tested the impact of disclosing KAMs on trade credit received from suppliers. The new audit report, according to the new auditing standards ISA (701), should contain KAMs and as expected that may affect the trade credit decisions.

Rare studies directed attention to the effect of information disclosure on trade credit in emerging economies. Therefore, current research focuses on the role of KAMs disclosure in improving trade credit in Egyptian non-financial institutions to enrich the prior literature. The effect of KAMs disclosure on trade credit in developing countries is a new research area in the

contemporary literature. Therefore, the researchers choose Egypt, one of emerging economies, to conduct the research and fill the existing gap in the literature due to the importance of trade credit as a source of finance in the industrial and commercial sectors. In addition, they did so due to the immediate implementation of the international standards where Big 4 and some of Egyptian audit firms with international affiliations started to implement new standard ISA (701) and issued the new audit reports after 2017.

It has been found that KAMs disclosure positively affects the trade credit offered by suppliers to their customers and received from the suppliers. Hence, KAMs disclosure may mitigate information asymmetry, and this leads to a positive association with the offered and received trade credit. The findings are in alignment with previous literature that has found that disclosure will help suppliers to assess the firm situation and ability to pay later, which in turn, help suppliers to extend more trade credit (Haj-Salem and Hussainey, 2021). The research presents empirical evidence on the impact of KAMs disclosure on trade credit decisions by improving the trade credit offered and received.

The study contributes to the prior literature in many ways. First, it explores the impact of KAMs disclosure in the audit reports on the trade credit decisions. Secondly, it offers a methodological contribution by examining the period of 2018 to 2021 in the Egyptian non-financial context. Egypt, as an emerging economy, can be considered as a valuable business environment that depends on trade credit as a relevant source of finance.

The findings have several implications for academics, firms, and regulators. First, the study showed that disclosing KAMs in audit reports is important for a company to help in getting more trade credit. Additionally, managers and the board of directors in companies should give attention to KAMs disclosure to have more trade credit. Our analysis provides practical implications for Egyptian regulators to encourage businesses to disclose KAMs to facilitate offering and receiving trade credit. Finally, KAMs disclosure can

be considered relevant to suppliers who are likely to grant more trade credit to their customers.

The current research may have some limitations where, the results of the study may be limited for Egyptian companies, and it may differ for other countries. In addition, the results of our study cannot be generalized due to the small sample size which is limited by the availability of financial reports. Future research could examine the same hypotheses in the financial sector using different sample size and different period. Moreover, it could explore other factors that may affect trade credit decisions. In addition, future research could also depend on different methodologies to test the hypotheses. In general, the impact of disclosing KAMs on the short-term sources of finance such as trade credit has attracted more attention in recent years and needs further research, especially in the Middle East region.

References

Ahmed, J., Xiaofeng, H. and Khalid, J. (2014). "Determinants of Trade Credit: The Case of a Developing Economy", *European Researcher*, Vol. 83 No. 9-2, pp.1694-1706.

Al Lawati, H. and Hussainey, K. (2022). "The Determinants and Impact of Key Audit Matters Disclosure in the Auditor's Report", *International Journal of Financial Studies*, Vol. 10 No. 4, 107. https://doi.org/10.3390/ijfs10040107

Almulla, M. and Bradbury, M. (2021). "Auditor, Client, and Investor Consequences of the Enhanced Auditor's Report"*, International Journal of Auditing,* Vol. 26 No. 2, pp.134-150.

Andrieu, G., Staglianò, R. and Zwan, P. (2018). "Bank debt and trade credit for SMEs in Europe: Firm, industry, and country level determinants", *Small Business Economics,* Vol. 51, pp.245-264.

Asare, S. and Wright, A. (2012). "Investors', auditors', and lenders' understanding of the message conveyed by the standard audit report on the financial statements", *Accounting Horizons*, Vol. 26 No. 2, pp.193-217.

Ascenso, T. and Pais, C. (2021). "The Consequences of Key Audit Matters on Users: The case of Spain", *World Conference on Information Systems and Technologies*, *World CIST*, pp.452-462.

Bédard, J., Gonthier-Besacier, N., and Schatt, A. (2014). "Costs and benefits of reporting key audit matters in the audit report: The French experience". *International Symposium on Audit Research*, pp.1-24. https://api.semanticscholar.org

Bédard, J., Gonthier-Besacier, N., and Schatt, A. (2019). Consequences of expanded audit reports: Evidence from the justifications of assessments in France, *Auditing: A Journal of Practice & Theory,* Vol. 38, pp.23-45.

Bentley, J., Lambert, T., and Wang, E. (2021). "The Effect of Increased Audit Disclosure on Managerial Decision Making: Evidence from Disclosing Critical Audit Matters", *The Accounting Review,* Vol. 96 No. 1, pp.23-40.

Brasel, K., Doxey, M., and Grenier, J. (2016). "Risk Disclosure Preceding Negative Outcomes: The Effects of Reporting Critical Audit Matters on Judgments of Auditor Liability", *The Accounting Review*, Vol. 91, pp.1345-1362.

Bougheas, S., Mateut, S., and Mizen, P. (2009). "Corporate Trade Credit and Inventories: New Evidence of a Trade-Off from Accounts Payable and Receivable", *Journal of Banking and Finance*, Vol. 33 No. 2, pp. 300-307.

Burkart, M., and Ellingsen, T. (2004). "In-Kind Finance: A Theory of Trade Credit", *American Economic Review*, Vol. 94 No.3, pp. 569-590.

Ceustermans, S., Breesch, D., and Branson, J. (2017). "Voluntary Disclosure of Sales and the Extent of Trade Credit in Small Private Companies", *Accounting in Europe*, Vol. 14, pp. 388-406.

Cheng, N., and Pike, R. (2003). "The trade credit decision: Evidence of UK firms", *Managerial and Decision Economics*, Vol. 24, pp. 419-38.

Chen, Y., and Wang, Y. (2010). "Audit quality, transaction cost and mode of trade credit", *Auditing Research*, Vol. 158 No. 6, pp. 77-85.

Chen, Y., Deng, T., and Zhang, C. (2014). "Information disclosure, external market environment and commercial credit", *Accounting and Economics Research*, Vol. 28 No. 6, pp. 16-26.

Chen, S., Huang, C., Hwang, C., and Wang, Y. (2021). "Voluntary disclosure and corporate innovation", *Review of Quantitative Finance and Accounting*, Vol. 58, pp. 1081-1115.

Chu, Y. (2021). "Corporate strategy and trade credit supply decision". *Accounting and Economics Research*, Vol. 35 No.6, pp. 73-89.

Cull, R., Goh, C., and Xu, L. (2023). "Trade Credit: Theory and Evidence for Emerging Economies and Developing Countries", Policy Research Working Papers, *World Bank*, Washington, DC.

Dornel, A., Ait Ali Slimane, M., and Mohindra, K. (2020). "Improving SME Access to Trade Credit and Financing in MENA", MENA Knowledge and Learning Quick Notes, No. 180, *World Bank*, Washington, DC.

Gimbar, C., Hansen, B., and Ozlanski, M. (2016). "The effects of critical audit matter paragraphs and accounting standard precision on auditor liability", *The Accounting Review*, Vol. 91 No.6, pp. 1629-1646.

Gold, A., and Heilmann, M. (2019). "The consequences of disclosing key audit matters (KAMs): A review of the academic literature", *Journal for Accountancy and Business-Economics*, Vol. 93 No.1/2, pp. 5-14.

Gujarati, N., and Porter, D. (2009). Basic Econometrics. International Edition McGraw-Hill/Irwin, A Business Unit of The McGraw-Hill Companies, Inc., New York.

Gutierrez, E., Minutti-Meza, M., Tatum, K., and Vulcheva, M. (2018). "Consequences of adopting an expanded auditor's report in the United Kingdom", *Review of Accounting Studies,* Vol. 23, pp. 1543-1587.

Haj-Salem, I., and Hussainey, K. (2021). "Does Risk Disclosure Matter for Trade Credit?", *Journal of Risk and Financial Management*, Vol. 14 No. 3, pp. 1-13.

Hegazy, M. , El-Haddad, R. and Kamareldawla, N. (2022). "Impact of auditor characteristics and Covid-19 Pandemic on KAMs reporting", *Managerial Auditing Journal*, Vol. 37 No.7, pp.908-933.

IAASB (2015a). International Standard on Auditing (ISA) 701 Communicating Key Audit Matters in the Independent Auditor's Report. https:// www.ifac.org/publications-resources/international-standard-auditing-isa-701-new-communicating-key-audit-matters.

Kachelmeier, S., Schmidt, J., and Valentine, S. (2017). "The Disclaimer Effect of Disclosing Critical Audit Matters in the Auditor's Report". Available at SSRN 2481284. https://pcaobus.org/News/Events/ Documents/10272014_CEA/Disclaimer_Effect.pdf.

Kitiwong, W., and Sarapaivanich, N. (2020). "Consequences of the implementation of expanded audit reports with key audit matters (KAMs) on audit quality", *Managerial Auditing Journal*, Vol. 35, pp.1095-1119.

Köhler, A., Ratzinger-Sakel, N., and 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*, Vol. 17 No. 2, pp. 105-128.

Lennox, C., Schmidt, J., and Thompson, A. (2023). "Why are expanded audit reports not informative to investors? Evidence from the United Kingdom", *Review of Accounting Studies*, Vol. 28, pp. 497-532.

Li, H. (2020). "A Study of Key Audit Matters Disclosure", *Modern Economy*, Vol. 11, pp. 399-406.

Li, D., and Wang, D. (2016). "The impact of supply chain customer information on firm's information environment", *Journal of Financial Research*, Vol. 438 No. 12, pp. 191-206.

Li, H., Yang, Y., Xue, F., and Liu, Z. (2024). "Annual report readability and trade credit financing: Evidence from China", *Research in International Business and Finance*, Vol. 69. https://doi.org/ 10.1016/ j.ribaf.2024.102220.

Machokoto, M., Gyimah, D., and Ibrahim, B. (2022). "The evolution of trade credit: new evidence from developed versus developing countries", *Review of Quantitative Finance and Accounting,* Vol. 59, pp. 857-912.

Mah'd, O., and Mardini, G. (2022). "Matters may matter: The disclosure of key audit matters in the Middle East", *Cogent Economics and Finance*, Vol. 10 No.1, pp. 1-20.

Matta, J., and Feghali, K. (2020). "The impact of Key Audit Matters (KAMs) on financial information quality: Evidence from Lebanon", *Indonesian Management and Accounting Research*, Vol. 19 No.2 pp. 136-164.

Otman, K. (2021). "Small and Medium Enterprises in the Middle East and North Africa Region". *International Journal of Business and Management*, Vol. 16 No. 5 pp. 55-70.

PCAOB (2016). Proposed Auditing Standard-The Auditor's Report on an Audit of Financial Statements When the Auditor Expresses an Unqualified Opinion and Related Amendments to PCAOB Standards. PCAOB Release No. 2016-003, Washington DC: PCAOB.

Peng, X., and Wang, X. (2018). "Does customer stock price crash risk have the contagion effects on their suppliers?", *Journal of Finance and Economics*, Vol. 44 No. 2, pp. 141-153.

Petersen, M., and Rajan, R. (1997). "Trade Credit: Theories and Evidence", *The Review of Financial Studies*, Vol. 10 No.3, pp. 661-691.

Rahaman, M. , Hossain, M. and Bhuiyan, M. (2022). "Disclosure of key audit matters (KAMs) in financial reporting: evidence from an emerging economy", *Journal of Accounting in Emerging Economies*, Vol. 13 No. 2, pp. 666-702.

Rautiainen, A., Saastamoinen, J., and Pajunen, K. (2021)." Do key audit matters (KAMs) matter? Auditors' perceptions of KAMs and audit quality in Finland", *Managerial Auditing Journal*, Vol. 36 No. 3 pp. 386-404.

Reid, L., Carcello, J., Li, C., Neal, T., and Jere, R. (2019). "Impact of Auditor Report Changes on Financial Reporting Quality and Audit Costs: Evidence from the United Kingdom", *Contemporary Accounting Research*, Vol. 36, pp.1501-1539.

Sirois, L., Bédard, J., and Bera, P. (2018). "The Informational Value of Key Audit Matters in the Auditor's Report: Evidence from an Eye-Tracking Study", *Accounting Horizons*, Vol. 32, pp. 141-162.

Shi, G. (2022). "Does industry-specific information disclosure improve trade credit financing? ", *China Journal of Accounting Studies*, Vol. 10 No. 2, pp. 203-227.

Smith, K. (2023). "Tell me more: A Content Analysis of Expanded Auditor Reporting in the United Kingdom", *Accounting, Organizations and Society*, Vol. 108. https://www.sciencedirect.com/science/article/pii/S0361368223000272.

Garanina, T. (2023). "CSR disclosure and state ownership: implications for earnings management and market value", *Journal of Accounting in Emerging Economies*. https://doi.org/10.1108/JAEE-06-2022-0175

Vaidya, R. (2011). "The Determinants of Trade Credit: Evidence from Indian Manufacturing Firms", *Modern Economy*, Vol. 2, pp. 707-716.

Van Horen, N. (2005). "Trade Credit as a Competitiveness Tool: Evidence from Developing Countries", The University of Amsterdam: Amsterdam, MPRA Paper No. 2792, pp. 1-25.

Vaziri, A., Azadi, K. (2017). "The Impact of Audit Reports on Financial Information Content", *International Journal of Economics and Financial Issues*, Vol. 7 No.3, pp. 304-308.

Wang, Y., He, R., and Liu, C. (2020). "Does non-punitive regulation affect trade credit financing? evidence from the annual report inquiry letter", *Finance Research*, Vol. 34 No. 4, pp. 28-42.

Wang, L., and Li, K. (2022). "Supply Chain finance and trade credit financing: From the perspective of asset specificity", *Journal of Finance and Economics*, Vol. 48 No. 3, pp. 154-168.

Wilson, N. and Summers, B. (2002). "Trade Credit Terms Offered by Small Firms: Survey Evidence and Empirical Analysis", *Journal of Business Finance and Accounting,* Vol. 29 No. 3 & 4, pp. 317-351.

Xiu, Z., Liu, R., and Yin, J. (2021). "Financial fraud, supply chain concentration, and corporate trade credit financing", *Accounting Research*, Vol. 399 No. 1, pp. 82-99.

Xu, Hongkang, Pham, T., and Dao, M. (2020). "Annual report readability and trade credit", *Review of Accounting and Finance,* Vol. 19, pp. 363-85.

Yang, Z., Tang, S., and Li, Z. (2020). "Information disclosure in capital market, relational contract and bullwhip effect in supply chain: empirical research based on information spillover effect", *Management World*, Vol. 322 No. 7, pp. 89-105.

Yazdinejad, E., and Jokar, H. (2019). "Discovering determinants of trade credit demand: Evidence from top managers insight", *Cogent Economics and Finance*, Vol. 7, pp. 1-15.