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Mapping the Factors Associated with the Similarity of Key Audit Matters in Brazilian Listed Companies

ABSTRACT

Objective: This study aims to identify the characteristics of audit firms and audited Brazilian listed companies that influence the similarity of key audit matters (KAM).

Method: Mean and panel data regression tests were conducted using a sample of 1,375 observations of companies traded on the Brazilian stock exchange B3 in the period from 2016 to 2021.

Results: The results demonstrate an average similarity of (KAM) of 72.91% in the analyzed period. Furthermore, it was observed that the number of KAM reported, company size, change of auditor, presence of an audit committee, pre-COVID period, and being audited by KPMG are negatively associated with the similarity rate. On the other hand, being audited by Deloitte Touche Tohmatsu, Ernst Young, PriceWaterhouseCoopers, and operating in the industrial goods sector showed a positive association with similarity.

Originality/relevance: Previous research has indicated that KAM similarity could occur over the years, but no comprehensive studies have explored the characteristics of audit firms and audited companies that influence the similarity of these matters.

Theoretical/Methodological Contributions: The evidence obtained contributes to the literature by establishing a connection between the characteristics of audit firms and companies that influence KAM similarity. This benefits the capital market, enabling audit professionals to assess factors that influence KAM similarity and reflect on its effects, thereby improving the quality of disclosed information. It also helps accounting regulatory bodies verify whether the objectives of establishing KAM in the audit report are achieved.

Keywords: Similarity, Key Audit Matters, Audit Report.

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1 INTRODUCTION

The existing standardization of reports from independent auditors has been questioned due to the perception that this disclosure has little informational value (Church et al., 2008; Cordoş & Fülöp, 2015). In response to this criticism, the International Federation of Accountants (IFAC) proposed a review and new regulations in 2015, aiming for a more communicative audit report with an expanded structure that enhances interaction between auditors and information users.

The most significant international regulatory change aimed at promoting interaction and communication between auditors and report users was the adoption of International Standards on Auditing (ISA) 701 – Communicating Key Audit Matters in the Independent Auditor’s Report. This consists of a new section in the report disclosing information that auditors consider relevant for users (IFAC, 2015).

The literature suggests the possibility of the absence of incremental information in KAM, as external users could already be aware of them (Lennox et al., 2017). Additionally, the KAM section was considered to hold symbolic value and be less informative (Bédard et al., 2019), particularly in the first year of publication (Bédard et al., 2016). Contrary to this evidence, Alves Júnior and Galdi (2020) observed that KAM disclosure influences investment decisions and directs users to significant matters in the financial statements (Christensen et al., 2014; Sirois et al., 2017).

The emergence of the new report from independent auditors, which includes the KAM section, stemmed from concerns about the standardization and limited information of previous reports. However, there is a risk that the KAM may mirror matters disclosed in previous years for the same company, which could undermine one of the reasons for implementing this section and perpetuate the same standardization criticized by information users (Bédard et al., 2016; Bédard et al., 2019).

This study aims to identify the characteristics of audit firms and audited companies that influence KAM similarity. Tests for differences between means and regression analysis were conducted with panel data based on 1,375 reports from 309 Brazilian listed companies published from 2016 to 2021. The characteristics studied, extracted from the literature, include audit fees, financial leverage, return on assets, company size, change of auditor, modified audit opinion, presence of an audit committee, audit firm, and economic sector. The control variables were the number of KAM reported and the period of COVID-19.

Although the literature on the determinants of KAM has expanded since the introduction of ISA 701, discussions about assessing the determinants of KAM similarity rate are scarce (Carvalho, 2021; Pinto & Morais, 2018; Hsieh et al., 2021). However, the debate on the similarity of audit reports is not new, and the repetition of content from reports released in previous periods can diminish the relevance of the standards and the independent auditors' report itself.

This research addresses a gap in the literature concerning KAM disclosure. Previous studies have focused on factors related to the type and quantity of these matters (Cruz et al., 2019; Ferreira and Morais, 2019; Pinto & Morais, 2018; Sierra-García et al., 2019), as well as their readability (Marques et al., 2021; Velte, 2018; Velte, 2019). Although the issue of KAM similarity over the years has been highlighted (Alves et al., 2022; Carlé et al., 2023; Carvalho, 2021; Hsieh et al., 2021; Kend & Nguyen, 2020; Pinto & Morais, 2018), there are no in-depth and conclusive studies on the determinants and characteristics of audit firms and audited companies that influence this similarity. Furthermore, Carlé et al. (2023) argue that the effectiveness of the reform of the auditor's report, which included the KAM section, must be critically examined, and the quality of that report monitored.

This study provides insights for regulatory agencies to consider the extent of discretion granted to independent auditors in applying ISA 701 regarding the determination of which

matters will be classified as KAM and their subsequent disclosure. The findings contribute to understanding auditing practices, facilitating both the enhancement of professionals' perception of disclosed content and the refinement of regulatory agencies seeking feedback on issued regulations for continuous improvement, thereby establishing a feedback loop.

Furthermore, the results presented here can assist investors in better understanding auditors' tendencies to disclose similar KAM in their reports and prompt executives to mitigate risks and expand disclosure. Thus, the study addresses the quality of disclosures made by independent auditors, offering opportunities for enhancements in the dissemination of accounting information to meet the needs of external users.

2 LITERATURE REVIEW

2.1 Relevance of Key Audit Matters

In recent years, regulatory agencies in the auditing field have made significant efforts to bridge the gap between auditors' expectations and users' needs for accounting information (Bedard et al., 2019). At the heart of this debate is the perception that audit reports have become standardized, lacking relevant information for decision-making by external users (Cordos & Fulop, 2015).

As Marques et al. (2021) highlighted, NBC-TA 701 mandates auditors to report the matters they consider most relevant throughout their work. The disclosure of key audit matters (KAM) presents challenges while impacting the perception of independent auditors' accountability, as indicated by Brasel et al. (2016) and Gimbar et al. (2016).

The necessity to comply with this regulatory requirement may result in the disclosure of less relevant matters, diluting the impact of more significant ones reported in the KAM section (Brasel et al., 2016). Furthermore, exercising caution is crucial, as excessive KAM

disclosure can potentially justify the absence of adjustments in financial statements (Asbahr & Ruhnke, 2019).

Disagreements among audit specialists regarding which matters should be considered KAM are multifaceted. These perspectives vary depending on criteria such as materiality, subjectivity, difficulty, and the time required to interpret relevant audit matters (Segal, 2019). Additionally, the nature and content of KAM are subjects of controversy even among auditing firms (Abdullatif & Al-Rahahleh, 2020).

2.1 Disclosure of Key Audit Matters and the Potential for Similarity: Development of Hypotheses

Studies on key audit matters (KAM) have focused on a) understanding KAM disclosure and the extent to which these matters tend to be repeated (Hsieh et al., 2021), b) factors associated with KAM similarity (Carlé et al., 2023; Carvalho, 2021), and c) the implications of this similarity on variables such as audit quality (Zeng et al., 2021). However, the results are preliminary and inconclusive (Carvalho, 2021).

There is evidence that factors related to the auditor, economic sector, and company characteristics can influence KAM disclosure, both in the type and quantity of matters that will be reported and in their content (Sierra-García et al., 2019). Thus, characteristics of audit firms and audited companies that can be decisive and influence KAM similarity were mapped and listed in this subsection, each leading to a hypothesis.

Audit fees (AudFee) – These are the fees charged by audit firms. They may be positively associated with the financial, strategic, and operational risks identified in the audited companies. Pinto and Morais (2018) found a positive relationship between audit fees and the number of KAM, which aligns with the hypotheses and results of Cruz et al. (2019) and Sierra-García et al. (2019). Conversely, Ferreira and Morais (2019) found a negative relationship between fees and the number of KAM.

Chen et al. (2020) demonstrated a positive relationship between fees and the quantity, complexity, and extent of KAM, as well as between fees and the litigious and uncertain tone of KAM and risk descriptions. The authors also observed a negative relationship between fees and the similarity of KAM disclosure when comparing peers in the sector.

Higher fees are associated with more significant risks identified in clients and a greater scope of work, which could help identify more KAM. Faced with these risks, auditors may repeat audit matters highlighted in past periods, seeking to reduce their responsibility for future events in the company. Thus, hypothesis 1 is:

H1: Audit fees have a positive association with the KAM similarity rate.

Financial leverage (Lever) – The characteristic of leverage refers to companies' debt. Firms with high debt typically present more significant financial risks. In this regard, Ferreira and Morais (2019) demonstrate the relevance of assessing whether companies with higher debt levels tend to have a greater number of KAM. In general, financial leverage entails more financial risks, thereby exposing companies to a higher risk of litigation (Pinto & Morais, 2018).

When identifying significant financial risks in their clients, auditors tend to increase audit procedures to mitigate their exposure to such risks. These additional procedures can contribute to increased KAM disclosure. Thus, auditors may repeat audit matters from previous periods, thus avoiding responsibility for subsequent events. Therefore, hypothesis 2 is:

H2: The company's financial leverage has a positive relationship with KAM similarity.

Return on assets (ROA) – This element refers to auditors' tendency to thoroughly review loss-making and unprofitable companies, which can result in increased audit efforts. This heightened effort by auditors tends to improve audit procedures and result in more KAM (Ferreira & Morais, 2019; Pinto & Morais, 2018). Additionally, auditors of less profitable companies with greater operational risks may feel pressured to disclose KAM to ensure independence (Ferreira & Morais, 2019).

Companies with losses or lower ROA are likely to employ more creative accounting practices in preparing their financial statements, thereby increasing the probability of receiving a modified audit opinion or increasing the number of KAM (Pinto & Morais, 2018).

Companies with higher ROA are expected to demonstrate greater compliance with accounting standards required by regulatory agencies and exhibit less earnings management and use of creative accounting practices. Furthermore, auditors are more likely to report fewer KAM due to the better compliance of the audited company and because they feel more comfortable regarding the risks of the audit and the company. This acquired confidence could reduce the possibility of repeating KAM in the future. Based on this evidence, hypothesis 3 is:

H3: The company's return on assets is negatively related to KAM similarity.

Company Size (Size) – The literature suggests that larger companies have more leverage to negotiate with auditors regarding work and fees; therefore, these large clients can pressure auditors to disclose fewer KAM (Pinto & Morais, 2018).

Cruz et al. (2019), Kitiwong and Srijunpetch (2019), Pinto and Morais (2018), and Sierra-García et al. (2019) demonstrated a positive relationship between the size of the audited company and the number of KAM. Velte (2018) also found a positive relationship between the size of the audited companies and KAM readability.

Therefore, it is plausible to assume that the significance of large clients for auditing firms increases their influence over auditors, who may be more inclined to accept the accounting treatment of these clients. Furthermore, large companies have greater resources for adapting to and understanding accounting standards, which could reduce the likelihood of classifying an issue as a key matter. Thus, hypothesis 4 is:

H4: company size has a negative relationship with KAM similarity.

Change of Auditor (ChAud) – This characteristic pertains to the varied reactions in the market and in the execution of audit work when a company changes its audit firm. The literature

suggests that this change can enhance the auditor's independence and positively impact the perception of work quality. There tend to be more audit adjustments during the auditor's last period before being replaced and during the new auditor's first year of work (Lennox et al., 2014).

Cruz et al. (2019) demonstrated that the longer the relationship between auditor and client, the fewer the KAM. According to the authors, this result may be associated with the confidence that auditors acquire during the extended period of auditing the same client. Velte (2018) and Velte (2019) analyzed the effects of audit firm rotation on KAM readability. In both studies, the results indicated that audit firm rotation reduces KAM readability.

Assuming that defining an issue as a key audit matter involves the auditor's professional judgment, mandatory audit firm rotation or other factors are expected to alter the methodologies employed in the auditing process and, consequently, the professional's judgment about the facts observed during the work. This could lead to a decrease in KAM similarity disclosed in previous periods. Based on this, hypothesis 5 is:

H5: Changing the audit firm has a negative relationship with KAM similarity.

Modified Audit Opinion (AudOpin) – Although modified opinions cannot be replaced by KAM (IFAC, 2015), Velte (2018) suggests that a modified audit opinion must be positively associated with KAM disclosure, as these situations pose increased risk for the audit firm. However, according to Ferreira and Morais (2019), companies with a modified audit opinion present a smaller number of KAM in their audit report.

Regarding similarity, when there is a modified audit opinion in the report, auditors tend to report issues that would be considered KAM in the basis for opinion section, which could reduce the number of matters in the KAM section and KAM similarities when comparing reports published in previous years. Thus, hypothesis 6 is:

H6: The issuance of a modified audit opinion has a negative relationship with KAM similarity.

Presence of an Audit Committee (AudCommit) – An audit committee within companies necessitates a more rigorous independent audit, as the independent auditor collaborates with the audit committee in its oversight role. Cruz et al. (2019) identified a positive relationship between a company's audit committee and the number of KAM.

Since members of the audit committee may discuss audit-related matters with independent auditors, which can enhance their understanding of accounting standards and influence the disclosure of financial statements, audit matters may be clarified and not considered as KAM again in future periods. Thus, hypothesis 7 is:

H7: The presence of the audit committee has a negative relationship with KAM similarity.

Size of the Audit Firm (Audit) – This characteristic refers to large firms conducting audit work, a factor considered in many studies in the capital market and auditing. The large audit firms, in recent literature, are characterized as the “Big Four”: DTT – Deloitte Touche Tohmatsu; EY – Ernst Young; KPMG; PWC – PriceWaterhouseCoopers.

Velte (2018) and Velte (2019) demonstrated that KAM disclosed by a Big Four firm has greater readability than KAM from non-Big Four firms. Kitiwong and Srijunpetch (2019) and Sierra-García et al. (2019) found a negative relationship between audits carried out by a Big Four firm and the number of KAM. In contrast, Cruz et al. (2019) and Ferreira and Morais (2019) identified a positive relationship.

Large audit firms are expected to have greater coordination with clients, and those responsible for company governance tend to accept audit recommendations in the first year. They also seek adjustments and improvements on matters the auditors judged relevant in

conducting the audit, reducing KAM similarity in the coming periods. Therefore, hypothesis 8 is:

H8: Companies audited by one of the Big Four audit firms have a negative relationship with KAM similarity.

Furthermore, by directly relating an audit matter to the entity's specific circumstances, the auditor can reduce the possibility that these matters become excessively standardized over time and lose their usefulness (IFAC, 2015). In this context, more significant requirements from sectoral regulatory agencies may result in a reduction in the need to disclose KAM (Pinto & Morais, 2018) and may require audit work to be carried out more conservatively in less regulated sectors to reduce risks (In et al., 2020). In this sense, the economic sector in which the companies operate was controlled through the "EconSect" variable.

Ferreira and Morais (2019), Pinto and Morais (2018), and Sierra-García et al. (2019) demonstrated that there is a difference between the number of KAM disclosed and the sector in which the audited company operates. Velte (2018) and Velte (2019) demonstrated that industrial sectors have greater KAM readability.

To control the impact of the number of KAM on KAM similarity, the variable NKAM – Number of KAM reported – was included. Also, due to the period of analysis comprising the COVID-19 pandemic, the variable COVID – Pre-COVID period was inserted, allowing us to observe the impact of this event on KAM similarity.

3 METHODOLOGY

3.1 Sample and Data Collection and Processing

The research sample comprised 1,375 audit reports from 309 companies listed in the Brazilian Stock Exchange (B3), published from 2016 to 2021, forming an unbalanced panel. The key audit matters (KAM) were collected from audit reports on the Brazilian Securities and Exchange Commission (CVM) website. Accounting and financial data were obtained from

Economática. The period analyzed was selected because 2016 marked the introduction of NBC-TA 701, and 2021 represented the latest fiscal year with financial statements available at the time of data collection. Quantitative data were winsorized between 1% and 99%, and the estimation procedures followed the recommendations of Baltagi (2005), Fávero e Belfiore (2017), and Wooldridge (2002).

3.2 Models and Variables

3.2.1 Dependent Variable

The similarity rate was used as a dependent variable in line with Chen et al. (2020), Carvalho (2021), Hsieh et al. (2021), Kend and Nguyen (2020), Santos et al. (2019), and Silva et al. (2018). It represents the percentage of KAM disclosed in a given audit report equal to KAM presented in the previous year's audit report. The similarity rate was obtained from the division between the number of similar KAM in the year and the total KAM reported (Equation 1).

$$SIM_{it} = \frac{\sum(KAM_{it} = KAM_{it-1})}{\sum KAM_{it}} \quad (1)$$

where:

SIM_{it} : KAM similarity index;

$\sum(KAM_{it} = KAM_{it-1})$: sum of the number of KAM for each company in one period that is equal to those of the same company in the previous period;

$\sum KAM_{it}$: sum of the number of KAM for each company in the period.

This similarity proxy measures the proportion of similar KAM relative to the total KAM reported, ranging between 0% and 100%. The higher the percentage, the more significant the proportion of KAM similar to those already reported in the previous year for the same company, which suggests less effectiveness of NBC-TA 701 (Hsieh et al., 2021).

3.2.2 Independent Variables

To determine the similarity rate and verify the hypotheses listed in subsection 2.2, the study considered the following independent variables: audit fees (AudFee), financial leverage

(Lever), return on assets (ROA), company size (Size), change of auditor (ChAud), modified audit opinion (AudOpin), presence of an audit committee (ComitAud), audit firm (Audit), industrial goods sector (IG) (due to differences from the averages of other economic sectors analyzed), number of KAM reported (NKAM), and pre-COVID period (COVID). The econometric model was estimated using the R software and is represented in Equation 2.

$$SIM_{it} = \beta_0 + \beta_1 AudFee_{it} + \beta_2 Lever_{it} + \beta_3 ROA_{it} + \beta_4 Size_{it} + \beta_5 ChAud_{it} + \beta_6 AudOpin_{it} + \beta_7 Audit_{it} + \beta_8 \sum_{k=6}^9 Audit_{it} + \beta_9 IG_{it} + \beta_{10} NKAM_{it} + \beta_{11} COVID_{it} + \varepsilon_{it} \quad (2)$$

Table 1 presents the variables' description and operationalization.

Table 1

Variables, theoretical foundations and expected behavior (positive or negative)

Variable	Description	Formula	Theoretical foundation	Expected behavior
SIM_{it}	Similarity	$SIM_{it} = \frac{\sum(KAM_{it} = KAM_{it-1})}{\sum KAM_{it}}$	Carvalho (2021); Chen et al. (2020); Kend and Nguyen (2020)	N/A
$AudFee_{it}$	Audit fees	Audit fees charged/total asset	Carvalho (2021); Ferreira and Morais (2019); Pinto and Morais (2018)	(+)
$Lever_{it}$	Financial leverage	Third parties capital/total asset	Carvalho (2021); Cruz et al. (2019); Ferreira and Morais (2019)	(+)
ROA_{it}	Profitability	Profit before taxes/total asset	Carvalho (2021); Ferreira and Morais (2019); Kitiwong and Srijunpetch (2019); Pinto and Morais (2018); Sierra-García et al. (2019) Velte (2018); Velte (2019);	(-)
$Size_{it}$	Size	Logarithm of total asset	Carvalho (2021); Cruz et al. (2019); Ferreira and Morais (2019); Pinto and Morais (2018); Velte (2018)	(-)
$ChAud_{it}$	Change of audit firm	Dummy variable, 1 for change of audit firm and 0 otherwise	Carvalho (2021); Cruz et al. (2019); Sierra-García et al. (2019); Velte (2018); Velte (2019)	(-)
$AudOpin_{it}$	Modified audit opinion	Dummy variable, 1 for reports with modified audit opinion and 0 otherwise	Carvalho (2021); Cruz et al. (2019); Ferreira and Morais (2019)	(-)

AudCommit _{it}	Presence of an audit committee	Dummy variable, 1 for firms with an audit committee and 0 otherwise	Carvalho (2021); Cruz et al. (2019); Velte (2018); Velte (2019)	(-)
Audit _{it}	Audit firm	Dummy variable, 1 when the audit firm is one of the Big Four and 0 otherwise	Carvalho (2021); Cruz et al. (2019); Ferreira and Morais (2019); Velte (2018); Velte (2019)	(-)
IG _i	Industrial goods sector	Dummy variable, 1 for companies in the industrial goods sector and 0 otherwise	Carvalho (2021); Ferreira and Morais (2019); Pinto and Morais (2018); Sierra-García et al. (2019); Velte (2018); Velte (2019)	(+/ -)
NKAM _{it}	Number of KAM	Number of LAM disclosed in the audit report	Included for control	(+/ -)
COVID _t	Pre-COVID-19 period	Dummy variable, 1 for the pre-COVID period and 0 otherwise	Included for control	(+/ -)

Source: Elaborated by the authors.

4 PRESENTATION OF RESULTS

The KAM similarity index was initially calculated as highlighted in Equation 1 of the methodology section. It represents the percentage of KAM disclosed in an audit report that are identical to KAM disclosed in the report released in the previous period.

The next step involved developing descriptive statistics for the variables to highlight their characteristics in the sample period, as shown in Table 2. Finally, Table 3 presents the validation statistics of the regression models estimated to verify the proposed hypotheses.

5 DISCUSSION OF RESULTS

The mean KAM similarity index in 2017 was 0.6771. This indicates that, on average, 67.71% of the KAM disclosed by independent auditors were the same as the KAM of 2016. For the other years, the results showed 72.42% in 2018, 68.08% in 2019, 75.81% in 2020, and 80.91% in 2021. Considering a minimum of 0% and a maximum of 100%, the average for the period was 72.91%. These results are consistent with the findings of Carvalho (2021), Carlé et al. (2023), Hsieh et al. (2021), and Kend and Nguyen (2020), who also investigated the percentage of KAM similarity.

As highlighted by Hsieh et al. (2021), this high KAM similarity rate may be explained by accounting standards, auditors' risk assessments, and the lack of changes in independent auditors' practices and methodologies.

The behavior of the continuous variables shown in Table 2 suggests that less leveraged, less profitable, and smaller companies present a higher KAM similarity rate. Companies that had between 1 and 3 KAM disclosed in the audit reports, had no change of auditors, did not have an audit committee, and did not present a modified audit opinion in the audit report also demonstrated a higher average KAM similarity. Controlling for the period affected by the COVID-19 pandemic made it possible to verify that between 2020 and 2021, companies presented greater KAM similarity, indicating that this pandemic could positively impact the similarity of these matters.

Table 2

Descriptive statistics of variables and test for difference in means/medians per group with and without KAM similarity

Variables	N	Below the mean N = 557	Above the mean N = 818	p-value
Panel A – Continuous variables				
SIM _{it}	1,375	0.50 (0.00, 0.67)	1.00 (1.00, 1.00)	<0.001
AudFee _{it}	1,375	0.00 (0.00, 0.00)	0.00 (0.00, 0.00)	0.001
Lever _{it}	1,375	0.65 (0.49, 0.78)	0.60 (0.42, 0.77)	0.002
ROA _{it}	1,375	0.04 (0.00, 0.08)	0.03 (-0.02, 0.08)	0.3
Size _{it}	1,375	22.05 (20.56, 23.40)	21.51 (19.71, 22.78)	<0.001
Panel B – Discrete and categorial variables				
ChAud _{it}	1,375			<0.001
No change of auditor		371 / 557 (67%)	693 / 818 (85%)	
Change of auditor		186 / 557 (33%)	125 / 818 (15%)	
AudOpin _{it}	1,375			0.5
Unmodified audit opinion		532 / 557 (96%)	787 / 818 (96%)	
Modified audit opinion		25 / 557 (4.5%)	31 / 818 (3.8%)	
AudCommit _{it}	1,375			<0.001
No audit committee		333 / 557 (60%)	570 / 818 (70%)	
Presence of audit committee		224 / 557 (40%)	248 / 818 (30%)	
Audit _{it}	1,375			0.11
No-Big4		169 / 557 (30%)	312 / 818 (38%)	
DTT		70 / 557 (13%)	41 / 818 (5.0%)	
EY		104 / 557 (19%)	177 / 818 (22%)	
KPMG		136 / 557 (24%)	174 / 818 (21%)	
PWC		78 / 557 (14%)	114 / 818 (14%)	
EconSect _i	1,375			>0.9
Other		25 / 557 (4.5%)	59 / 818 (7.2%)	
Industrial goods (IG)		119 / 557 (21%)	149 / 818 (18%)	
Cyclical consumption		156 / 557 (28%)	220 / 818 (27%)	

Variables	N	Below the mean N = 557	Above the mean N = 818	p-value
Non-cyclical consumption		44 / 557 (7.9%)	62 / 818 (7.6%)	
Basic resources		50 / 557 (9.0%)	82 / 818 (10%)	
Oil, gas, and biofuels		20 / 557 (3.6%)	31 / 818 (3.8%)	
Health		37 / 557 (6.6%)	56 / 818 (6.8%)	
Information technology		10 / 557 (1.8%)	31 / 818 (3.8%)	
Utilities		96 / 557 (17%)	128 / 818 (16%)	
NKAM_{it}	1,375			<0.001
0		8 / 557 (1.4%)	1 / 818 (0.1%)	
1		65 / 557 (12%)	234 / 818 (29%)	
2		170 / 557 (31%)	286 / 818 (35%)	
3		168 / 557 (30%)	174 / 818 (21%)	
4		87 / 557 (16%)	90 / 818 (11%)	
5		41 / 557 (7.4%)	26 / 818 (3.2%)	
6		11 / 557 (2.0%)	7 / 818 (0.9%)	
7		6 / 557 (1.1%)	0 / 818 (0%)	
8		1 / 557 (0.2%)	0 / 818 (0%)	
Pre – COVID_{it}	1,375			0.014
COVID		197 / 557 (35%)	343 / 818 (42%)	
Pre-COVID		360 / 557 (65%)	475 / 818 (58%)	

Note: t-test for continuous variables and Wilcoxon test for categorical and discrete variables. **AudFee** – Audit fees; **Lever** – Financial leverage; **ROA** – Return on assets; **Size** – Company’s size; **ChAud** – Change of auditor; **AudOpin** – modified audit opinion; **AuditComm** – presence of an audit committee; **Audit** – Audit firm; **EconSect** – Economic sector; **NKAM** – Number of reported KAM; **COVID** – Pre-COVID period.

Regarding the size of the audit firms, companies audited by non-Big Four firms show greater KAM similarity than those audited by Big Four firms. Among the Big Four firms, Deloitte Touche Tohmatsu exhibits less similarity when disclosing these matters.

The differences in similarity identified for audit firms corroborate the findings of Carvalho (2021), Cruz et al. (2019), Ferreira and Morais (2019), Kitiwong and Srijunpetch (2019), Sierra-García et al. (2019), Velte (2018), and Velte (2019), who also found disparities in the disclosure of KAM among audit firms. According to Abdullatif and Al-Rahahleh (2020) and Kend and Nguyen (2020), auditors vary in the nature and content of KAM. The standard that established the disclosure of KAM in Brazil states that these matters are those that, according to the auditor’s professional opinion, stand out during the auditing process (IFAC, 2015).

For economic sectors, there was greater KAM similarity in companies operating in the “other” category and in information technology. Conversely, the lowest similarity was concentrated in the “non-cyclical consumption” and “basic resources” sectors. Differences

between economic sectors were observed, aligning with the literature (Carlé et al., 2023; Carvalho, 2021; Ferreira & Morais, 2020; Hsieh et al., 2021).

These findings contribute to other studies that evaluated the impact of the economic sector on KAM disclosure. Ferreira and Morais (2019) and Sierra-García et al. (2019) demonstrated the existence of different effects of economic sectors on the number of KAM, and Velte (2019) showed greater KAM readability for industrial sectors. This disparity in similarity between sectors reinforces the results of Kend and Nguyen (2020), in which differences were identified in KAM disclosures among companies operating in different sectors.

The evidence reported in Table 3 was obtained through the statistical model and allows us to verify that among the characteristics of audit firms and audited companies that influence KAM similarity, the number of KAM reported (NKAM), the size of the company (Size), the change of auditor (ChAud), the presence of an audit committee (AudCommit), the pre-COVID period, and the audits carried out by the audit firm KPMG are those presenting a negative and significant influence on the proxy of KAM similarity. On the other hand, the audits carried out by the auditing firm Deloitte Touche Tohmatsu (DTT), Ernst Young (EY), PriceWaterhouseCoopers (PWC), and the fact that the company operates in the industrial goods sector (IG) are characteristics with a positive influence on this similarity.

The size of the audited company demonstrated a negative impact on KAM similarity, not rejecting hypothesis H4. It was expected that large companies would have greater resources for adapting and understanding accounting regulations, which could reduce the possibility of issues being classified as KAM. There was also the inference that due to the importance of large clients for auditing firms and because these companies have greater influence over auditors, these professionals would be more likely to accept these clients' accounting treatment.

Table 3

Statistics of the estimated regression models

	Mod.1	Mod.1.1	Mod.1.2	Mod.1.3	Mod.1.4	Mod.1.5
Intercept	0.03 (0.05)	0.04 (0.04)	0.08 * (0.04)	0.03 (0.04)	0.04 (0.04)	0.03 (0.04)
AudFee _{it}	0.16 (0.16)	0.23 (0.15)	0.16 (0.15)	0.19 (0.14)	0.23 (0.15)	0.19 (0.14)
Lever _{it}	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
ROA _{it}	0.02 (0.02)	0.03 (0.02)	0.02 (0.02)	0.03 (0.02)	0.03 (0.02)	0.03 (0.02)
Size _{it}	-0.01 * (0.00)	-0.01 ** (0.00)	-0.01 *** (0.00)	-0.01 ** (0.00)	-0.01 ** (0.00)	-0.01 ** (0.00)
ChAud _{it}	-0.04 *** (0.00)	-0.04 *** (0.00)	-0.04 *** (0.01)	-0.04 *** (0.00)	-0.04 *** (0.00)	-0.04 *** (0.00)
AudOpi _{it}	-0.02 (0.01)	-0.02 (0.01)	-0.02 (0.01)	-0.02 (0.01)	-0.02 (0.01)	-0.02 (0.01)
AudCommit _{it}	-0.01 (0.01)	-0.01 (0.00)	-0.01 * (0.00)	-0.01 (0.00)	-0.01 (0.00)	-0.01 (0.00)
DTT _{it}	0.02 (0.01)	0.01 (0.01)		0.01 (0.01)	0.01 (0.01)	0.01 (0.01)
EY _{it}	0.02 ** (0.01)	0.02 ** (0.01)		0.02 * (0.01)	0.02 ** (0.01)	0.02 * (0.01)
KPMG _{it}	-0.04 *** (0.01)	-0.04 *** (0.01)		-0.04 *** (0.01)	-0.04 *** (0.01)	-0.04 *** (0.01)
PWC _{it}	0.04 *** (0.01)	0.04 *** (0.01)		0.04 *** (0.01)	0.04 *** (0.01)	0.04 *** (0.01)
IG _{it}	0.02 (0.01)	0.03 * (0.01)	0.02 * (0.01)		0.03 * (0.01)	
NKAM _{it}	-0.02 *** (0.00)	-0.02 *** (0.00)	-0.01 *** (0.00)	-0.02 *** (0.00)	-0.02 *** (0.00)	-0.02 *** (0.00)
COVID _{it}	-0.02 *** (0.01)	-0.02 *** (0.01)	-0.03 *** (0.01)	-0.02 *** (0.01)	-0.02 *** (0.01)	-0.02 *** (0.01)
N	1375	1375	1375	1375	1375	1375
R ²	0.17	0.17	0.14	0.16	0.17	0.16
R ² adjusted	0.15	0.16	0.13	0.16	0.16	0.16
F.Stat/Wald	261.58	13.21	13.34	20.48	13.21	20.48
p-value	0.00	0.00	0.00	0.00	0.00	0.00
Fixed effect firm	No	Yes	No	No	No	Yes
Fixed effect auditor	No	No	Yes	No	No	No
Fixed effect sector	No	No	No	Yes	No	Yes
Fixed effect year	No	No	No	No	Yes	Yes
Control sector	Yes	Yes	Yes	No	Yes	No
Control year	No	No	Yes	No	No	No

Note: *** p < 0.001; ** p < 0.01; * p < 0.05. Clustered robust standard errors in firms/sector. **AudFee** – Audit fees; **Lever** – Financial leverage; **ROA** – Return on assets; **Size** – Company’s size; **ChAud** – Change of auditor; **AudOpi**– Modified audit opinion; **AudCommit** – Presence of an audit committee; **DTT** – Audit firm: Deloitte Touche Tohmatsu; **EY** – Audit firm: Ernst Young; **KPMG** – Audit firm: KPMG; **PWC** – Audit firm: PriceWaterhouseCoopers; **IG** – Industrial goods sector (B3); **NKAM** – Number of KAM reported; **COVID** – Pre-COVID period.

The change in auditor had a negative impact on KAM similarity, confirming hypothesis H5 and corroborating the results of Carlé et al. (2023). This finding can be related to the effects of the change in auditor on audit procedures. Whether mandatory or due to other contractual factors, audit firm rotation changes the professionals and, consequently, the methodologies adopted. This modifies the professionals’ judgment and materialities, which may decrease KAM similarity when comparing the report disclosed with the information released in the previous period by other auditors.

The presence of an audit committee demonstrated a negative impact on KAM similarity, corroborating hypothesis H7. The committee members could discuss matters related to auditing with the auditors, helping them understand the accounting standards and improving the processes of preparing and disclosing financial statements. In this way, the matters discussed may be elucidated and not considered KAM again.

It was possible to observe that the number of KAM has a negative impact on KAM similarity, whereas the period of the COVID-19 pandemic proved to have a positive influence on KAM similarity. Regarding the economic sectors, the findings pointed out that the industrial goods sector positively influenced KAM similarity.

The results for audit firms indicated that H8 was partially not rejected, i.e., only KPMG had a negative influence on KAM similarity, and the other Big Four firms had a positive influence.

These findings are consistent with the literature related to KAM disclosure, indicating that the characteristics of the auditor and audit clients influence the disclosure of these matters and their similarity (Carvalho, 2021). An analysis of the companies' results by independent auditors is relevant, as recommended by NBC-TA 701. By relating an audit matter directly to the circumstances and specificities of each entity, the auditor can reduce the possibility that such matters are excessively standardized over time and lose their usefulness to external users (IFAC, 2015).

6 CONCLUSIONS

This research aimed to identify the characteristics of audit firms and audited companies that influence KAM similarity in companies listed on the Brazilian Stock Exchange (B3), examining data from 2016 to 2021. The results revealed that the number of KAM reported, company size, change of auditor, presence of an audit committee, the pre-COVID-19 period, and audits carried out by the audit firm KPMG are associated with a lower KAM similarity rate.

On the other hand, audits carried out by the audit firms Deloitte Touche Tohmatsu, Ernst Young, PriceWaterhouseCoopers, and companies operating in the industrial goods sector showed a positive association with similarity. The evidence also indicated differences in KAM similarity between audit firms and economic sectors.

The existence of similarity in the KAM over the years should not be considered just a negative aspect. Some KAM may be related to the intrinsic characteristics of a given company and the economic sector in which it operates, indicating that particularities of the environment may contribute to the repetition of these issues. However, it is crucial to monitor similarity, as excessive repetition of KAM restricts the potential for informative content. The average similarity of 72.91% highlighted in this study indicates that, in general, auditing firms tend to repeat KAM.

Therefore, the findings of this research must be examined together with other empirical findings in the literature, not only on the similarity itself but also on the quantity, readability, and extension of the KAM. It is essential to strike a balance between report content and requirements, as new disclosure requirements do not guarantee a better understanding of the report by users and may generate costs that outweigh the benefits.

In this context, further studies on KAM are necessary, especially concerning similarity. In addition to research on metrics and determinants, future research should examine the consequences of KAM similarity. For example, analyzing the market reaction to the repetition of content in the KAM reported. Authors such as Bédard et al. (2016) demonstrated a lower relevance of reports for market players after the first year of adopting the current format. Different levels of similarity can explain different market reactions and, consequently, informational relevance.

The results of this study contribute to the literature by relating the characteristics of audit firms and audited companies that influence KAM similarity. Furthermore, they offer

subsidies to the capital market so independent audit professionals may assess the effects of KAM similarity on information users. Based on these data, accounting regulatory agencies can assess the similarity of the KAM and the level of judgment granted to independent auditors when applying ISA 701, verifying whether the objectives of establishing the KAM section in the independent audit report are being achieved.

The metrics used, despite the limitations, complement the literature. As previous studies on audit quality indicate, it is difficult to directly capture the full extent, judgments, and motivations involved in the audit work. Therefore, proxies are necessary to help identify behavior patterns unbiasedly. In this sense, future research can compare the behavior of KAM among peers, whether in terms of quantity, extent, or repetition, detecting abnormal levels of repetition, recommendations from previous audits, and the use of internal auditing. Comparing a company's behavior with companies in the same sector allows for controlling external factors and isolating company-specific patterns.

REFERENCES

- Abdullatif, M., & Al-Rahahleh, A. S. (2020). Applying a new audit regulation: Reporting Key Audit Matters in Jordan. *International Journal of Auditing*, 24(2), 268–291. <https://doi.org/10.1111/ijau.12192>
- Alves Júnior, E., & Galdi, F. (2020). Relevância informacional dos principais assuntos de auditoria. *Revista Contabilidade & Finanças*, 31(82), 67-83. <https://doi.org/10.1590/1808-057x201908910>
- Alves, V., Sales Filho, M., da Silva, J., Gomes, H., & de Lima, D. (2022). A Semelhança do Conteúdo dos Principais Assuntos de Auditoria: Um Estudo nas Instituições Bancárias

Listadas na B3. *Revista de Contabilidade e Controladoria*, 14(2), 59-76.

<https://doi.org/10.5380/rcc.v14i2.83205>

Asbahr, K., & Ruhnke, K. (2019). Real effects of reporting key audit matters on auditors' judgment and choice of action. *International Journal of Auditing*, 13(2), 165-180.

<https://doi.org/10.1111/ijau.12154>

Baltagi, B. H. (2005). *Econometric Analysis of Panel Data*. 3rd Edition, John Wiley & Sons Inc., New York.

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 & Theory*, 38(3), 23–45. <https://doi.org/10.2308/ajpt-52339>

Bédard, J., Gonthier-Besacier, N., & Schatt, A. (2016.) Analysis of the Consequences of the Disclosure of Key Audit Matters in the Audit Report. In: *DAC Accounting Research Seminars*. <http://www.hec.unil.ch/documents/seminars/dcc/1946.pdf>

Brasel, K., Doxey, M. M., Grenier, J. H., & Reffett, A. (2016). Risk Disclosure Preceding Negative Outcomes: The Effects of Reporting Critical Audit Matters on Judgments of Auditor Liability. *The Accounting Review*, 91(5), 1345–1362.

<https://doi.org/10.2308/accr-51380>

Carlé, T., Pappert, N., & Quick, R. (2023). Text similarity, boilerplates and their determinants in key audit matters disclosure. *Corporate Ownership & Control*, 20(2), 49–62.

<https://doi.org/10.22495/cocv20i2art4>

Carvalho, O. A. de. (2021). Similaridade dos principais assuntos de auditoria em companhias abertas brasileiras. 107 f. Dissertação (mestrado) – Universidade Federal de Minas Gerais, Centro de Pós-Graduação e Pesquisas em Controladoria e Contabilidade. <https://repositorio.ufmg.br/bitstream/1843/39007/1/Disserta%C3%A7%C3%A3o%20OTAVIO%20ARAUJO%20DE%20CARVALHO.pdf>

- Chen, J. Z., Nelson, K. K., Wang, Y., & Yu, L. (2020). Key Audit Matters and the Pricing of Audit Services: Evidence from Hong Kong. *Accounting Horizons*, forthcoming. Special Issue, 1-39. <https://doi.org/10.2139/ssrn.3638540>
- 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://papers.ssrn.com/sol3/papers.cfm?abstract_id=2318590
- Church, B. K., Davis, S. M., & Mccracken, S. A. (2008). The Auditor's Reporting Model: A Literature Overview and Research Synthesis. *Accounting Horizons*, 22, 69-90. <https://doi.org/10.2308/acch.2008.22.1.69>
- Cordoş, G. S., & Fülöp, M. T. (2015). Understanding audit reporting changes: introduction of key audit matters. *Accounting & Management Information Systems*, 14(1), 128-152. <https://ideas.repec.org/a/ami/journal/v14y2015i1p128-152.html>
- Cruz, A., Nardi, P., Figueira, L., & Silva, R. (2019). A relação entre o novo relatório do auditor independente e o perfil das empresas auditadas e de auditoria. *Revista Contemporânea de Contabilidade*, 16(40), 3-23. <https://doi.org/10.5007/2175-8069.2019v16n40p3>
- Fávero, L. P., & Belfiore, P. (2017). *Manual de Análise de Dados*, 1ª edição. Rio de Janeiro. Editora Elsevier.
- Ferreira, C., & Morais, A. I. (2019). Análise da relação entre características das empresas e os key audit matters divulgados. *Revista Contabilidade & Finanças*. 31(83), 262-274. <https://doi.org/10.1590/1808-057x201909040>
- Gimbar, C., Hansen, B., & Ozlanski, M. E. (2016). The Effects of Critical Audit Matter Paragraphs and Accounting Standard Precision on Auditor Liability. *The Accounting Review*, 91(6), 1629–1646. <https://doi.org/10.2308/accr-51382>

- Hsieh, S., Custodio, C. B., & Vasarhelyi, M. A. (2021). The textual similarity of KAM disclosures for Spanish companies. *The International Journal of Digital Accounting Research*, 21(7), 183-202. https://doi.org/10.4192/1577-8517-v21_7
- In, C., Kim, T., & Park, S. (2020). Key Audit Matters for Production-to-Order Industry and Conservatism. *International Journal of Financial Studies*, 8(1), 1-18. <https://doi.org/10.3390/ijfs8010005>
- International Auditing and Assurance Standards Board. (2015). International Standard on Auditing (ISA) 701 (NEW), Communicating Key Audit Matters in the Independent Auditor's Report. IAASB. <https://www.ifac.org/publications-resources/international-standard-auditing-isa701-new-communicating-key-audit-matters-i>
- Kend, M., & Nguyen, L. A. (2020). Investigating recent audit reform in the Australian context: An analysis of the KAM disclosures in audit reports 2017 at 2018. *International Journal of Auditing*, 24(3), 412–430. <https://doi.org/10.1111/ijau.12205>
- Kitiwong, W., & Srijunpetch, S. (2019). Cultural Influences on the Disclosures of Key Audit Matters. *Accounting Profession Journal*, 15(46), 45-63. <http://www.jap.tbs.tu.ac.th/files/Article/Jap46/Full/JAP46WeeSil.pdf>
- Lennox, C. S., Wu, X., & Zhang, T. (2014). Does Mandatory Rotation of Audit Partners Improve Audit Quality? *The Accounting Review*, 89(5), 1775–1803. <https://doi.org/10.2308/accr-50800>
- Lennox, C. S., Schmidt, J. J., & Thompson, A. (2017). Is the Expanded Model of Audit Reporting Informative to Investors? Evidence from the UK. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2619785
- Marques, V. A., Pereira, L. N., Aquino, I. F. de, & Freitag, V. da C. (2021). Ele ficou mais legível? Evidências empíricas dos principais assuntos no relatório de auditoria

- independente. *Revista Contabilidade & Finanças*, 32(87), 444-460.
<https://doi.org/10.1590/1808-057x202112990>
- Pinto, I., & Morais, A. I. (2018). What matters in disclosures of key audit matters: Evidence from Europe. *Journal of International Financial Management & Accounting*, 30(2), 145-162. <https://doi.org/10.1111/jifm.12095>
- Santos, E. S., Calixto, L., & Bispo, M. F. (2019). Impacto da OCPC 07 no enxugamento das notas explicativas das companhias brasileiras. *Revista Contabilidade & Finanças*, 30(79), 58-72. <https://doi.org/10.1590/1808-057x201806650>
- Segal, M. (2019), Key audit matters: insight from audit experts. *Meditari Accountancy Research*, 27(3), 472-494. <https://doi.org/10.1108/MEDAR-06-2018-0355>
- Sierra-García, L., Gambetta, N., García-Benau, M. A., & Orta-Pérez, M. (2019). Understanding the determinants of the magnitude of entity-level risk and account-level risk key audit matters: The case of the United Kingdom. *The British Accounting Review*, 51(3), 227–40. <https://doi.org/10.1016/j.bar.2019.02.004>
- Silva, R. B., Ponte, V. M. R., Luca, M. M. M. De, Santos, E. S., & Domingos, S. R. M. (2018). Implicações da OCPC 07 sobre a Forma das Notas Explicativas: Estudo em Empresas de Alimentos Processados. *Revista De Educação E Pesquisa Em Contabilidade (REPeC)*, 12(4), 429-449. <https://doi.org/10.17524/repec.v12i4.1848>
- Sirois, L., Bédard, J., & Bera, P. (2017). The Informational Value of Key Audit Matters in the Auditor's Report: Evidence from an Eye-tracking Study. *Accounting Horizons*, Forthcoming. Especial Issue, 1-49. <http://doi.org/10.2139/ssrn.2469905>
- Velte, P. (2018). Does gender diversity in the audit committee influence key audit matters' readability in the audit report? UK evidence. *Corporate Social Responsibility and Environmental Management*. Especial Issue, 1-8. <https://doi.org/10.1002/csr.1491>

- 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. <https://doi.org/10.1108/JAAR-10-2018-0163>
- Wooldridge, J. M. (2002). *Econometric analysis of cross section and panel data*. Cambridge, Mass: MIT Press.
- Zeng, Y., Zhang, J. H., Zhang, J., & Zhang, M. (2021). Key Audit Matters Reports in China: Their Descriptions and Implications of Audit Quality. *Accounting Horizons*, 35(2), 167–192. <https://doi.org/10.2308/HORIZONS-19-189>

Mapeando os Fatores Associados à Similaridade dos Principais Assuntos de Auditoria em Empresas Brasileiras Listadas

RESUMO

Objetivo: esse estudo se propôs a identificar quais são as características das firmas de auditoria e das companhias auditadas que influenciam à similaridade dos PAA.


Método: foram realizados testes de médias e regressão de dados em painel com uma amostra de 1.375 observações de companhias negociadas na B3 no período de 2016 a 2021.

Originalidade/Relevância: pesquisas anteriores sinalizaram que poderia ocorrer a similaridade dos PAA ao longo dos anos, mas não há estudos abrangentes que explorem quais são as características das firmas de auditoria e das companhias auditadas que influenciam a similaridade desses assuntos.

Resultados: os resultados demonstraram existir uma similaridade média dos PAA no período analisado de 72,91%. Ademais, foi observado que o número de PAA reportados, tamanho da companhia, mudança do auditor, presença do comitê de auditoria, período pré-COVID, e ser auditado pela KPMG estão associados negativamente com a taxa de similaridade. Já ser auditado pela Deloitte Touche Tohmatsu, Ernst Young, PriceWaterhouseCoopers e atuar no setor de bens industriais apresentaram associação positiva com a similaridade.

Contribuições Teóricas/Metodológicas: as evidências alcançadas contribuem para a literatura ao relacionar as características das firmas de auditoria e das companhias que influenciam a similaridade dos PAA. Beneficia o mercado de capitais, permitindo que os profissionais de auditoria avaliem os fatores que influenciam à similaridade dos PAA e reflitam sobre os efeitos dessa similaridade, possibilitando aprimorar a qualidade da informação divulgada. Auxilia também os órgãos de regulação contábil a verificarem se os objetivos de instituir os PAA no relatório da auditoria estão sendo alcançados.


Palavras-chave: Similaridade, Principais Assuntos de Auditoria, Relatório de Auditoria.

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