

DYNAMICS OF DISCLOSURE OF KEY AUDIT MATTERS IN BRAZIL AND PORTUGAL

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ABSTRACT

The study analyzes the Key Audit Matters (KAM) reported by independent auditors in non-financial companies listed on the Brazilian Stock Exchange and Euronext Lisbon from 2016 to 2021. For this purpose, a sample of 460 companies was used, and content analysis was performed on 4.733 KAM from 1.775 Independent Audit Reports (IAR), categorizing them at the lowest possible level: i) 25 items from Ibracon (2017; 2018); ii) 6 classes from ACCA (2018); and iii) 2 risk items from Sierra-García et al. (2019) and Lennox et al. (2022). Additionally, through descriptive analysis, the total number of KAM was examined by year, sector, audit firm, life cycle, and addition/elimination. The results indicate: an average of 3 KAM per company; an increase from 2016 to 2017 and a decline from 2017 to 2021, implying more eliminations than additions annually; the big four audited the majority of the sample; more KAM were reported in companies in the maturity phase of their life cycle; and the content was predominantly about financial statement risks. These findings help stakeholders in the IAR understand that there is a trend in the quantity and informational content of KAM, which are relatively focused on subjective, complex, and challenging financial aspects that require auditor involvement.

Keywords: Key Audit Matters. Informational Content. Trend.

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1 INTRODUCTION

The communication of Key Audit Matters (KAM) aims to enhance the transparency of financial statements by highlighting, in the Independent Auditor's Report (IAR), the areas that required the most relevance and judgment in the auditors' work (Federal Accounting Council – CFC, 2016). These disclosures are intended to meet the stakeholders' need for information about the risks and complex areas of the audited entity (Köhler et al., 2020). In the KAM, auditors also explain the reasons for the relevance of each matter and the verification methodology, which also adds value to the IAR (Association of Chartered Certified Accountants – ACCA, 2018; CFC, 2016; Cordoş & Fülöp, 2015; Kostova, 2016).

Audit regulators (Securities and Exchange Commission – CVM, 2018; Financial Reporting Council – FRC, 2015) expect the KAM to provide more informational content about the audited entity, being personalized and related to the present, avoiding repetition from the previous year and/or the industry. According to Lennox et al. (2022), the KAM reflect risks and/or distortions in the financial statements that are already known.

However, the standardization or increase of KAM has not yet been sufficiently explored (FRC, 2015; Lennox et al., 2022; Tušek & Ježovita, 2018). The American Accounting Association – AAA (2021) recommends investigating which long-term trends have emerged in KAM, even though they are specific to each audit and among companies in the same industry. Zhang and Shailer (2021) highlight that the manual data collection on how KAM change over time is scarce and expect similar monitoring by researchers or regulators. Therefore, there is a gap in the longitudinal analysis of changes in KAM, particularly regarding standardization and informational detailing.

Research on KAM has already investigated: i) the quantity of KAM and their categorization (Institute of Independent Auditors of Brazil – Ibracon, 2017; 2018; Marques & Souza, 2017; Pereira, 2019; Santos et al., 2020a; Silva et al., 2021a; Vargas et al., 2022); ii) market reactions to the communication of KAM (Lennox et al., 2022; Sirois et al., 2018); iii) auditor responsibility in reporting (Brasel et al., 2016; Gimbar et al., 2016); iv) the impact of KAM on various users, such as investors (Alves Júnior & Galdi, 2020; Christensen et al., 2014), general users of financial statements (Cordoş & Fülöp, 2015; Sirois et al., 2018), creditors (Boalaky & Quick, 2016; Trpeska et al., 2017), analysts (Venturini et al., 2022), and other stakeholders (Velte & Issa, 2019); v) KAM versus auditor protection against litigation for undetected distortions (Brasel et al., 2016); vi) whether KAM pressure management to publish more risk information on their own in the same or following year's annual report, as managers are aware of the KAM before they go to the IAR (Elmarzouky et al., 2022); vii) the quality of the new IAR (Santos et al., 2020); and viii) the specific characteristics of the audited entity and audit firms that determine the volume of KAM (Ferreira & Morais, 2020; Pinto & Morais, 2019; Ricquebourg & Maroun, 2023; Sierra-García et al., 2019; Venturini et al., 2023).

Regarding content analysis, in Brazil, Marques and Souza (2017) categorized and analyzed one year and 49 companies; Ibracon (2017; 2018) evaluated two years across all sectors; Santos et al. (2020a) examined the largest KAM in the sector up to 2018; Santos et al. (2020) analyzed 96 companies from the IBrX100 index in 2016 and 2017; Silva et al. (2021a) and Vargas et al. (2022) analyzed specific sectors – Public Utilities and Telecommunications. In Portugal, Pereira (2019) evaluated KAM reported in 2016 and 2017 and Fonseca (2021) and Martins (2023) examined the most frequent KAM in companies listed on Euronext Lisbon. Thus, it is observed that contextual factors, such as the life cycle of companies, have not been addressed. In each stage of the company's life cycle, distinct risks and challenges arise (Dickinson, 2011; Lester et al., 2003) that may require the auditor's attention and be among the critical audit areas.

In response to the regulators' intentions and previous studies, the research investigates: *How is the dynamics of the Key Audit Matters (KAM) reported by independent auditors characterized in non-financial companies in Brazil and Portugal?* The aim is to analyze the dynamics of KAM disclosure reported by independent auditors in non-financial companies listed on the Brazilian Stock Exchange and Euronext Lisbon from 2016 to 2021.

The motivation for understanding the disclosure of KAM in Brazil and Portugal lies in the fact that, despite cultural (same official language) and legal (same legal framework based on the code law philosophy) similarities (Silva et al., 2021), both countries are seen as having weak institutional environments, with a large portion of the business structure composed of small and medium-sized enterprises or concentrated ownership (El-Helaly et al., 2020), and with the same implementation of KAM (Pereira, 2019), they also present particularities that could lead to differences in KAM reporting. The contributions of this research are theoretical, empirical, and social.

From a theoretical perspective, it is based on Agency Theory (Jensen & Meckling, 1976; Subramaniam, 2006), as the reasonable level of assurance the auditor provides on financial reports helps reduce informational asymmetry. Therefore, if, over the long term, auditors incorporate new elements into their Independent Audit Reports (IAR) through KAM, they will provide even more data with less asymmetry to users. Additionally, it extends the literature on KAM by examining the extent to which auditors change their KAM disclosures annually (addition and elimination in terms of quantity/sectors) over a six-year period, considering this analysis by sector, audit firm, and life cycle. This contributes to the gap in the trend of KAM evidenced by FRC (2015), Tušek and Ježovita (2018), AAA (2021) and Lennox et al. (2022).

On the social level, this study helps regulators gain insights into the usefulness of KAM to improve the transparency of both the audit and the audited entity, consequently improving audit quality and assisting in the creation of more effective guidelines. Users of the KAM can better understand potential risks perceived and reported by auditors.

Empirically, in the Brazilian and Portuguese contexts, this study differs from Ibracon (2017; 2018), Marques and Souza (2017), Pereira (2019), Santos et al. (2020a), Santos et al. (2020), Silva et al. (2021a), and Vargas et al. (2022) by analyzing: a more robust sample (time period and sectors); KAM by life cycle; trends in KAM addition or elimination; and categorization aggregating the informational content of KAM at the lowest possible level: i) 25 items from Ibracon (2017; 2018); ii) 6 classes from ACCA (2018); and, finally, two risk items from Sierra-García et al. (2019) and Lennox et al. (2022). Furthermore, it compares two countries, complementing Zhang and Shailer (2021), who suggest studying KAM in other countries.

2 THEORETICAL ASPECTS OF KEY AUDIT MATTER REPORTING

The section on Key Audit Matters (KAM) reports, according to the auditor's professional judgment, the most significant issues in the audit of financial statements. These points are selected and discussed with those responsible for governance, but the decision on what to disclose rests with the auditor (Cordoş & Fülöp, 2015). KAM aim to provide more information to users, encouraging auditors to be specific to the audited entity, meaning that explanations about the circumstances of the audited entity should be included, rather than generic or abstract interpretations in standardized language (Lennox et al., 2022). Thus, each KAM includes a title, a description of the issue, with or without reference to the corresponding explanatory note, and the audit procedures performed (CFC, 2016; Sneller et al., 2016). The reference to explanatory notes or management reports implies that the KAM carry greater informational value (ACCA, 2018; CFC, 2016).

In this direction, KAM represent a shift from a standardized IAR, with few specific details about the companies reported by the auditor, to a model that includes more information, such as significant risks of material misstatements observed in the audited entity's financial statements and how the auditor dealt with them in the execution of their work (Sneller et al., 2016). Therefore, it is expected that auditors explicitly disclose in the KAM matters that are particularly challenging, subjective, or complex in judgment (Brasel et al., 2016).

Cordoş and Fülöp (2015) believe that KAM provide relevant information to users and, over the years, should be included in all IAR of audited companies, regardless of whether they are listed on the stock exchange. Sirois et al. (2018) concluded through eye-tracking technology that KAM in the IAR have a guiding impact on attention, as participants accessed these communications more quickly and paid closer attention to them. Therefore, if independent auditors report KAM with communicative value about the risks of the audited entity, this could reduce informational asymmetry as advocated by Agency Theory and signal new information to users.

Agency Theory (Jensen & Meckling, 1976; Subramaniam, 2006) and KAM are interconnected because KAM help reduce informational asymmetry between managers (agents) and investors (principals). Auditors highlight, in KAM, critical information and potential risks in financial reports, increasing transparency and allowing investors to have a more detailed and reliable view of the audited company (Köhler et al., 2020). Thus, KAM are a tool to mitigate agency conflicts, enhancing market understanding of the financial and operational situation of companies.

The International Accounting Standards Board does not determine the number of KAM to be reported but suggests reporting between two and seven items (Cordoş & Fülöp, 2015). Pinto and Morais (2019) understand that the number of KAM varies but is generally influenced by litigation risk, the auditor's reputational loss, the auditor-client relationship, the accuracy of accounting standards, and the effects of regulators and supervisors of the activity.

Brasel et al. (2016) present two legal perspectives on KAM: i) the auditor not detecting material misstatements in a risk area but highlighting a KAM increases the chance of litigation; and ii) the auditor not detecting misstatements but communicating KAM in other areas or reporting that there are no KAM increases their responsibility. In this context, Gimbar et al. (2016) argue that in environments with strict accounting standards, KAM help prevent litigation. Furthermore, they suggest that the term “reasonable assurance”, used to interpret other sections of the IAR, should be applied to KAM to improve user understanding of the auditor's professional responsibility.

Additionally, Segal (2017), when exploring the possible consequences of introducing KAM in audit reports in the South African context, suggested that auditors seek protection against failing to clarify certain key audit matters. Moreover, he recommended that auditors substantiate their findings, particularly regarding the going concern assumption, and report which procedures were not performed to reduce future inquiries.

Another challenging aspect for auditors, leading to scarce disclosures, is the KAM related to the impacts of Information Technology (IT) within an organization, as it can result in: business closure; affecting share values; establishing continuity risks; and jeopardizing the integrity of financial statements (Sneller et al., 2016). If auditors pay attention to this aspect in their KAM, they could improve IT disclosures and, especially, contribute to stakeholders having more information about companies by highlighting minor aspects or anomalies (Cordoş & Fülöp, 2015).

Studies using statistical techniques suggest that the characteristics of the audited entity and the audit firms contribute to determining the volume and type of KAM reported in the IAR (Ferreira & Morais, 2020; Pinto & Morais, 2019; Sierra-García et al., 2019; Venturini et al., 2023). Ricquebourg and Maroun (2023) found that changing the responsible auditor is not

associated with changes in the reported KAM, but switching audit firms significantly impacts the KAM added or removed from an audit report. Regulators are concerned with the quality of the content published in the KAM and question whether auditors are not making standardized disclosures simply to fulfill their duties, thus reporting the same information already presented by the company in other reports (ACCA, 2018). This highlights the importance of studies that qualitatively evaluate KAM.

Regarding the analysis of the informational content of KAM, Ibracon (2017), in a general way and by activity sector, identified the KAM from the IARs of the first year (2016) in Brazil, observing an average of 2.43 KAM per company, with more disclosures about areas of higher risk and greater subjectivity in analysis. Ibracon (2018) evaluated the KAM of 2017, finding a greater quantity of items and IAR, but the same average number per company.

Marques and Souza (2017) analyzed companies from the Ibovespa index in 2016, finding about 3.49 KAM per company, with the most cited being: asset recoverability, contingencies, revenue, and projections of future results for asset realization. Additionally, two companies reported going concern risk, which was included in their financial statements. Silva et al. (2021a) observed that the big four firms reported 79% of the KAM annually, addressing issues related to fixed assets, results, assets and liabilities of concessions, and sector-specific matters, being more varied in large companies. Vargas et al. (2022) observed an annual reduction in the total number of KAM from 2016 to 2019, with an average of 2.75 per company, with revenue, assets and liabilities of concessions, sector-specific issues, and contingencies being the most frequent in the public utilities and telecommunications sectors.

In Portugal, Pereira (2019) analyzed the KAM from 2016 and 2017 of companies listed on the Lisbon Stock Exchange – Euronext Lisbon, with the most reported issues being related to tangible/intangible fixed assets, goodwill, investments in other companies, tax matters, provisions, and contingent assets and liabilities. Martins (2023) also examined companies listed on Euronext Lisbon and found that the most common KAM included legal, tax, and investment issues, with larger companies and those audited by the big four reporting a greater number of KAM. Fonseca (2021) identified that the most representative topics in the financial statements are more frequent in KAM than areas with greater complexity of validation. Additionally, the total assets and liabilities have a positive influence on the number of KAM disclosed; the larger these factors, the greater the number of KAM reported by the auditor. Conversely, companies with higher profitability tend to report fewer KAM. This finding corroborates Pinto and Morais (2019), who identified more KAM in companies with higher financial risk and fewer in highly regulated institutions, such as financial companies.

This study stands out by analyzing all non-financial sectors of the Brazilian Stock Exchange and Euronext Lisbon over a longer period (2016 to 2021). It also aggregates the quantity and types of KAM by the company's life cycle stage. This approach is motivated by the fact that, despite belonging to different segments and markets, companies face similar challenges during their development (Scott & Bruce, 1987). Variations in cycles are common and influenced by risks and uncertainties reflected in cash flows (Dickinson, 2011; Lester et al., 2003; Miller & Friesen, 1984). The movement between cycles is impacted by the company's operational, investment, and financing activities (Hasan & Habib, 2017). According to Dickinson (2011), a company's life cycle represents the stages it goes through from its creation to possible decline, each with its own challenges and adapted strategies.

In the first and second stages, birth and growth, companies typically turn to external sources to cover the cash needs arising from their operational activities (Alves & Marques, 2007). In the third stage, maturity, revenue stabilizes, and the generated cash flow is sufficient to cover initial losses and investments, making companies less prone to risks and more likely to have persistent profits (Dickinson, 2011).

In the turbulence phase, the fourth stage, the company undergoes a renewal process, changing its structure to return to periods of growth or maturity, causing the financial information to lose its informational content (Alves & Marques, 2007). Benmelech et al. (2010) demonstrate that companies in the decline phase – the final stage – face a high probability of exiting the market due to internal inefficiencies, obsolescence of technology, products, and management strategies. To overcome these limitations, they work to regain market share, often by increasing their investments.

Thus, even though companies apply the same accounting standards for recording their operations, the relevance of accounting information varies across the five stages of the life cycle (Habib & Hasan, 2018). This highlights the need for differentiated reporting by independent auditors at each stage and, consequently, distinct reporting of KAM for the company.

3 METHODOLOGICAL PROCEDURES

The sample consisted of active non-financial organizations listed on the Brazilian Stock Exchange or Euronext Lisbon, which presented IAR for at least one of the years considered between 2016 and 2021. This verification was conducted from January to October 2022, covering 460 companies, and analyzing 1.775 IAR (1.584 from Brazil and 191 from Portugal). The period was selected because it follows the implementation of the KAM standard in Brazil and Portugal, which required a new section in the IAR for audits that end in or after the 2016 fiscal year (CFC, 2016).

By accessing the IAR available on the Brazilian Stock Exchange or Euronext Lisbon websites, manual data collection was carried out regarding the quantity and topics reported by each company in the KAM section and the name of the audit firm that issued the IAR. To evaluate the dynamics of KAM disclosure, the following steps were taken: i) understanding the reported communication through content analysis by sentence; ii) quantitative aspects of reporting through descriptive analysis.

Regarding the informational content of the KAM, an initial categorization was performed based on the list (25 types) from Ibracon (2017; 2018), in which: i) if the title and/or description of the KAM involved two or more categories, it was broken down and counted separately; and ii) if the company reported more than one KAM in the same category in a given year, it was classified multiple times in that category.

Subsequently, the categorization was coded based on the six classifications from ACCA (2018), and finally summarized following Sierra-García et al. (2019) and Lennox et al. (2022), distinguishing between two categories: i) entity-level risk, which includes matters related to the overall risk of the company, such as tax provisions and information technology; and ii) account-level risk, which includes specific items in the financial statements, such as revenue, intangibles, fixed assets, inventories, and impairment of assets. It is worth noting that through this final segregation, it was possible to understand which matters are or are not of a financial accounting nature. Table 1 illustrates the KAM categorizations adopted in this research.

For categorizing the KAM to the lowest possible level, one author manually classified the KAM, and then another pair reviewed them. Finally, a group analysis (with all authors) was conducted to discuss, validate, or reclassify the issues as necessary. This process aimed to minimize the subjectivity of inference and interpretation. Additionally, when necessary, experts (financial analysts and PhD professors in Accounting) were consulted, and the explanatory notes referenced in the KAM descriptions were read to obtain more information about the described KAM.

The experts participated in the evaluation of the informational content of the KAM from the first categorization (IBRACON). Items that raised doubts were discussed with them in scheduled meetings, leading to learning about the interpretation of KAM messages. Finally, they

reviewed the entire proposed categorization, with only a few classification changes and a small number of KAM being reclassified into multiple categories.

Table 1
KAM categories of the study

Ibracon (2017; 2018)	ACCA (2018)	Sierra-García et al. (2019) and Lennox et al. (2022)
Grant and sectoral assets and liabilities	Sector-Specific Matters	Account-level risk
Realization of deferred income impact	Assets	
Investments		
Inventories		
Investment property		
Biological assets		
Fixed assets		
Accounts receivable		
Intangible assets		
Assets held for sale/Discontinued operations		
Recoverable amount of non-financial assets		
Impairment of financial assets	Liabilities	
Contingencies		
Post-employment benefits		
Other liabilities	Complex Matters	
Revenue		
Financial instruments	Complex Matters	Entity-level risk
Business combinations		
Laws and regulations		
Taxes		
Transactions with related parties		
Going concern assumption		
Liquidity management		
Internal controls – IT	Controls	
Fiduciary statements		

The quantitative aspects evaluated from the KAM by country included the maximum, minimum, average, and frequency, as well as the dynamics of change: i) year-to-year; ii) sector; iii) audit firm; iv) life cycle; and v) addition/elimination. Descriptive analysis was performed for these data.

In the life cycle stage classification, companies with available cash flow statement data from the Refinitiv® database were considered, with organizations categorized year by year into one of the five stages of Dickinson (2011), which considers operating, investing, and financing cash flows. It is worth noting that the analysis from 2016 to 2021 provides a sample size with randomness, allowing for analogy with less bias, and also includes two years (2020 and 2021) marked by the Covid-19 pandemic, which may have economically and financially influenced companies worldwide (Nicola et al., 2020) and the reporting of KAM by auditors.

It should be emphasized that for this research, the Correspondence Analysis (Anacor) statistic was not used, as the companies analyzed reported more than one KAM category each year (for the three types of categorization analyzed), and Anacor assumes that each company has only one category as the object of analysis to avoid biasing the results.

4 RESULTS ANALYSIS

The focus of the analysis of KAM was on the six categories from ACCA (2018) and the two categories from Sierra-García et al. (2019) and Lennox et al. (2022), as this study aims to understand the lowest level of disclosure. In summary (data tabulated but not in table format), in

the evaluation of KAM according to the 25 categories from Ibracon (2017; 2018), only the item fiduciary statements was not observed in Brazil and Portugal, as it is listed under securitization companies – financial sector in Ibracon. In Portugal, KAM regarding inventories were also not observed. The three most reported issues during the analyzed period in both countries were: recoverable amount of non-financial assets, revenue, and contingencies, which together represented 37.58% of the 4.124 KAM analyzed in Brazil and 57.47% of the 609 in Portugal.

Table 2 illustrates the total number of KAM by sector and the average quantity per company.

Table 2
Total of KAM by sector and average quantity per company in Brazil and Portugal

Sector	Brazil							Portugal							
	Average KAM/Company						Overall Average	Average KAM/Company						Overall Average	
	2016	2017	2018	2019	2020	2021		2016	2017	2018	2019	2020	2021		
Accommodation and Food Services	2.67	2.67	3.33	3.67	3.00	3.00	3.06	1.50	1.50	2.50	2.50	2.50	2.50	2.50	2.17
Health Care and Social Assistance	3.40	3.33	3.33	2.86	2.60	2.60	3.02	-	-	-	-	-	-	-	-
Wholesale Trade	2.57	3.43	3.14	3.38	2.83	2.75	3.02	3.00	3.00	2.00	1.00	2.00	2.00	2.00	2.17
Educational Services	2.80	2.40	3.40	3.25	3.40	2.57	2.97	-	-	-	-	-	-	-	-
Arts, Entertainment, and Recreation	3.00	3.00	3.00	3.00	3.00	2.33	2.89	0.75	1.80	1.40	1.60	1.60	1.60	1.60	1.46
Transportation and Warehousing	3.60	2.88	3.13	2.72	2.50	2.33	2.86	4.00	6.00	5.00	5.00	5.00	4.00	4.83	
Administrative and Support Services, Waste Management and Remediation Services	3.00	3.00	2.50	2.75	3.00	2.85	2.85	-	-	-	-	-	-	-	-
Real Estate and Rental and Leasing	3.88	3.13	2.63	2.50	2.25	2.50	2.81	-	-	-	-	-	-	-	-
Utilities	3.26	3.21	2.86	2.67	2.47	2.17	2.77	4.33	5.00	4.33	4.33	4.67	3.75	4.40	
Mining, Quarrying, and Oil and Gas Extraction	2.33	3.00	2.67	3.17	2.57	2.00	2.62	-	-	-	-	-	-	-	-
Retail Trade	3.29	3.29	2.79	2.45	1.96	1.79	2.59	2.67	2.33	3.33	3.67	3.33	2.00	2.89	
Agriculture, Forestry, Fishing, and Hunting	2.40	2.80	1.80	2.40	3.17	2.51	2.51	-	-	-	-	-	-	-	-
Other Services (except Public Administration)	-	-	-	-	2.50	2.50	2.50	-	-	-	-	-	-	-	-
Manufacturing	2.65	2.68	2.90	2.29	2.35	2.02	2.48	2.82	3.18	2.73	2.64	2.25	2.42	2.67	
Construction	2.59	2.65	3.06	2.05	2.20	2.08	2.44	3.33	4.67	2.67	3.50	3.50	4.00	3.61	
Information	1.20	3.00	2.60	2.22	1.56	2.00	2.10	3.40	3.40	3.20	3.20	3.40	3.20	3.30	
Professional, Scientific, and Technical Services	1.57	2.29	2.57	1.71	1.44	1.44	1.84	3.00	2.67	2.67	2.67	2.00	2.50	2.58	
Finance and Insurance	1.80	1.80	1.80	1.33	1.58	1.79	1.68	-	-	-	-	-	-	-	
Management of Companies and Enterprises	1.00	0.75	0.75	0.83	0.83	1.33	0.92	-	-	-	-	-	-	-	
Total	2.61	2.74	2.68	2.51	2.38	2.24	2.52	2.88	3.35	2.98	3.01	3.03	2.80	3.01	

According to Table 2, the overall average of KAM per company is 2.52 in Brazil and 3.01 in Portugal, corroborating the findings of Ibracon (2017; 2018), Marques and Souza (2017), Sierra-García et al. (2019), and Lennox et al. (2022). Between 2016 and 2019, all 19 Brazilian sectors reported KAM at least in one year, while 9 Portuguese sectors did not report them. The maximum number of KAM per company was 8. According to Cordoş and Fülöp (2015), the IAASB suggests reporting between two and seven relevant issues in the IAR, after discussions with governance, which would align with the average in both Brazil and Portugal, if it were a regulatory requirement.

In Brazil, between 2017 and 2021, the sector with the most KAM was Accommodation and Food Services (average of 3.06), and the sector with the least was Management of Companies and Enterprises (0.92). In Portugal, the Transportation sector had the highest average of KAM (4.83), and Arts and Entertainment had the lowest (1.46), which is consistent with Pereira (2019), who also noted a varied average across sectors. Although the overall average of KAM remained stable in both countries, there was a slight decrease from 2017 to 2021. This trend, also observed in Africa, reflects the increasing exclusion of KAM over the years (Riquebourg & Maroun, 2023).

In the years 2020 and 2021, considered to be globally and economically affected by the Covid-19 pandemic (Nicola et al., 2020), no significant increase or decrease in the number of KAM was observed in relation to the overall average in each country, despite 2021 being the year with the lowest average in both countries (Brazil – 2.24 and Portugal – 2.80). The highest average of KAM was in 2017, both for Brazil (2.74) and Portugal (3.35).

To further understand the annual trend of KAM reported in Brazil and Portugal from 2016 to 2021, the number of KAM added and removed was analyzed, following Ricquebourg and Maroun (2023). For example, an audit report may have two KAM in the previous year and the current year, which may be the same, completely different, or a new and an old KAM. On average, (data tabulated but not in table format), every year, companies in the sample from Brazil and Portugal had a slightly higher number of KAM removed than added, leading to a decline in the average number of KAM. This same trend was observed by Ricquebourg and Maroun (2023) in Africa. This helps explain the decline in the total number of KAM reported from 2017 to 2021 in both Brazil and Portugal (Table 2).

Table 3 illustrates the KAM, according to the six categories from ACCA (2018), by year and sector, in Brazil and Portugal, arranged in order from the highest to the lowest total of KAM by category.

Table 3
KAM reported by category (six categories) and sector in Brazil and Portugal

Sector	Brazil																																				
	Complex Matters					Assets					Impairments					Liabilities					Controls					Sector-Specific Issues											
	16	17	18	19	20	21	16	17	18	19	20	21	16	17	18	19	20	21	16	17	18	19	20	21	16	17	18	19	20	21	16	17	18	19	20	21	
A	1	1	1	4	2	2	2	1	2	2	2	2	3	3	4	4	4	4	0	1	1	0	0	0	2	2	2	1	1	1	0	0	0	0	0		
B	4	4	3	6	8	7	0	0	0	0	1	1	1	1	2	3	7	7	1	1	0	1	1	1	0	0	0	1	1	0	0	0	1	0	0		
C	4	6	3	6	11	8	6	6	5	5	6	5	0	1	1	1	1	1	2	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0		
D	3	2	3	2	1	1	2	2	2	3	3	2	2	2	2	2	3	2	2	2	2	2	2	1	0	1	0	0	0	1	0	0	0	0	0		
E	12	11	16	13	21	21	12	12	12	10	12	8	6	6	6	4	9	10	10	11	10	8	10	9	4	5	8	4	3	2	0	0	0	0	0		
F	5	4	5	5	6	8	2	2	4	2	5	5	4	4	5	4	4	4	3	2	3	2	1	1	0	0	0	0	1	0	0	0	0	0	0		
G	2	2	2	4	7	6	3	3	2	3	3	7	2	2	2	3	4	3	1	1	1	1	2	4	1	1	2	1	3	3	0	0	0	0	2		
H	5	8	8	10	13	12	5	3	3	1	1	1	5	5	5	6	7	7	2	4	4	3	4	6	0	0	0	1	0	0	0	0	0	0	0		
I	2	4	4	12	13	15	2	3	2	1	1	4	1	3	3	5	6	10	1	3	2	2	3	3	0	2	2	0	2	0	0	0	0	0	0		
J	1	1	1	2	2	2	1	1	1	1	1	1	0	0	0	1	1	2	1	1	1	1	1	2	0	0	0	0	1	0	0	0	0	0	0		
K	62	60	75	64	77	66	59	62	63	47	53	42	45	39	44	44	47	43	41	52	49	40	46	42	18	20	21	11	16	13	0	0	0	2	1	0	
L	2	5	2	3	5	6	2	3	4	3	2	3	4	4	4	5	4	2	6	6	4	6	6	6	0	2	1	1	1	0	0	0	1	0	0		
M	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
N	3	3	3	4	6	7	3	6	7	4	4	3	4	5	4	2	3	3	1	1	3	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	
O	11	9	7	7	6	10	14	10	9	8	6	11	2	2	3	5	4	4	2	2	1	0	1	0	2	2	1	0	1	0	0	0	0	0	0	0	
P	13	8	10	23	18	19	21	23	16	9	16	15	4	3	2	7	5	4	4	7	5	5	9	6	4	5	6	4	6	5	0	0	0	1	1	1	
Q	11	14	16	19	15	12	16	12	11	11	8	10	10	7	8	9	12	11	6	6	7	5	5	2	5	2	4	2	0	1	6	5	4	3	5	6	
R	39	37	34	38	31	30	20	20	13	12	12	12	18	18	14	13	11	12	32	33	29	27	23	19	6	2	0	1	5	1	22	25	30	24	29	26	
S	5	7	8	14	15	12	6	5	4	3	6	9	2	2	2	3	5	5	2	5	5	6	7	5	3	5	3	1	1	2	0	0	0	0	0	0	
Total	185	186	201	236	260	247	176	174	160	125	142	141	113	107	111	121	139	136	117	139	127	110	122	108	45	48	52	27	42	32	28	30	34	32	36	35	
Sector	Portugal																																				
	Impairments					Assets					Complex Matters					Liabilities					Controls					Sector-Specific Issues											
	16	17	18	19	20	21	16	17	18	19	20	21	16	17	18	19	20	21	16	17	18	19	20	21	16	17	18	19	20	21	16	17	18	19	20	21	
A	1	1	1	1	2	2	0	0	0	0	0	0	1	1	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
D	1	3	3	4	4	4	1	0	0	0	0	0	0	3	2	2	2	1	1	3	2	2	2	2	0	0	0	0	1	0	0	0	0	0	0	0	0
E	1	2	1	1	1	1	6	8	4	5	5	6	2	3	1	1	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
I	6	6	6	6	6	5	5	4	4	5	5	3	3	3	3	2	3	3	3	3	3	3	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0
K	16	16	15	15	16	17	9	9	9	6	5	5	2	4	3	5	2	2	4	5	3	2	2	2	0	1	0	1	2	3	0	0	0	0	0	0	0
N	4	4	4	4	3	3	2	2	2	2	1	1	1	1	1	1	1	1	0	0	0	0	0	2	1	1	1	1	0	0	0	0	0	0	0	0	0
P	3	3	3	3	3	2	2	2	1	1	1	0	2	1	4	5	4	3	1	1	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Q	0	0	0	0	0	0	1	2	2	3	3	2	1	1	1	1	1	1	2	3	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
R	2	2	3	3	3	4	1	3	2	2	2	2	4	4	3	4	5	5	3	3	3	2	2	2	1	1	0	0	0	0	2	2	2	2	2	2	2
S	2	2	0	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Total	36	39	36	38	38	39	28	32	25	23	22	21	16	20	20	22	18	17	16	20	16	13	13	10	3	4	1	2	4	5	2	2	2	2	2	2	

Note. A = Sector of Accommodation and Food Services; B = Sector of Administrative and Support Services, and Waste Management and Remediation; C = Sector of Agriculture, Forestry, Fishing, and Hunting; D = Sector of Arts, Entertainment, and Recreation; E = Sector of Construction; F = Sector of Educational Services; G = Sector of Finance and Insurance; H = Sector of Health Care and Social Assistance; I = Sector of Information; J = Sector of Management of Companies and Enterprises; K = Sector of Manufacturing; L = Sector of Mining, Quarrying, and Oil and Gas Extraction; M = Sector of Other Services (except Public Administration); N = Sector of Professional, Scientific, and Technical Services; O = Sector of Real Estate and Rental and Leasing; P = Sector of Retail Trade; Q = Sector of Transportation and Warehousing; R = Sector of Utilities; S = Sector of Wholesale Trade. 16 = year 2016; 17 = year 2017; 18 = year 2018; 19 = year 2019; 20 = year 2020; 21 = year 2021.

It can be observed in Table 3 that, from 2016 to 2021, auditors in Brazil primarily highlighted Complex Matters as the areas that required deeper judgments. The KAM standard (CFC, 2016) emphasizes that complex areas and those requiring significant judgment from the audited entity demand difficult or complex judgments from the auditor. In Portugal, the most frequent KAM refer to impairment, which is the third group in Brazil. This divergence may stem

from the objective of the KAM section, which is to focus on issues that were discussed with management and required the most attention from auditors during the audit (Köhler et al., 2020). Therefore, it can be specific to the business context and each country. Regarding the impairment category, because it involves estimates, it has an inherent uncertainty that can generate significant distortions in the financial statements, requiring greater validation by auditors (ACCA, 2018).

Themes such as Assets and Liabilities are the second and fourth most frequent groups identified by auditors as KAM in Brazil and Portugal, respectively. This can be attributed to the auditor's role in examining financial statements and providing a reasonable level of assurance regarding the reported accounting figures to the users of the IAR (BooLaky & Quick, 2016).

The fifth group of KAM, less frequent in both countries, encompasses issues outside the financial statements, such as the evaluation of internal controls. This includes the analysis of IT, which is significant and of public interest due to possible risks to operational continuity and financial integrity (Sneller et al., 2016). The evaluation of client risk, according to Sierra-García et al. (2019), is also crucial for the success of the audit.

The KAM related to revenue emphasize internal controls and IT to ensure proper measurement of revenues, preventing the impacts of inadequate accounting and IT system failures on the financial statements. Other frequent issues include the accounting and determination of taxes, such as offset credits and installment payments, which affect results and require careful evaluation by the auditor to reduce information asymmetry. Martins (2023) observed that legal, tax, and investment issues are frequent KAM in Portugal. In 2019, the adoption of CPC 06 (R2)/IFRS 16 – Leases was also a KAM, reinforcing the trend of new accounting rules being highlighted in audits (Pinto & Morais, 2019).

The KAM standard (CFC, 2016) emphasizes that some issues are key for certain activities/sectors due to the circumstances of the segment or the complexity of the financial reports. The KAM legislation may have contributed to the frequent mention of "Assets and Liabilities of concession and sectoral" in industrial goods and utilities sectors, which include concession activities. Sierra-García et al. (2019) warned about auditors' propensity to issue certain KAM by area.

Table 4, listed from highest to lowest, illustrates the KAM by sector and year from 2016 to 2021, according to the two categories from Sierra-García et al. (2019) and Lennox et al. (2022).

Table 4
KAM by category (two categories) of Sierra-García et al. (2019) and Lennox et al. (2022) and sector in Brazil and Portugal

Sector	Brazil												Portugal											
	Account-level risk						Entity-level risk						Account-level risk						Entity-level risk					
	2016	2017	2018	2019	2020	2021	2016	2017	2018	2019	2020	2021	2016	2017	2018	2019	2020	2021	2016	2017	2018	2019	2020	2021
A	5	5	7	6	6	3	3	3	5	3	3	2	2	2	2	2	2	2	1	1	0	0	0	0
B	4	4	3	10	14	14	2	2	2	1	4	3	0	0	0	0	0	0	0	0	0	0	0	0
C	12	14	9	9	15	13	0	0	0	3	4	2	0	0	0	0	0	0	0	0	0	0	0	0
D	9	8	7	8	8	5	0	1	2	1	1	2	3	8	7	8	8	7	0	1	0	0	0	1
E	40	40	44	35	50	46	4	5	8	4	5	4	10	12	7	7	7	8	0	2	1	0	0	0
F	13	11	16	10	13	13	1	1	1	3	4	5	0	0	0	0	0	0	0	0	0	0	0	0
G	8	8	7	10	14	21	1	1	2	2	5	4	0	0	0	0	0	0	0	0	0	0	0	0
H	15	17	17	15	19	20	2	3	3	5	7	6	0	0	0	0	0	0	0	0	0	0	0	0
I	6	13	10	13	19	25	0	2	3	7	6	7	16	16	15	15	17	16	1	1	1	1	0	0
J	3	3	3	5	5	7	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
K	183	190	196	162	184	166	42	43	56	46	56	40	31	32	29	26	25	26	0	3	1	3	2	3
L	14	16	14	16	14	14	0	2	2	3	4	4	0	0	0	0	0	0	0	0	0	0	0	0
M	0	0	0	0	4	4	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
N	11	15	17	10	12	13	0	1	1	2	1	0	7	7	7	7	5	5	2	1	1	1	1	0
O	27	21	20	18	17	22	4	4	1	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0
P	34	38	26	25	38	35	12	8	13	24	17	15	7	7	8	8	8	4	1	0	2	3	2	2

Q	47	43	40	40	41	37	7	3	10	9	4	5	4	6	5	5	5	4	0	0	0	0	0	0
R	129	129	116	102	100	92	8	6	4	13	11	8	11	13	13	12	11	13	2	2	0	1	3	2
S	12	14	14	17	25	25	6	10	8	10	9	8	3	3	1	1	0	0	0	0	0	0	1	1
Total	572	589	566	511	598	578	92	95	119	140	143	121	94	106	94	91	88	85	7	11	6	9	9	9

Note. A = Sector of Accommodation and Food Services; B = Sector of Administrative and Support Services, and Waste Management and Remediation; C = Sector of Agriculture, Forestry, Fishing, and Hunting; D = Sector of Arts, Entertainment, and Recreation; E = Sector of Construction; F = Sector of Educational Services; G = Sector of Finance and Insurance; H = Sector of Health Care and Social Assistance; I = Sector of Information; J = Sector of Management of Companies and Enterprises; K = Sector of Manufacturing; L = Sector of Mining, Quarrying, and Oil and Gas Extraction; M = Sector of Other Services (except Public Administration); N = Sector of Professional, Scientific, and Technical Services; O = Sector of Real Estate and Rental and Leasing; P = Sector of Retail Trade; Q = Sector of Transportation and Warehousing; R = Sector of Utilities; S = Sector of Wholesale Trade.

It can be observed in Table 4 that auditors reported more on specific accounting items in the financial statements than on entity-level risks, both in Brazil and in Portugal. Most KAM address accounts that require greater subjectivity and complexity, similar to Sierra-García et al. (2019), with an average of 3 to 4 KAM at the account level and 2 to 3 at the entity level. Furthermore, the most significant issues in the financial statements tend to be a KAM (Fonseca, 2021), and consequently, these KAM are becoming guiding points in the reading of the financial statements (Sirois et al., 2018).

Segal (2017) warns that the possibility of KAM disclosing confidential elements signals a legal risk to auditors. Therefore, an expanded reporting standard is expected, addressing more accounting items. Kostova (2016) emphasizes that the auditor is not prohibited from highlighting issues unrelated to the financial statements. However, internal information should only be disclosed if professional ethics are observed.

On the other hand, the reporting of KAM related to the going concern of the business is also included in other areas of the IAR and in the explanatory notes. In other words, the information is simultaneously disclosed by the company’s management and the auditor, but the credibility of the auditor in the market can inspire greater trust and acceptance.

In summary, in this study, the categorization of KAM, according to Ibracon (2017; 2018), later by ACCA (2018), and followed by Sierra-García et al. (2019) and Lennox et al. (2022), indicates that during the period evaluated (2016 to 2021), audit firms gave more importance to elements of the financial statements (82.78% in Brazil and 91.63% in Portugal) than to entity-related risks (17.22% in Brazil and 8.37% in Portugal). This may be attributed to the auditor's role in certifying the credibility and truthfulness of the financial reports.

Table 5 illustrates the quantity of KAM by audit firm, segregated into i) big four, showing the KAM by their four members, and ii) other audit firms. This choice is justified by the fact that, annually, between 2016 and 2021, more than 50 audit firms were identified, but some only had one audit client, which could distort the average.

Table 5
KAM reported by audit firm from 2016 to 2021 – Brazil and Portugal

		Brazil																		Overall Average
Audit Firm		2016			2017			2018			2019			2020			2021			
		Com	KAM	Average KAM	Com	KAM	Average KAM	Com	KAM	Average KAM	Com	KAM	Average KAM	Com	KAM	Average KAM	Com	KAM	Average KAM	
Other Audit Firms		70	174	2.49	82	217	2.65	90	264	2.93	102	236	2.31	112	250	2.23	113	236	2.09	2.42
Big four	Deloitte	33	90	2.73	23	55	2.39	21	56	2.67	21	43	2.05	27	52	1.93	32	58	1.81	2.25
	EY	38	103	2.71	40	111	2.78	42	101	2.40	47	120	2.55	73	175	2.40	75	172	2.29	2.48
	KPMG	55	155	2.82	64	198	3.09	64	179	2.80	64	155	2.42	68	142	2.09	64	119	1.86	2.50
	PwC	41	142	3.46	33	103	3.12	25	85	3.40	36	97	2.69	43	122	2.84	47	114	2.43	2.95
Grand Total		237	664	2.80	242	684	2.83	242	685	2.83	270	651	2.41	323	741	2.29	331	699	2.11	2.51
		Portugal																		Overall Average
Audit Firm		2016			2017			2018			2019			2020			2021			
		Com	KAM	Average KAM	Com	KAM	Average KAM	Com	KAM	Average KAM	Com	KAM	Average KAM	Com	KAM	Average KAM	Com	KAM	Average KAM	
Other Audit Firms		11	19	1.73	10	21	2.10	9	18	2.00	11	21	1.91	12	20	1.67	12	21	1.75	1.85
Big four	Deloitte	9	34	3.78	7	28	4.00	5	12	2.40	4	10	2.50	6	14	2.33	8	22	2.75	3.08

EY	3	11	3.67	6	21	3.50	8	25	3.13	9	31	3.44	9	29	3.22	9	31	3.44	3.36
KPMG	4	13	3.25	4	16	4.00	4	13	3.25	5	14	2.80	5	14	2.80	4	9	2.25	3.04
PwC	9	24	2.67	10	31	3.10	11	36	3.27	7	27	3.86	5	24	4.80	4	15	3.75	3.41
Grand Total	36	101	2.81	37	117	3.16	37	104	2.81	36	103	2.86	37	101	2.73	37	98	2.65	2.84

Note. Com = Total of Companies; KAM = Total of KAM.

Analyzing Table 5, in Brazil, the overall average of reported KAM is 2.51, with PwC and KPMG above or close to the average, and Deloitte below it. In Portugal, all the big four exceeded the average of 2.84, led by PwC. In the United Kingdom, PwC also stood out with the highest average number of KAM (Sierra-García et al., 2019). Non-big four audit firms deemed, on average, 2.51 issues relevant in Brazil and 1.85 in Portugal.

In both countries of this study and in the United Kingdom (Sierra-García et al., 2019), based on the number of companies audited, the auditor's knowledge and history in the sector appear to favor the big four, suggesting a higher perception of quality in these audits (Ferreira & Morais, 2020), although the adequacy of KAM by firm has not been analyzed.

Table 6 illustrates the number of KAM reported from 2016 to 2021, classified into the six categories according to ACCA (2018), segregated by the five stages of the firm's life cycle.

Table 6
Total of KAM reported in six categories and by life cycle stage in Brazil and Portugal

Six categories	Brazil																				Grand Total										
	2016					2017					2018					2019						2020					2021				
	N	C	M	T	D	N	C	M	T	D	N	C	M	T	D	N	C	M	T	D		N	C	M	T	D	N	C	M	T	D
Complex Matters	11	40	91	21	8	15	50	80	18	3	21	49	82	21	8	16	63	108	14	5	35	97	72	18	7	58	52	78	23	13	1.177
Specific Issues	0	10	11	2	3	2	8	10	7	1	4	17	8	3	0	3	8	14	5	1	0	15	15	3	1	2	12	12	8	0	185
Assets	17	33	81	24	10	18	31	82	16	9	16	33	69	11	12	8	40	53	11	3	14	48	53	9	4	23	27	52	14	9	830
Controls	2	4	25	6	3	1	8	20	9	4	7	6	23	5	4	3	4	9	3	3	7	12	11	1	3	5	3	11	3	3	208
Impairments	10	16	61	11	7	8	17	52	14	5	11	26	45	10	7	9	32	55	11	3	16	48	45	13	5	20	33	49	13	9	661
Liabilities	9	28	58	9	6	12	29	70	11	6	14	35	52	5	9	4	26	58	6	4	9	35	52	8	5	20	21	37	14	8	660
Total Brazil	49	131	327	73	37	56	143	314	75	28	73	166	279	55	40	43	173	297	50	19	81	255	248	52	25	128	148	239	75	42	3.721
	Portugal																				Grand Total										
	2016					2017					2018					2019						2020					2021				
	N	C	M	T	D	N	C	M	T	D	N	C	M	T	D	N	C	M	T	D		N	C	M	T	D	N	C	M	T	D
Complex Matters	0	1	11	2	2	1	1	10	6	1	0	0	16	3	0	0	0	19	2	0	0	5	10	2	0	0	5	10	2	0	109
Specific Issues	0	0	2	0	0	0	2	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	2	0	0	0	0	2	0	0	12
Assets	0	0	19	6	3	0	1	16	13	2	0	1	15	7	2	0	0	12	11	0	0	2	15	5	0	2	2	12	3	2	151
Controls	0	0	2	0	1	0	1	2	1	0	0	0	1	0	0	0	0	2	0	0	0	1	3	0	0	0	1	2	1	0	18
Impairments	0	1	28	5	1	1	0	28	8	0	0	6	25	2	1	0	2	27	6	0	0	8	22	4	0	1	8	23	3	0	210
Liabilities	0	0	13	2	0	0	1	13	3	0	0	0	14	0	0	0	1	10	0	0	0	2	9	1	0	0	2	6	1	0	78
Total Portugal	0	2	75	15	7	2	6	69	31	3	0	7	73	12	3	0	3	72	19	0	0	18	61	12	0	3	18	55	10	2	578
Grand Total	49	133	402	88	44	58	149	383	106	31	73	173	352	67	43	43	176	369	69	19	81	273	309	64	25	131	166	294	85	44	4.299

Note: N = Birth; C = Growth; M = Maturity; T = Turbulence; D = Decline.

Between 2016 and 2021, maturity was the stage with the highest frequency of KAM in both Brazil and Portugal, except in 2020 in Brazil, when the growth stage predominated. The lowest number of KAM in both countries occurred during the decline stage, and a gradual increase in KAM was observed from the earlier stages to maturity, followed by a reduction in turbulence and decline.

Classifying a firm within a cycle requires understanding the potential factors that may affect performance (Dickinson, 2011). Thus, the stages of the life cycle vary according to the structure and strategy of the entities (Lester et al., 2003). When cash flows are in development or more stable, as in growth and maturity (Miller & Friesen, 1984), more KAM are reported. In birth, turbulence, and decline, due to production inefficiencies and limited financial resources (Dickinson, 2011), cash flow is more volatile, and auditors tend to communicate fewer KAM per company.

In Brazil, in all stages of the life cycle, the category "Complex Matters" was the most reported, followed by "Assets", while "Sector-Specific Issues" and "Controls" received fewer

mentions. Mature companies reporting KAM on challenging issues can benefit users of financial statements, as auditors help reduce informational asymmetry. The "Complex Matters" category includes KAM on revenue, and its movements, whether operational or extraordinary, are valued by the market (Hasan & Habib, 2017). Therefore, changes in audited and reported revenue in a KAM provide additional and reliable information to users.

In Portugal, no KAM were reported in the birth stage in the years 2016, 2018, 2019, and 2020, and in the decline stage in 2019 and 2020. From birth to maturity, there is more asymmetry in the information between the company and investors, with companies being subject to more rigorous control by their shareholders and having fewer resources to provide more robust disclosures (Dickinson, 2011). The lack of KAM reporting by auditors in the birth and decline stages reflects a low contribution to reducing informational asymmetry.

Table 7 presents the number of KAM reported in each of the five life cycle stages, segregated into two categories, at the account level and at the entity level.

Table 7
Total of KAM reported in two categories and by life cycle stage in Brazil and Portugal

Two categories	Brazil																				Grand Total										
	2016					2017					2018					2019						2020					2021				
	N	C	M	T	D	N	C	M	T	D	N	C	M	T	D	N	C	M	T	D		N	C	M	T	D	N	C	M	T	D
Account	46	118	279	59	33	49	124	275	62	21	60	145	224	44	33	28	137	236	46	14	61	202	212	45	20	98	122	206	63	37	3.099
Entity	3	13	48	14	4	7	19	39	13	7	13	21	55	11	7	15	36	61	4	5	20	53	36	7	5	30	26	33	12	5	622
Total Brazil	49	131	327	73	37	56	143	314	75	28	73	166	279	55	40	43	173	297	50	19	81	255	248	52	25	128	148	239	75	42	3.721
	Portugal																				Grand Total										
	2016					2017					2018					2019						2020					2021				
	N	C	M	T	D	N	C	M	T	D	N	C	M	T	D	N	C	M	T	D		N	C	M	T	D	N	C	M	T	D
Account	0	1	71	15	5	2	5	64	27	2	0	7	69	10	3	0	3	63	19	0	0	15	55	12	0	3	15	51	9	2	528
Entity	0	1	4	0	2	0	1	5	4	1	0	0	4	2	0	0	9	0	0	0	3	6	0	0	0	3	4	1	0	50	
Total Portugal	0	2	75	15	7	2	6	69	31	3	0	7	73	12	3	0	3	72	19	0	0	18	61	12	0	3	18	55	10	2	578
Grand Total	49	133	402	88	44	58	149	383	106	31	73	173	352	67	43	43	176	369	69	19	81	273	309	64	25	131	166	294	85	44	4.299

Note. N = Birth; C = Growth; M = Maturity; T = Turbulence; D = Decline.

According to Table 7, in Brazil and Portugal, the KAM focus more on account-level risks than on entity-level risks, especially in the maturity phase, indicating that issues related to accounting entries (financial statements) were more relevant. This is aligned with the auditor's work, which aims to contribute to the company's reputation and influence user decisions (Alves Júnior & Galdi, 2020), providing the market with an opinion with reasonable assurance about the financial statements. It was also observed that the number of KAM tends to increase as companies evolve towards maturity and decrease during the decline phases, possibly due to the absence of new operations and the high financial risk.

In the birth and decline life stages, which have more unstable cash flows, and consequently, higher investment return risk (Benmelech et al., 2010; Hasan & Habib, 2017), more KAM might be expected. This is because KAM aim to provide more information about the audit, especially regarding higher-risk aspects such as revenue. For companies in these phases, the more information users have about what was relevant to the auditor, the greater confidence they tend to have in their investments. However, KAM in companies in decline are limited, suggesting that auditors may not be meeting the informational needs of investors in uncertain contexts. The final stages indicate a high likelihood of companies exiting the market due to internal inefficiencies, technological obsolescence, and management strategy failures (Benmelech et al., 2010).

In general, the largest number of KAM was communicated by auditors in companies in the maturity phase. This phase is considered less risky (Dickinson, 2011), which can help the auditor provide more reliable information about the company. Despite being at a lower risk, companies in the maturity phase achieve a high standard of operational functioning, making

them material for auditors. Additionally, in both countries and all years, the decline phase had the lowest number of KAM. Hasan and Habib (2017) defined this phase as one with an uncertain scenario due to inadequate information. Therefore, in some stages, auditors may not be contributing to reducing the informational gap perceived by the market.

This study analyzed the disclosure of KAM in Brazil and Portugal from 2016 to 2021, considering factors such as year, sector, auditing firm, and life cycle. The goal was to assess the trend of KAM and, consequently, the information (financial or otherwise) of the audited companies. The average was 3 KAM per company, with more reports in the earlier years and a subsequent decline, resulting in more exclusion than addition annually. It was identified that the big four firms led the audits, with mature companies reporting more KAM, primarily focused on risks in the financial statements. Based on Agency Theory, the diversity of issues reported by auditors, as categorized in this study, provides users with broader information through the IAR (subject title, auditor's justification, and tests performed). Therefore, KAM help reduce informational asymmetry in the capital markets by providing more insights into the audit and the audited company.

5 FINAL CONSIDERATIONS

The study analyzes the dynamics of disclosure of Key Audit Matters (KAM) reported by independent auditors in non-financial companies listed on the Brazilian Stock Exchange and Euronext Lisbon from 2016 to 2021. A sample of 460 companies was evaluated, examining the informational content of 4,733 KAM from 1,775 Independent Audit Reports (IAR), categorized to the smallest possible level: i) 25 items from Ibracon (2017; 2018); ii) 6 classes from ACCA (2018); and iii) 2 risk items from Sierra-García et al. (2019) and Lennox et al. (2022). Additionally, the following reporting dynamics of the KAM were examined: total by year, sector, auditing firm, life cycle, and addition or elimination.

The research identified that, on average, the IAR report around three key matters annually, implying more reliable information about the company, as before the KAM standard, auditors issued a binary opinion (approved or disapproved) on financial statements and did not communicate the procedures executed (Lennox et al., 2022).

At the sector level, the average was also three KAM per company, mostly related to elements of the financial statements, specifically the most complex accounting issues. This suggests that at least three areas of risk and/or accounting accounts are analyzed and subjected to tests to ensure a reasonable level of reliability. Moreover, since most companies were audited by the big four, considered to have the most expertise on auditing principles and accounting standards, the reported KAM tend to provide higher quality and inspire greater credibility to stakeholders in the IAR.

Regarding the informational content, according to the 25 categories of Ibracon (2017; 2018), "revenue", "recoverable value of non-financial assets", and "contingencies" were the most frequently reported issues. These three matters, even if reported once, were KAM in all sectors analyzed. The subclassification, following the ACCA (2018) strata, indicated "Complex Matters," "assets," "impairments," "liabilities", "internal controls", and "Sector-Specific Issues" as the most significant risk aspects of the audited entity.

Finally, according to the categories of Sierra-García et al. (2019) and Lennox et al. (2022), over 82% of the KAM are related to accounting accounts, while about 18% address entity risks. This indicates that the KAM cover specifics related to financial statements (e.g., measurement and disclosure) and general issues of the entity (e.g., internal control details and operational continuity). It can also be inferred that auditors consider it more relevant to report the risks of distortions in the financial statements in the IAR. This provides stakeholders with a

better understanding of audit procedures, enhances the reliability of the IAR, and helps users interpret the areas of the financial statements that required the most judgment from the auditor.

Regarding the company's life cycle stages, the highest number of KAM reported in Brazil and Portugal occurred in the maturity phase, except in Brazil in 2020, when the growth phase had more reports. The lowest number of KAM was recorded in the decline phase. In the maturity phase, the company is more consolidated and discloses more information, and the auditor tends to report more elements. In contrast, during the decline phase, there is greater caution due to the uncertainty that something may not materialize and the higher risk of litigation. Thus, the informational security perceived by the auditor influences the number of KAM reported, especially regarding Complex Matters.

Based on the results presented, the research contributes to the literature related to the informational content of KAM by providing evidence of the types and quantity of matters reported in the IAR of Brazilian and Portuguese companies. It also offers insights into the issues disclosed by sector, the average quantity per auditing firm, year, big four vs non-big four, and by the firm's life cycle. This provides indicators that the KAM in the IAR promote greater informational value to their users, as the expanded audit report mitigates informational asymmetry about the audit and auditing procedures, thereby increasing stakeholders' trust. In this regard, due to the period of investigation and categorization adopted, this research advances studies that assess the quantity of KAM, such as Ibracon (2017; 2018), Marques and Souza (2017), Pereira (2019), Sierra-García et al. (2019), Santos et al. (2020a), Silva et al. (2021a), Zhang and Shailer (2021), Lennox et al. (2022), and Vargas et al. (2022), who suggested evaluating KAM reported in other countries.

Theoretically, the study contributes to Agency Theory, which advocates for reducing informational asymmetry, supporting the research by quantifying, year by year and by sector, the changes in KAM disclosures by auditors (additions and eliminations). This allowed an understanding that more matters were eliminated than included, but there is some annual variability across sectors. Therefore, it fills the gap of KAM trends highlighted by Tušek and Ježovita (2018) and Lennox et al. (2022), and by evaluating the dynamics of KAM disclosure in Brazil and Portugal, it extends Ricquebourg and Maroun's (2023) work in South Africa.

Socially, it reinforces to regulators, users, and researchers the importance of KAM in improving the transparency of auditing and audited companies. It also contributes to the regulators' desire to verify the implementation of KAM to identify long-term trends, even if they vary between audits and companies within the same sector (AAA, 2021; FRC, 2015). This can help regulators enhance future KAM implementation guidelines and allow users of financial statements to better understand the risks perceived and reported by auditors.

Empirically, the research contributes to the categorization of KAM by analyzing the informational content regarding risks at the level of accounting accounts or the entity. Thus, stakeholders in the IAR perceive that KAM highlight relevant aspects of the financial statements that require greater auditor involvement. These issues are typically subjective, complex, and challenging, allowing for the evaluation of areas with a higher risk of material distortion or significant risks identified by auditors.

As a limitation, the Dickinson (2011) model was used to define life cycle stages, which is based on cash flow signals. However, it is a widely used and established model in the research field. While the number of companies categorized into each stage following Dickinson (2011) may be a limitation, it could also be a suggestion for future studies to explore with auditors the validation of company classification versus the reported KAM.

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AUTHORS' CONTRIBUTIONS

Roles	1 ^a author	2 ^a author	3 ^a author
Conceptualization	◆	◆	◆
Data Curation	◆	◆	
Formal Analysis	◆		
Funding Acquisition			
Investigation	◆	◆	
Methodology	◆	◆	◆
Project Administration			◆
Resources			
Software			
Supervision			◆
Validation	◆		◆
Visualization	◆	◆	◆
Writing – Original Draft	◆		
Writing – Review and Editing	◆	◆	◆

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest regarding this submitted work.