



Empirical Study on the Analysis of the Financial Auditor's

Concern in Ensuring the Transparency and Sustainable Performance of BSE Listed Companies

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Abstract

Sustainable development of the company implies achieving a balance in terms of economic, social and environmental activities with the aim of making optimal use of the entity's resources without harming the environment and through an active involvement of the company in society. To this end, an important role is played by the financial auditor, the guarantor of transparency in financial reporting and an active player in enforcing discipline in sustainable reporting. Through the audit report, including the opinion expressed, the auditor contributes to the credibility of the audited financial statements and inspires confidence in all users. The purpose of this study is to test the influence of the audit opinion and the auditor's membership of the Big4 group of companies on key indicators of financial position and performance, as well as on the use of performance management operations. The study also tested the influence of the audit opinion, in conjunction with the influence of key financial indicators, on the probability of reporting Kev Audit Matters (KAM) related to earnings management operations or going concern. The study was conducted at the level of Romanian companies listed on the Bucharest Stock Exchange (BSE) – Regulated Market, in the period 2012-2022. Using advanced statistical methods of data analysis, the main results of the study indicate the existence of a significant influence of the previous year's audit opinion expressed by a particular type of auditor on key indicators of financial position and performance, as well as on discretionary accruals. At the same time, the prior year audit opinion as well as the current year values of the key financial indicators analysed have a significant influence on the probability of reporting on Key Audit Matters (KAM) related to earnings management operations or going concern.

Key words: financial auditor; financial transparency; sustainable performance; audit opinion; key audit matters; Bucharest Stock Exchange;

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1. Introduction

The harmonious combination of social, economic and environmental factors contributes to the sustainable development of companies. Ensuring transparency in the communication of information required by stakeholders makes a significant contribution to the sustainable performance of organisations. In order to ensure transparency, the information presented in both annual financial statements and audit reports must meet a number of characteristics, including: accuracy, completeness and neutrality. In recent years, in order to increase transparency in financial auditing, the audit report has been improved by adding a separate Key Audit Matters (KAM) section. What are Key Audit Matters? These are those matters which, based on the auditor's professional judgement, are of most importance to the audit of the financial statements for a period and are selected from those matters discussed with those charged with governance (IAASB, 2021).

The auditor is interested in identifying as accurately as possible the problems that the audited companies might have in their business. In the relevant literature, this behaviour is put down to the reputational and litigation risks that auditors would assume if they fail to detect errors that may lead to the reported result (Lennox & Kausar, 2017). Results proposed by Kaplan & Williams (2013) show that auditors use the possibility of expressing a Going Concern Opinion (GCO) as a preventive action in limiting the risks of being involved in litigation with users of financial statements affected by the audited firms' following difficulties. The quality of the audit, as assessed by the competence and independence of the auditor, also affects the probability that a firm with financial problems will receive a GCO (Ruiz-Barbadillo et al., 2004).

Although financial markets are increasingly connected, differences between countries can lead to different manifestations of firms, managers or auditors, depending on the geographical context under analysis. Bao & Lewellyn (2017) advance the idea that audit, through its ability to constrain firms' earnings management practices, is dependent on both the characteristics of the firm and the specifics of the country in which it operates. Specifically, these factors act differently depending on the category into which countries fall: developed or emerging. The vast majority of the studies relate to the situation of listed (and sometimes unlisted) North American firms or

firms in other developed countries. However, there is relevant literature applying original methodologies or replicating established methodologies, which aim to show the particularities of emerging countries in different parts of the world, individually or in groups. Cultural elements are also determinant in the auditor's reaction to the information proposed by the audited companies. Chen et al. (2016) find that in countries characterised by a culture of secrecy, auditors are more likely to express modified opinions (including in multinational companies), a tendency limited by the degree of investor protection.

The developments that we can see and try between audit and sustainability are steps towards bringing a topic that was, some time ago, outside the usual research area in audit and accounting into the audit sphere. Andon et al. (2015) argue that the interest in efficiency and sustainability demonstrates that what is outside of auditing at one point in time can become the central theme of the discipline.

This study primarily aims to test the influence of audit opinion type and auditor membership (Big4/Non-Big4) on financial position and performance on the one hand and on earnings management practices on the other. Then, by correlating the type of audit opinion with the influence of financial indicators, the influence of these indicators on the probability that the auditor includes key matters relating to earnings management practices or affecting going concern in the audit report is tested. The results show that these influences are generally significant: key indicators of financial position and performance and discretionary accruals depend on both the type of audit opinion and the type of auditor; the probability of reporting key audit matters relating to earnings management operations or going concern depends on the type of audit opinion but also on the values of the key financial indicators analysed.

The study is further structured in sections. Section 2 is devoted to reviewing the literature focused, on the one hand, on the factors influencing reporting transparency and sustainable performance of companies from a financial auditing perspective and, on the other hand, on developing the research hypotheses by summarizing the variables of interest, their source, the methodology used and the results obtained. Section 3 focuses on the research methodology, broken down into: the study population and the sample analysed, the variables analysed, the source of the data and the models proposed for testing. Section 4 deals with the results obtained from



the processing carried out and their interpretation. The final part of the study is for conclusions.

2. Reviewing the literature and formulating research hypotheses

The quality of companies' financial and non-financial reporting is also assessed by stakeholders in terms of the transparency of reporting by those responsible for preparing financial statements and by the guarantors of their credibility, i.e. financial auditors. Increasing the communicative value of the audit report to support stakeholders by ensuring greater transparency in audit reporting is also supported by the introduction of KAM in the content of the report (Köhler et al., 2020).

2.1. Improving transparency in reporting through financial auditing

It is well known that financial statements are used by users as one of the sources of information needed to make financial decisions. The quality of financial reporting is a constant concern for both the producers of these reports and the auditors who review them and, most importantly, for users, including regulators. A commonly used indicator to measure the quality of reporting is earnings management, either based on accruals earnings management (AEM) or real earnings management (REM) (Beneish, 2001; Roychowdhury, 2006). This type of manipulation of information reported in financial statements can be mitigated by the intervention of financial auditors, who thus contribute to better and more transparent information for users and, by doing so, to creating and maintaining the necessary framework for companies to develop sustainably. Of course, we expect a quality audit to limit the levels of earnings management (Alzoubi, 2016) and significantly reduce the level of errors and reporting inaccuracies (Cardinaels & Jia, 2016), but also to discourage earnings management by increasing firm focus and honest and systematic communication with the board (Buchanan et al., 2021). The usefulness of financial statements to investors thus depends on the quality of this reporting, but also on the quality of the related financial audit (Chen, et al., 2019).

Increasing audit quality is a natural concern for the regulator, professional organisations and individual

auditors. The mandatory inclusion in audit reports of key audit matters identified during the engagement was an important step in improving audit quality in the form of better communication and greater transparency, leading to lower agency costs (Barghathi et al., 2021). Of course, auditor efforts in detecting and reporting potential nonconformities must be matched by efforts on the part of users to understand the messages being conveyed by auditors. It is possible that the inclination of some users (especially institutional users) to privilege exogenous irrelevant information may lead to a decrease in audit quality, a decrease in the probability of an GCO, and a decrease in the probability of the auditor reporting internal control weaknesses (Chan et al., 2021). Not including adverse information in annual reports is in the interest of management to convey positive messages and may affect the comprehensibility of the annual report. In such a situation, Blanco et al. (2021) find that audit risks increase, leading to longer periods for conducting audit engagements and thus higher fees. Analysing the readability of key audit matters (KAM) included in the audit report, Hussin et al. (2023) note a significant impact of female auditors on the development and transparency of this section for a sample of Malaysian firms.

The unqualified audit opinion provides users with assurance that the financial statements comply with applicable standards. If the opinion is modified, the auditor warns users that the level of transparency of the financial statements does not meet the standards. A link between firm transparency and audit effort is made by Asante-Appiah (2020) who finds that auditors need to make extra efforts – materialised in several days dedicated to the engagement – if the firm does not have a good reputation on how it addresses sustainable development objectives (Environmental-Social-Governance – ESG).

Transparency in bringing audit opinions to the attention of users is not limited to making the audit report public. Khan et al. (2017) analyze the effects of publishing GCOs as press announcements and as announcements on stock exchange websites as a result of obligations imposed by the financial market regulator and find that this information significantly influences investor reaction. Transparency of financial information – including what is proposed by the audit report – should not be selective: all users, internal or external, should benefit from specific information at the same time. Arif et al. (2022) warn that insiders who become aware of the audit report (when it contains a modified opinion) prior to its publication may take



advantage of it by engaging in abnormally frequent trading in the firm's securities.

Users of financial statements should also consider the tone in which the annual report is written, especially the financial part. Hossain et al. (2020) find that an abnormally positive tone in reporting is associated with a higher probability of receiving a GCO. Communication skills of both the firm and the auditor significantly influence the transparency of financial statements by increasing the credibility of reports and confidence in the value of auditing (Akther & Xu, 2021) as a governance tool. Financial analysts, with a key role in collecting, interpreting and disseminating information also depend on the quality of the audit and financial reporting environment (Cheong & Zurbruegg, 2016).

Improvements in the quality of financial reporting are also expected from the introduction of mandatory auditor changeover rules. Lin & Yen (2022) prove that this auditor rotation can influence the quality of financial reporting only under certain circumstances, i.e. when the new auditor comes with a different risk assessment, which may influence their audit plan and audit process.

2.2. The auditor's confirmation of the entity's going concern as a premise for sustainable performance

The auditor's detection of events and evidence that may affect the entity's ability to perform as a going concern is an important event in financial reporting. The auditor's application of specific standards may not be sufficient in identifying risks to going concern. Baza & di Trana (2019) assess that ISA 570 (Italian version), while suggesting a list of items that could be signals of uncertainty about the firm's ability to perform a going concern, does not establish a hierarchy of their importance. In the literature review they present in their study, Baza & di Trana (2019) find many studies that focus on financial analysis indicators, but also studies that propose and introduce as variables non-financial indicators (related to the market, strategic initiatives or governance characteristics), indicators on the role of management plans, customer characteristics, but also auditor characteristics. Carson et al. (2016) identify the use of the following indicators:

- Liquidity indicators: current assets/current liabilities, interest expense/EBIT, cash flow/current liabilities, WC/total liabilities, operating cash flow/total liabilities;
- Profitability indicators: net result/total assets (ROA), reserves and retained earnings/total assets; EBIT/total

- assets, gross income/sales; current or recurrent losses:
- Leverage indicators: market to book ratio, equity/debt; total debt/total assets.

Reporting a Going Concern Opinion (GCO) is especially likely for firms in serious financial distress and has come to be seen as a proxy for audit quality (Aguilar et al., 2018, although Chu et al., 2022, and Guo et al., 2020, demonstrate that this option is risky) or evidence of auditor independence (Ruiz-Barbadillo et al., 2004; DeFond & Zhang, 2014). Financial difficulties can also arise when the firm is highly dependent on a client; indeed, this type of dependence sometimes appears in the justification of qualified opinions or observations in the audit report (Istrate et al., 2020, Dhaliwal et al., 2020). The prudence of the auditor (including reputational risks) may lead him, in the case of firms in difficulty, to express a GCO, at the risk of being overruled by following developments in the firm's situation (Type I error), rather than not expressing a GCO, at the risk of the firm becoming insolvent later (Abbot et al., 2022). However, these reputational risks – often identified in the literature - do not seem to affect the situation of the auditor involved very much: Berglund (2020) finds that auditors involved in such cases (Type II errors) are not very strongly affected, even though for audited firms, bankruptcy is less predictable than in the case of a GCO. The issuance of a GCO is a signal not only for the firm involved or for the auditor; Casterella et al. (2020) analyse the extent to which not issuing a GCO for bankrupt firms influences stock market prices for firms similar to the bankrupt firm; the effect is a significant decrease in these prices compared to the situation where bankruptcy was preceded by a GCO.

Analyzing more than 30,000 observations from 20 emerging countries, Viana Jr. & Lourenço (2022) predictably identify attempts at increasing earnings manipulation by financially distressed firms (using accruals), tempered by the presence of *Big4* auditors.

The emergence and manifestation of various crises (financial, health, political, energy, military) are events that can make auditors more careful in identifying audit evidence and expressing opinions. The increased conservatism of auditors in times of crisis may lead them to be more careful than usual, especially when they are in the position of expressing a GCO based on the predictors of such an opinion (Beams & Yan, 2015). However, there are statistics showing that a significant proportion of firms that enter bankruptcy have not received GCO prior to this



event (Feldman & Read, 2010). Some crises – such as the global financial crisis that began in 2008 – have also had the effect of changing regulations as well as auditor procedures and behaviours, such that auditors have become more inclined to express GCOs post-crisis for both *Big4* and *Non-Big4* firms in financial difficulties (Geiger et al., 2014). However, after a period of increase in this type of opinion, pre-crisis weights returned to pre-crisis levels in 2006 (Read & Yezegel, 2018).

As for the management characteristics of firms that might receive GCO, there are several variables that can influence the auditor's decision. Berglund et al. (2018) find that managerial ability is negatively associated with the GCO, regardless of how the firm later performs; at the same time, this managerial ability is associated, by Gul et al. (2018), with lower accrual quality in firms with financial problems, but also with higher audit fees. Managerial behavior can lead to pressure on auditors not to express GCO when managers – as insiders – sell out of shares held in the firm (Chen et al., 2013). As a general rule, managers are optimistic about going concern, even if the company is experiencing visible difficulties; this optimism is also reflected in their forecasts of the evolution of financial indicators. However, auditors have to be circumspect and, in the case of firms with difficulties, they do not take much account of managers' estimates (Feng & Li, 2014), and even become more inclined to express a GCO, especially when managers are very confident and less skillful (Kim M., 2021). Often, however, the optimism of managers is also transferred to auditors in the sense that they do not report going concern problems: Maregue et al. (2017) identify more than half of the Spanish firms analysed that went bankrupt in 2010 as not having received GCO in previous years.

Performing non-audit services by auditors may affect their inclination to express GCO (Geiger et al. 2022). However, the profession asserts (and some studies confirm) that non-audit services provided to a firm can lead to a better auditor's knowledge of that firm and thus a more well-founded audit opinion (DeSimone et al., 2015).

2.3. Gender differences and transparency in auditing

The composition of the audit team can have significant effects on the quality of the audit. Cameran et al. (2018) find that such influence

undergoes changes throughout the audit engagement. One of the characteristics of audit teams is the presence of women as partners or managers; Cameran et al. (2018) find that, in Italy, a higher proportion of women in such positions leads to an increase in audit quality as measured by accruals; the same direction of decreasing abnormal accruals is found by Ittonen et al. (2013) for Finland and Swedish firms. Hardies et al. (2016) identify, on the example of Belgian firms, a greater propensity of female auditors to provide CGOs to firms in financial distress and that women produce better audit quality, mainly because they are more independent and risk averse. Also, in other Finland firms, female auditors are characterized by greater discretion in reporting results, being more conservative than male auditors (Niskanen et al, 2011); under these circumstances, gender diversity in audit teams is considered to improve the overall quality of financial reporting. Kung et al. (2019) show us that if the head of the audit team is female, then the dimensions of results management through accruals are more limited in the case of Taiwanese firms (where joint audits are practiced), but that this is also true for male audit teams with expertise in the industry in which the audited firm operates. Ittonen & Peni (2012), based on the observation that audit fees are higher when the audit partner is female, propose an explanation – which they shy away from generalising - that gender differences in the planning, preparation, diligence of such a partner can explain the differences in fees. I have mentioned the geographical context in the abovementioned studies, because differences may arise from the specific features of a country or region. In China, for example, Yang et al. (2018) find that differences in audit quality between female and male auditors are insignificant when firms try to manipulate earnings to increase earnings; on the contrary, differences occur when firms use accruals to decrease earnings, and these differences suggest better audit quality by men. The same study finds that the gender gap is significantly reduced when the age considered exceeds 45. Gender research has also been carried out on the number of KAMs reported by female versus male auditors: Bepari et al. (2022) conclude that female auditors perceive more risks



in their audit work and therefore report more KAMs in order to minimize these risks and reduce their exposure to getting involved in user disputes.

Of course, research on women's participation in audit engagements does not all converge on better quality provided by women. There are also studies that find, in certain geographical contexts and on certain financial coordinates, that the quality of audit performed by women does not always match the quality of audit performed by men: Yang et al. (2018) provide us with a list of studies with such findings.

The presence of women in the audit engagement is not limited to their membership of audit teams. It is also interesting to see what influence the presence of women as members of the boards of directors or audit committees of audited companies may have on audit variables. The imposition by some countries (Norway, France, etc.) of minimum quotas for women on various company committees has been an important source of gender research. Nekhili et al. (2019) find that the appointment of women to boards, as independent directors and also as members of audit committees, leads to a decrease in perceived auditor risk and, consequently, a decrease in audit fees.

2.4. Developing research hypotheses

The introduction of the requirement for the auditor to provide an extensive report, including KAM, was intended to increase the information content and usefulness of the audit opinion in order to increase the ability of users to monitor management, but also auditors, through better communication between users of financial reporting and auditors (Minutti-Meza, 2021; Moroney et al., 2021). However, this informational boost is not free: reporting some KAMs leads to increased financial reporting costs (Bentley et al., 2021); Chen et al. (2019) show that auditors' efforts in increasing audit report quality are only covered in the case of low-quality financial reporting.

The number of KAMs reported by auditors depends on a multitude of factors (Bepari et al., 2022) related to accounting rules (rules applied

and various accounting options), auditor characteristics (size, audit fees, non-audit services provided to the firm, auditor experience and specialisation, auditor gender, auditor training), and entity characteristics (size, life cycle phase, business complexity, litigation risks, profitability, information asymmetry).

Users' perception of the firm may be influenced by the presence of KAM in the audit report. Moroney et al. (2021) find that investors perceive the audit as more valuable and credible when the report includes KAM, but that this conclusion is particularly true for Non-Big4 auditors; for Big4, audit reports with or without KAM are perceived as equally useful. It appears that Big4 auditors are perceived as providing a quality audit regardless of whether or not KAM is presented. However, it is a bit of a stretch to consider Big4 as a homogeneous group. Honkamäki et al. (2022) find differences between the Big4's audit procedures and strategies, differences embodied in different ways of reporting KAM, although the quality of the audit provided by the Big4 remains high.

Overall, audit quality has increased significantly after the introduction of KAM mandatory reporting rules (Zeng et al., 2021). In contrast, in another geographical context, Gutierrez et al. (2018) find evidence that the new audit report format (which includes KAM) comes with very little additional information for investors and has insignificant effects on audit quality and audit fees.

The literature proposes quite obvious meanings of the influence of some variables on GCO. Averio (2021) – proposing hypotheses in line with the relevant literature – confirms the positive correlation between leverage and GCO, but also negative correlations between audit quality, profitability and liquidity, on the one hand, and GCO, on the other; at the same time, for the Indonesian firms analysed, Averio (2021) finds no correlations between GCO and firm size or *audit report lag*.

Table no. 1 includes the variables identified in the literature of interest for this study, their source, the models applied and the results obtained, which will support the hypotheses formulated and the processing made in the part dedicated to the research methodology.



| Variable | Source | Methodology | Results |
|---|--|---|--|
| | (Blanco et al., 2021) | Linear regression models | Manipulation of information by management → Unqualified audit opinion → Increased audit risk |
| | (Arif et al., 2022) | Regression models on panel data | Qualified audit opinion → Market reaction |
| Audit opinion type: unqualified/qualified | (Dhaliwal et al., 2020) | Logistic regression models | Dependence on a customer → Qualified audit opinion |
| (AO) | (Grosu, V. et. al, 2020) | QATRMT Model (Quick audit test for readjustment of materiality threshold) | Doubtful quality of reporting → Qualified audit opinion |
| | (Grosu, M. et al., 2021) Regression Models and Multivariate Data Analysis Methods EN | | EM (+) → Qualified audit opinion |
| Auditor typo: Pig//Non | (Viana Jr. & Lourenço, 2022) | Multivariate Data Analysis Methods | Big4 Auditors → EM(-) |
| Auditor type: Big4/Non- Big4 (AT) | (Geiger et al., 2014) | Logistic regression models | Big4 Auditors and Non-Big4 → GCO for firms in financial difficulty |
| | (Moroney et al., 2021) | Regression models on panel data | KAM Reporting by Non-Big4 → Quality Audit |
| | (Hardies et al., 2016) | Linear regression models | Women auditors → GCO for firms in financial difficulty |
| | (Geiger et al., 2014) | Logistic regression models | Big4 Auditors and Non-Big4 → GCO for firms in financial difficulty |
| ROA, ROE, FL | (Kothari et al., 2005) | Jones Model and Modified Jones Model | $ROA \rightarrow EM(+/-)$ |
| | (Averio, 2021) | Logistic regression models | High debt → GCO High profitability → Non-GCO |
| | (Grosu, M., 2023) | Multivariate data analysis methods and regression models | Negative equity and going concern opinion → Qualified audit opinion |
| | (Campa, 2019) | Altman Z-score, Jones Model (1991), Kothari Model (2005) | Presence of financial problems → EM(+) |
| | (Durana, et. al., 2021) | A hierarchical mixed model with a random effect of time and industry | Entities in recession → EM(+) |
| Eamings Management | (Alzoubi, 2016) | Modified Jones model (cross-sectional) | Quality audit through transparency → EM(-) |
| (EM) | (Buchanan et al., 2021) | Perceptual discouragement theory and regression models | Quality audit through transparency → EM(-) |
| | (Ittonen et al., 2013; Cameran et al., 2018; Kung et al., 2019) | Linear regression models, Models for measuring discretionary accruals | Women auditors → EM(-) |
| | (Alhadab, 2018) | Regression models | Additional auditors' fees → EM(-) |
| | (Chan et al., 2021) | Regression models on panel data | Manipulation of information by management → Decrease likelihood of issuing GCOs |
| | (Blay et al., 2011; Khan et al., 2017; Rodgers et al., 2019) | Regression Models, Score Functions, Throughput Model | Publication of GCO → Market reaction |
| Going Concern Opinion | (Aguilar et al., 2018) | Multivariate analysis methods | Financial constraints → GCO |
| (GCO) | (Casterella et al., 2020; Hossain et al., 2020) | Regression models | Non-GCOs for bankrupt entities → Significant decrease in share price |
| | (Chen et al., 2013) | Regression models | Management constraints → Non-GCO |
| | (Robu et al., 2012) | Regression and Correlation Models and Principal Component Analysis | Non-compliance with the presumption of going concern in the preparation of annual financial statements → GCO |
| | (Barghathi et al., 2021) | Semi-structured survey | KAM reporting → Transparency and decrease agency costs |
| Key Audit Matters (KAM) | (Hussin et al., 2023) | Regression models on panel data, Flesch reading ease score and Coleman–Liau index | Auditor gender → Audit transparency through KAM |
| | (Bepari et al., 2022) | Regression models | Women auditors, increased risks, decreased profitability → more KAMs |

Source: own processing based on the literature studied

Note: EM(+) is the manifestation of earnings management practices; EM(-) is the decline in earnings management practices; KAM is Key Audit Matters; GCO is Going Concern Opinion; ROA is Return On Assets; ROE is Return On Equity; FL is Financial Leverage.



Based on the literature reviewed and, in particular, the patterns noted in the papers mentioned in **Table no. 1**, the following research hypotheses are formulated:

H1: In the case of Romanian BSE listed companies, the audit opinion of the previous financial year has a significant influence on the financial performance, leverage ratio and the level of operations management of the current financial year's earnings.;

H2: In the case of Romanian BSE listed companies, the audit opinion in the previous financial year, as well as the financial performance, the level of leverage and the level of earnings management operations in the current financial year have a significant influence on the probability of formulating a key audit matter on earnings management operations or on-going concern (including observations on compliance with the use of this principle in financial reporting) in the current financial year.

The testing of the formulated research hypotheses is made in the research methodology part, after the choice of the sample and the relevant models, and comments on their validation are included in the results and discussion part.

3. Research methodology

Based on the research hypotheses proposed for testing and validation, as mentioned in the introductory part, the objectives of the study are, on the one hand, to test the influence of the prior year audit opinion on financial performance, leverage and the level of current year earnings management operations by auditor type (*Big4* and *Non-Big4*) and, on the other hand, to test the influence of the prior year audit opinion, as well as financial performance, leverage, and level of current year earnings management operations, on the probability of making a key audit matter on earnings management operations or going concern (including observations on compliance with the use of this principle in financial reporting) in the current year, by auditor type (*Big4* and *Non-Big4*).

The following is a description of the variables (generally qualitative) identified in the literature for which data were collected and processed in the models analysed below. The key audit matters (KAMs) on the operations of the management of the result concerned the auditor's

observations in the audit report on: aggressive recognition of provisions or reserves, overstatement of research and development expenses, but also of those related to restructuring, understatement of provisions associated with doubtful or highly doubtful debts, recognition of unrealised income, recording of fictitious sales, inadequate recording of stocktaking results (Toumeh & Yahya, 2019).

Key audit matters (KAM) on going concern (including observations on compliance with the use of this principle in financial reporting) are intended to cover cases where: there is a separate paragraph in accordance with ISA 700 (revised), or a number of key audit matters are highlighted in the audit report flagging a number of items that may affect going concern in accordance with ISA 701 (CAFR, 2022). Indicators that may signal potential going concern opinion may include: high leverage, withdrawal of creditor support, negative cash flows from operations, low liquidity, unfavourable returns and profitability, creditor default, as per ISA 570 (revised) (CAFR, 2022).

The study follows a statistical approach to test and validate the proposed research hypotheses (Jaba, 2002). Thus, a representative sample of the identified study population is selected for data collection and analysis using advanced statistical data analysis methods (Robu, I.B., 2012; Robu, 2021).

3.1. Study population and sample analysed

In order to test and validate the proposed research hypotheses, the study population is represented by all companies listed on the Bucharest Stock Exchange (BSE-www.bvb.ro) – *Regulated Market*. Also, these firms fall under the scope of Law no. 162/2017, being subject to statutory audit. As of 2023, there were 84 listed companies on the BSE – *Regulated Market*, of which 29 in the *Premium* category, 52 in the *Standard* category and 3 in the *Int'l* category.

From the 84 companies listed on the BSE, those representing financial intermediaries, banks, insurance and reinsurance institutions, as well as companies for which not all the information required for the analysis at the 2012-2022 level was found were eliminated. This resulted in a balanced sample of 37 listed companies, analysed over 11 financial years, providing a total of 407 observations. The sample is quite limited, which affects the generalizability of the results, but there are other



studies in the literature analyzing emerging financial markets, where the number of listed firms does not create very large populations; Averio (2021), uses a sample of 33 firms listed on the Indonesia Stock Exchange over a 5-year period. Similarly, Alves (2013), analyses 33 Portuguese firms, over 7 years, in terms of the correlation between audit committee, external auditor and earnings management.

3.2. Models analysed and source of data

To achieve the research objectives, the study proposes the use of linear regression analysis and logistic regression analysis respectively (Robu, 2021).

The general econometric model proposed for testing the influence of prior year audit opinion on financial performance, leverage, and the level of current year earnings management operations by auditor type (*Big4* and *Non-Big4*) will be as follows:

$$Y_t = \beta_0 + \beta_1 \cdot Audit \ Opinion_{t-1} + \beta_2 \cdot Auditor \ Type_{t-1} + \beta_3 \cdot Audit \ Opinion_{t-1} \cdot Auditor \ Type_{t-1} + \varepsilon$$
 (1)

where.

 β _{i=0,...,3} are the parameters of the regression model, Y is the dependent variable, with Y ϵ {FL, ROE, ROA, Abs(DAC)},

and

 $\varepsilon \sim N(0.1)$, a random variable, the error.

The proposed econometric model for testing the influence of the prior year audit opinion, as well as financial performance, leverage, and level of earnings management operations in the current year, on the probability of making a key audit matter on earnings management operations or going concern (including observations on compliance with the use of this principle in financial reporting) in the current year by auditor type (*Big4* and *Non-Big4*) will be as follows:

$$In(p_t/1-p_t) = \gamma_0 + \gamma_1 \cdot Audit \ Opinion_{t-1} + \gamma_2 \cdot ROA_t + \gamma_3 \cdot ROE_t + \gamma_4 \cdot FL_t + \gamma_5 \cdot Abs(DAC_t) + \gamma_6 \cdot Auditor$$

$$Type_t + \varepsilon$$
(2)

where,

 $\gamma_{\models 0,\dots,3}$ are the parameters of the regression model, p is the probability that the auditor will make a key audit matter regarding the existence of earnings management operations or a going concern opinion (including observations on compliance with the use of this principle in financial reporting),

and.

 $\varepsilon \sim N(0,1)$, a random variable, the error.

A description of the variables used in the proposed econometric models is presented in **Table no. 2**, from which it can be seen that of the eight variables identified, four variables are qualitative (audit opinion, auditor type, key audit matters on earnings management operations, key audit matters on going concern) and four variables are quantitative, namely *ROA*, *ROE*, *FL* and *Abs(DAC)*.

| Table no. 2. Description of the variables used in the proposed econometric models | | | | | | | |
|---|------------|--|--|--|--|--|--|
| Variable | Categories | Explanation/Description | | | | | |
| | UO = 1 | Unqualified Opinion | | | | | |
| Audit Opinion | MO = 0 | Modified Opinion (Qualified Opinion, Adverse Opinion, Disclaimer of Opinion) | | | | | |
| Auditor Type | B4 = 1 | Big 4 | | | | | |
| Auditor Type | NB4 = 0 | Non Big 4 | | | | | |
| ROA | - | Return on Assets (Operating Income/Total Assets – 100) | | | | | |
| ROE | - | Return on Equity (Net Income/Equity · 100) | | | | | |
| FL | - | Financial Leverage (Total Debt/Equity) | | | | | |
| Abs(DAC) (Absolute value of the discretionary accruals) | - | The working methodology proposed in Grosu M. et al. (2022) was used to calculate Abs(DAC), scaled by the operating income. | | | | | |
| KAM EM | Yes EM = 1 | Existence of key audit matters relating to earnings management | | | | | |
| NAIVI LIVI | No EM = 0 | operations (1 = Yes; 0 = No) | | | | | |
| KAM GC | Yes GC = 1 | Existence of observations/key audit matters on going concern (1 = Yes; 0 | | | | | |
| | No GC = 0 | = No) | | | | | |

Source: own processing



For the sampled firms, data were collected manually from annual financial statements and published audit reports and analysed using SPSS 25.0. The audit report may refer to going concern matters both in the justification of the audit opinion and in the emphasis of matters paragraph. Mareque et al. (2017) find that, for the sample of unlisted Spanish firms they deal with, at the beginning of the 2008 crisis they find references to going concern rather in the amended opinion justification, while in 2010 these references appear in the observations paragraph.

4. Results and discussions

In the study, the main results obtained from the analysis of the data collected at the level of the

analysed sample are: the presentation of descriptive statistics related to the financial indicators included in the econometric models, the presentation of the distribution over time of audit opinions and key audit matters on earnings management operations and on going concern by category, the presentation of the distribution of key audit matters on earnings management operations and on going concern by category of auditors and the estimation of the parameters of the econometric models related to the two proposed research objectives.

Table no. 3 presents the main descriptive statistics (mean and standard deviation) for the financial indicators included in the analysis.

| Table | Table no. 3. Descriptive statistics on the financial indicators analysed | | | | | | | | |
|-------|--|------------|------------|----------|----------|------------------|-----------|----------|-----------|
| Varia | ble | FL | | ROA | | ROE | | Abs(DAC) | |
| Year | N | Average | Dev.std. | Average | Dev.std. | Average Dev.std. | | Average | Dev.std. |
| 2012 | 37 | -,537358 | 7,2816533 | ,019233 | ,0676005 | ,212267 | ,9573236 | ,303312 | 1,4153896 |
| 2013 | 37 | ,349383 | 4,4259509 | ,002596 | ,0896631 | ,097369 | ,5446346 | ,551656 | 2,9377615 |
| 2014 | 37 | ,132383 | 4,6003774 | ,026797 | ,0593324 | ,047637 | ,3963880 | ,082294 | ,0496726 |
| 2015 | 37 | 4,479103 | 22,8732338 | ,017888 | ,0816438 | -,391145 | 2,3076811 | ,070049 | ,0156623 |
| 2016 | 37 | -1,586236 | 9,9637806 | -,012559 | ,2071052 | ,312837 | 1,8428436 | ,069462 | ,0082477 |
| 2017 | 37 | -1,394382 | 5,5200200 | ,068239 | ,3587033 | -,142317 | 2,9196109 | ,064740 | ,0161862 |
| 2018 | 37 | -,615443 | 5,0220592 | ,020362 | ,1634999 | ,257062 | ,6952861 | ,074359 | ,0253667 |
| 2019 | 37 | -,071418 | 3,0482240 | ,025127 | ,0948267 | ,070205 | ,1641720 | ,073572 | ,0299017 |
| 2020 | 37 | 2,001253 | 11,9679015 | ,017962 | ,0836426 | ,002017 | ,2849413 | ,075583 | ,0232407 |
| 2021 | 37 | -10,787300 | 82,0787127 | ,068636 | ,2097909 | ,948910 | 5,7348759 | ,116189 | ,1824271 |
| 2022 | 37 | 1,389601 | 13,4700188 | ,026735 | ,0774347 | ,067494 | ,5386849 | ,077761 | ,0351428 |
| Total | 407 | -,603674 | 26,6178626 | ,025547 | ,1612091 | ,134758 | 2,1784678 | ,141725 | ,9836555 |

Source: own processing in SPSS 25.0

From the data presented in **Table no. 3** it can be seen that at the level of the sample analysed for BSE listed firms, in the period 2012-2022, they show, on average, leverage ratio values, calculated on the basis of financial leverage (*FL*) of -0.603674. This value indicates, on the one hand, negative equity values due to losses carried forward and, on the other hand, the tendency of firms to finance their activity on debt. At the same time, high values of indebtedness were recorded in the years 2015, 2020 and 2021, with overunity values of *FL*, which indicates that the firms analysed are mainly financed by foreign resources and less by own resources. Also, high but negative *FL* values were recorded in the financial

years 2016, 2017 and 2021, indicating very high values of losses reported in relation to debt.

In terms of the return on assets (*ROA*), it can be seen that the average *ROA* of a firm in the sample analysed is 0.0255477, which implies that for every 100 monetary units of assets used in operating activity, they will generate 2.55477 monetary units in the form of future economic benefits. Negative values of this indicator, recorded in the 2016 financial year, describe the recording of losses by firms in operating activity.

For the return on equity (ROE), it can be seen that at the level of the sample analysed, a BSE-listed company has



an average *ROE* of 0.134758. This implies that for every 100 monetary units of capital provided by shareholders, they will be remunerated on the basis of dividends (as part of the net result) with 13.4758 monetary units. Negative values of this indicator for the financial years 2015 and 2017 reflect the recording of net losses.

For the indicator measuring the level of discretionary accruals, in absolute value, in relation to the operating income – *Abs(DAC)*, at the level of the sample analysed, it can be observed that, on average, a BSE listed company records values of this indicator of 0.141725. This value indicates on average a low value of discretionary accruals

in relation to the value of the operating income. The highest values, overunity, were recorded in 2012 and 2013 (when the value of discretionary accruals represents approximately 30% and 55% of the operating income, respectively), immediately after the transition to IFRS, and their level will decrease significantly over time.

Table no. 4 shows the distributions over time of the number of audit opinions by the two categories (modified – *MO* and unqualified – *UO*) as well as the number of key audit matters by the two main groups, namely those on the existence of earnings management operations – *EM* and those on going concern – *CG*.

Table no. 4. Distribution over time of audit opinions and key audit matters on earnings management operations and going concern by category

| | | Audit (| Opinion | Total | KAI | M EM | Total | KAN | I GC | Total |
|-------|---------------------|---------|---------|--------|--------|--------|--------|--------|--------|--------|
| Year | No Observations / % | МО | UO | Total | No EM | Yes EM | Total | No GC | Yes GC | |
| 2012 | No cases | 14 | 23 | 37 | 37 | 0 | 37 | 37 | 0 | 37 |
| | % pe an | 37,8% | 62,2% | 100,0% | 100,0% | 0,0% | 100,0% | 100,0% | 0,0% | 100,0% |
| 2013 | No cases | 12 | 25 | 37 | 37 | 0 | 37 | 37 | 0 | 37 |
| | % pe an | 32,4% | 67,6% | 100,0% | 100,0% | 0,0% | 100,0% | 100,0% | 0,0% | 100,0% |
| 2014 | No cases | 12 | 25 | 37 | 37 | 0 | 37 | 37 | 0 | 37 |
| | % pe an | 32,4% | 67,6% | 100,0% | 100,0% | 0,0% | 100,0% | 100,0% | 0,0% | 100,0% |
| 2015 | No cases | 13 | 24 | 37 | 37 | 0 | 37 | 37 | 0 | 37 |
| | % pe an | 35,1% | 64,9% | 100,0% | 100,0% | 0,0% | 100,0% | 100,0% | 0,0% | 100,0% |
| 2016 | No cases | 8 | 29 | 37 | 17 | 20 | 37 | 31 | 6 | 37 |
| | % pe an | 21,6% | 78,4% | 100,0% | 45,9% | 54,1% | 100,0% | 83,8% | 16,2% | 100,0% |
| 2017 | No cases | 11 | 26 | 37 | 8 | 29 | 37 | 28 | 9 | 37 |
| | % pe an | 29,7% | 70,3% | 100,0% | 21,6% | 78,4% | 100,0% | 75,7% | 24,3% | 100,0% |
| 2018 | No cases | 8 | 29 | 37 | 10 | 27 | 37 | 30 | 7 | 37 |
| | % pe an | 21,6% | 78,4% | 100,0% | 27,0% | 73,0% | 100,0% | 81,1% | 18,9% | 100,0% |
| 2019 | No cases | 11 | 26 | 37 | 9 | 28 | 37 | 32 | 5 | 37 |
| | % pe an | 29,7% | 70,3% | 100,0% | 24,3% | 75,7% | 100,0% | 86,5% | 13,5% | 100,0% |
| 2020 | No cases | 7 | 30 | 37 | 12 | 25 | 37 | 31 | 6 | 37 |
| | % pe an | 18,9% | 81,1% | 100,0% | 32,4% | 67,6% | 100,0% | 83,8% | 16,2% | 100,0% |
| 2021 | No cases | 5 | 32 | 37 | 35 | 2 | 37 | 29 | 8 | 37 |
| | % pe an | 13,5% | 86,5% | 100,0% | 94,6% | 5,4% | 100,0% | 78,4% | 21,6% | 100,0% |
| 2022 | No cases | 5 | 32 | 37 | 36 | 1 | 37 | 28 | 9 | 37 |
| | % pe an | 13,5% | 86,5% | 100,0% | 97,3% | 2,7% | 100,0% | 75,7% | 24,3% | 100,0% |
| Total | No cases | 106 | 301 | 407 | 275 | 132 | 407 | 357 | 50 | 407 |
| | % per year | 26,0% | 74,0% | 100,0% | 67,6% | 32,4% | 100,0% | 87,7% | 12,3% | 100,0% |

Source: own processing in SPSS 25.0

From the data presented in **Table no. 4**, for the categorical variable Audit opinion, the following can be observed: at the level of the sample analysed, for the period 2012-2022, unqualified audit opinions represented 74.0% of the total opinions expressed, and the remaining 26% were modified opinions (qualified opinion, adverse opinion, disclaimer of opinion). In terms of year

distribution, the data analysed show a higher percentage of modified opinions immediately after IFRS adoption (2012) and until 2020 (pandemic period), with percentages of more than 18%, and a significant decrease in the share of modified opinions post-pandemic.

With regard to key audit matters signaling the existence of KAM EMs, it can be seen from the data



analysed that immediately after the transition to IFRS and up to and including 2015, no such matters were reported for any of the companies analysed, as they were not required to be disclosed. With the financial year 2016 and up to 2020 (post-pandemic) such key audit matters were reported. For the key audit matters relating to compliance with the going concern principle (KAM GC), it can be seen from the data analysed that no continuity matters were mentioned by the auditor in the audit report in the period 2012 (with the transition to IFRS) and up to and including 2015, nor was it mandatory to present these matters as key audit matters (mentions in this respect could, however, be made). From the 2016 financial year onwards and especially during the

pandemic period and immediately afterwards, key audit matters relating to going concern were reported in more than 13-16% of cases.

In the analysis of the sample of firms we are dealing with, there is some carryover of KAMs submitted by the same auditor for the same firm from one year to the next. Lin & Yen (2022) studied this issue, on the case of Taiwanese firms, seeking to identify whether auditor change (rotation) influences this remanence; they found confirmation of the KAM change hypothesis, which proves a new perspective of the new auditor.

In terms of the number of key audit matters on earnings management operations and going concern, by auditor category, their distributions are shown in **Table no.** 5.

Table no. 5. Distribution of key audit matters on earnings management and going concern operations by auditor category

| Adita | N = Ob = =====4:=== 10/ | KA | M EM | Total | KAM GC | | Total | |
|---------|-------------------------|-------|--------|---------|--------|--------|--------|--|
| Auditor | No Observations / % | No EM | Yes EM | - Total | No GC | Yes GC | Total | |
| B4 | No cases | 46 | 19 | 65 | 65 | 0 | 65 | |
| | % per auditor | 70,8% | 29,2% | 100,0% | 100,0% | 0,0% | 100,0% | |
| NB4 | No cases | 229 | 113 | 342 | 292 | 50 | 342 | |
| | % per auditor | 67,0% | 33,0% | 100,0% | 85,4% | 14,6% | 100,0% | |
| Total | No cases | 275 | 132 | 407 | 357 | 50 | 407 | |
| | % per auditor | 67,6% | 32,4% | 100,0% | 87,7% | 12,3% | 100,0% | |

Source: own processing in SPSS 25.0

From the data presented in **Table no. 5**, it can be seen that in the sample analysed, for 32.4% of the cases, key audit matters related to the existence of earnings management operations were reported and for 12.3% of the cases, matters related to going concern were reported. Of these, for those relating to earnings management operations, most cases were reported by *Non-Big4* auditors (113 cases), and for those relating to compliance with the going concern principle, all cases were also reported by *Non-Big4* auditors. Thus, a higher degree of professional skepticism can be observed for *Non-Big4* auditors than for *Big4* auditors.

In order to test and validate Hypothesis 1 and achieve the proposed research objective, the parameter estimates of the regression models related to Equation (1) are presented in **Table no. 6** (1).

Table no. 6 presents the parameter estimates of the regression models testing the influence of the previous year's auditor's audit opinion on the financial position and performance indicators (*FL*, *ROE*, *ROA*), including the one

on the existence of earnings management operations, i.e. *Abs(DAC)*.

At the level of the sample analysed, it can be observed that for BSE listed companies in the period 2012-2022, the auditor's audit opinion in the previous financial year does not have a significant influence on the leverage financial (*LF*) nor on the return on equity (*ROE*) in the current financial year, their values being independent of the type of opinion as well as of the auditor's membership in the *Big4* group of companies (at least for the year following the formulation of the audit opinion).

As regards the Return on Assets (*ROA*), from the data presented in **Table no.** 6 it can be seen that the audit opinion from the previous financial year and the type of auditor have a significant influence on it. Thus, for firms to which modified opinions were given in previous financial years, the *ROA* values are 0.124 lower than for firms to which unqualified opinions were given. At the same time, firms audited in the past by *Non-Big4* auditors and for which modified opinions were given have *ROA* values



0.075 lower than firms for which unqualified opinions were given in the past but by auditors belonging to the *Big4* group. It can be concluded that the type of opinion

previously given and the auditor's membership of the *Big4* group of firms have a significant influence on the *ROA* in the current financial year.

| Table no. 6. Parameter estimates of regression models related to Equation (1) | | | | | | | | |
|---|------------------------|---------------|---------------------------|------------|----------------------------|--------------|---------------------------------|-------------------|
| Model | Dependent Variable: FL | | Dependent Variable: ROE | | Dependent Variable: ROA | | Dependent Variable: Abs(DAC) | |
| Parameter | В | Std. Error | В | Std. Error | В | Std. Error | В | Std. Error |
| Intercept | ,666 | 4,041 | ,042 | ,330 | ,053* | ,024 | ,509 | ,149 |
| [Opinion _{t-1} =0] | -2,865 | 7,300 | ,309 | ,597 | -,124* | ,044 | -,440** | ,270 |
| [Opinion _{t-1} =1] | 0a | | 0a | | 0a | | 0a | |
| [Auditor _{t-1} =0] | 1,283 | 4,409 | -,139 | ,360 | -,009 | ,026 | -,433* | ,163 |
| [Auditor _{t-1} =1] | 0a | | 0a | | 0a | | 0a | |
| [Auditor _{t-1} =0]* [Opinion _{t-1} =0] | -4,738 | 7,893 | ,362 | ,645 | ,075** | ,047 | ,509** | ,291 |
| [Auditor _{t-1} =0] * [Opinion _{t-1} =1] | 0a | | 0a | | 0a | | 0a | |
| [Auditor _{t-1} =1] * [Opinion _{t-1} =0] | 0a | | 0a | | 0a | | 0a | |
| [Auditor _{t-1} =1] * [Opinion _{t-1} =1] | 0a | | 0a | | 0a | | 0a | |
| | R squa | ared = 0,016 | R squared = 0,019 R squar | | | ared = 0,038 | | R squared = 0,018 |
| * significant values for a risk of | of 5%; ** signific | ant values fo | r a risk of 10% | | • | | | |

Source: own processing in SPSS 25.0

With respect to the absolute discretionary accruals, from the data presented in **Table no. 6**, the following can be observed: both the prior year audit opinion and the auditor's membership in the Big4 group of firms, and the cumulative effect of these, have a significant influence on the level of absolute discretionary accruals in the current year, similar to other studies (Alzoubi, 2016; Campa, 2019; Buchanan et al., 2021; Viana Jr. & Lourenço, 2022). Thus, firms for which a modified opinion was given in the previous financial year tend to reduce their level of discretionary accruals by 0.440 in the next financial year. Firms audited in the past by auditors not belonging to the *Big4* group of companies also have a 0.433 decrease in discretionary accruals in the next financial year. However, firms audited in the past by *Non-Big4* auditors and

for which modified opinions have been given in the past have increases in discretionary accruals in the next period, implying a deterioration in transparency in financial reporting. In order to test and validate Hypothesis 2 and achieve the related research objective, **Table no. 7** presents the parameter estimates of the regression models related to Equation (2). Thus, it is proposed to apply logistic regression analysis for the case of econometric models assessing the influence of the prior period audit opinion as well as the proposed financial indicators on the probability that the financial auditor will report in the current period a number of key audit matters regarding the existence of earnings management operations or those regarding going concern.

| Model | Dependent Variable: In(pK/ | AM EMt/1-pKAM EMt) | t) Dependent Variable: In(pKAM GCt/1-pKAM GCt) | | | |
|---------------------------|-----------------------------|--------------------|--|-------|--|--|
| Parameter | В | S.E. | В | S.E. | | |
| Opinion _{t-1} =1 | -,709* | ,247 | ,272 | ,352 | | |
| ROA | 1,054** | ,805 | -1,898** | 1,155 | | |
| ROE | ,067 | ,115 | ,237 | ,201 | | |
| FL | ,014 | ,013 | ,041* | ,020 | | |
| Abs_DAC | -2,078 | 2,701 | -10,421 | 7,790 | | |
| Auditor(1) | ,150 | ,302 | -1,431 | ,601 | | |
| Constant | -,524 | ,352 | ,272 | ,352 | | |
| | Nagelkerke R Square = 0,056 | | Nagelkerke R Square = 0,124 | | | |

Source: own processing in SPSS 25.0



Table no. 7 presents the parameter estimates of the logistic regression models testing the influence of the previous year's audit opinion, financial position and performance indicators (*FL, ROE, ROA*), including the existence of earnings management operations, i.e. *Abs(DAC)*, and the auditor's membership of the Big4 group of firms on the probability of reporting key audit matters on the existence of earnings management operations or going concern.

In terms of the probability of reporting key audit matters on the existence of earnings management transactions, it can be seen that by giving an unqualified audit opinion in the previous financial year, the probability of reporting a key audit matter on EM in the next financial year will decrease, in line with the results of other studies (Alzoubi, 2016; Buchanan et al., 2021). This helps to strengthen discipline in financial reporting, as well as increasing transparency in financial reporting following the giving of the audit opinion. Moreover, high ROA values in the current year may be red flags of possible earnings management operations under the action of opportunity factors, as per ISA 240-Auditor's responsibility to consider fraud in an audit of financial statements, as demonstrated by other authors in their studies (Kothari et al., 2005).

For key audit matters of going concern (KAM GC), the probability of their signature by the auditor in the current financial year is significantly influenced by the level of ROA and FL as pressure factors, as per ISA 240-Auditor's responsibility to consider fraud in an audit of financial statements. Thus, these signal indicators may indicate possible malfunctions in the operating activity, such that negative ROA values will lead to an increased probability of reporting a key audit matter on going concern. At the same time, the increase in leverage will also lead to an increase in the probability of reporting key audit matters related to going concern in the current period, similar to the results reached by other researchers (Aguilar et al., 2018).

5. Conclusions

This research aimed to show the role of the financial auditor in improving transparency in reporting and as an active player in enforcing a sustainable reporting discipline. It is well known that the audit opinion given by the financial auditor should provide a high degree of credibility for companies' financial reporting (there is also the option to move to a reasonable assurance

engagement for non-financial information as well, but at a later stage – Ernst & Young, 2022). Given the reputational risks, it is in the auditor's best interest to identify and assess as accurately as possible the risks to audited companies.

The study had two objectives translated into research hypotheses:

- 1. to test the influence of audit opinion type and auditor membership (*Big4/Non-Big4*) on financial position and performance and earnings management practices;
- to test the influence of the audit opinion in conjunction with the influence of important financial indicators on the probability that the auditor will include in the audit report key matters relating to earnings management practices or affecting the going concern principle.

The results show that these influences are generally significant.

In order to test the influence of the auditor's audit opinion of the previous financial year on the indicators of financial position and performance, including that of the existence of earnings management operations, at the level of the sample analysed, it could be found that, for BSE listed companies in the period 2012-2022, the auditor's audit opinion of the previous financial year as well as its type (Big4/Non-Big4) have a significant influence on the return on assets (ROA) of the current financial year. Specifically, firms to which modified opinions were given in previous financial years have lower ROA values than firms to which unqualified opinions were given, and firms audited in the past by Non-Big4 auditors and for which modified opinions were given have lower ROA values than firms for which unqualified opinions were given in the past but by Big4 auditors. In terms of discretionary accruals, both the prior year audit opinion and the auditor's membership of the Big4 group of firms, and the cumulative effect of these, have a significant influence on the level of discretionary accruals in the current year. The deterioration of transparency in financial reporting, through an increase the discretionary engagements occurs against the background of auditors not belonging to the Big4 group and having given modified opinions in the previous period.

Testing the influence of the prior period audit opinion as well as the financial indicators considered on the probability of the financial auditor reporting a number of key audit matters on the existence of *EM* in the current period evidences that the giving of an unqualified audit opinion in the prior financial year decreases the probability



of reporting a key audit matter on *EM* in the next financial year. While this contributes to improved discipline and transparency in financial reporting, the high *ROA* values in the current year may signal the existence of possible earnings management operations under the action of opportunity factors. Testing the influence of the financial indicators considered on the likelihood that the financial auditor will report in the current period on a number of key audit matters related to going concern shows that both *ROA* and *FL* have a significant influence and are considered as pressure factors. In other words, the increased probability of reporting a key audit matter on

going concern may be influenced by inadequate return on assets and leverage.

The additional knowledge that this study brings, in addition to developing the audit-sustainability relationship, also aims to consider some key audit matters as variables included in the category of earnings management operations, and the results obtained may be useful both to accounting professionals in their audit assignments and to other researchers for the development of future studies. Certainly, the study carried out also has limitations, as the sample analysed is quite small, which affects the generalizability of the results, but it could be extended in a future research.

REFERENCES

- Abbott, L. J., Boland, C., Buslepp, W., McCarthy, S. (2022), U.S. Audit partner identification and auditor reporting, *Journal of Accounting and Public Policy*, vol. 41, 106862
- Aguilar, N. G., Lopez, E. B., Barbadillo, E. R. (2018), El efecto de la rotación de socio en la calidad de la auditoría – The effect of audit partner rotation on audit quality, Revista de Contabilidad – Spanish Accounting Review, vol. 21, no. 1, pp. 7–18
- 3. Akther, T., Xu, F. (2021), An investigation of the credibility of and confidence in audit value: evidence from a developing country, *Accounting Research Journal*, vol. 34, no. 5, pp. 488-510
- Alhadab, M. (2018), Abnormal audit fees and accrual and real earnings management: evidence from UK. *Journal of Financial Reporting and Accounting* 16, 00–00. doi: 10.1108/JFRA-07-2017-0050
- Alves, S. (2013), The impact of audit committee existence and external audit on earnings management: Evidence from Portugal, *Journal of Financial Reporting & Accounting*, vol. 11, no. 2, pp.143-165
- Alzoubi, E. S. S. (2016), Audit quality and earnings management: evidence from Jordan, *Journal of Applied Accounting Research*, vol. 17, no. 2, pp.170-189
- 7. Andon, P., Free, C., O'Dwyer, B. (2015), Annexing new audit spaces: challenges and adaptations", *Accounting, Auditing & Accountability Journal*, vol. 28, no. 8, pp.1400-1430

- 8. Arif, A., Kepler, J. D., Schroeder, J., Taylor, D. (2022), Audit process, private information, and insider trading, *Review of Accounting Studies*, vol. 27, no. 3, pp. 1122-1156
- 9. Asante-Appiah, B. (2020), Does the severity of a client's negative environmental, social and governance reputation affect audit effort and audit quality?, *Journal of Accounting and Public Policy*, vol. 39, no. 3, 106713
- 10. Averio, T. (2021), The analysis of influencing factors on the going concern audit opinion a study in manufacturing firms in Indonesia, *Asian Journal of Accounting Research*, vol. 6, no. 2, pp. 152-164
- Bao, S.R., & Lewellyn, K.B. (2017), Ownership structure and earnings management in emerging markets – An institutionalized agency perspective, *International Business Review*, vol. 26, no. 5, pp. 828-838
- Barghathi, Y., Mirani, S., Khan, N. U. (2021), Audit quality and earnings management after communicating Key Audit Matters (KAMs) in the UAE audacity and auditors' perspectives, *Accounting and Management Information Systems*, vol. 20, no. 2, pp. 173-198
- 13. Bava, F., di Trana, M. G. (2019), ISA 570: Italian Auditors' and Academics' Perceptions of the Going Concern Opinion, *Australian Accounting Review*, no. 88, vol. 29, issue 1, pp. 112-123
- 14. Beams, J., Yan, Y. C. (2015), The effect of financial crisis on auditor conservatism: US evidence, *Accounting Research Journal*, vol. 28, no. 2, pp. 160-171



- 15. Beneish, M. (2001), Earnings Management: A Perspective. *Managerial Finance* 27. doi: 10.2139/ssrn.269625
- Bentley, J. W., Lambert, T. A., Wang, E. (2021), The Effect of Increased Audit Disclosure on Managers' Real Operating Decisions: Evidence from Disclosing Critical Audit Matters, *The Accounting Review*, vol. 96, no. 1, pp. 23-40
- Bepari, M. K., Mollik, A. T., Nahar, S., Islam, M. N. (2022), Determinants of Accounts Level and Entity Level Key Audit Matters: Further Evidence, *Accounting in Europe*, vol. 19, no. 3, pp. 397-422
- 18. Berglund, N. R., Herrmann, D. R., Lawson, B. P. (2018), Managerial ability and the accuracy of the going concern opinion, *Accounting and the Public Interest*, vol. 18, no. 1, pp. 29-52
- 19. Blanco, B., Coram, P., Dhole, S., Kent, P. (2021), How do auditors respond to low annual report readability?, *Journal of Accounting and Public Policy*, vol. 40, no. 3, 106769
- Blay, A. D., Geiger, M. A., North, D. S. (2011), The Auditor's Going-Concern Opinion as a Communication of Risk. AUDITING: A Journal of Practice & Theory 30, 77–102. doi: 10.2308/ajpt-50002
- Buchanan, J., Commerford, B. P., Wang, E. (2021), Auditor Actions and the Deterrence of Manager Opportunism: The Importance of Communication to the Board and Consistency with Peer Behavior, *The* Accounting Review, vol. 96, no. 3, pp. 141-163
- 22. Cameran, M., Ditillo, A., Pettinichio, A. (2018), Audit team attributes matter: how diversity affects audit quality, *European Accounting Review*, vol. 27, no. 4, pp. 595-621
- Campa, D. (2019), Earnings management strategies during financial difficulties: A comparison between listed and unlisted French companies. Research in International Business and Finance 50, 457-471. doi: 10.1016/j.ribaf.2019.07.001
- Cardinaels, E., Jia, Y. (2016), How Audits Moderate the Effects of Incentives and Peer Behavior on Misreporting, *European Accounting Review*, vol. 25, no. 1, pp. 183-204
- 25. Casterella, J. R., Desir, R., Stallings, M. A., Wainberg, J. S. (2020), Information Transfer of Bankruptcy Announcements: Examining the Impact

- of Auditor Opinions, *Accounting Horizons*, *34*(1), 45-66. https://doi.org/10.2308/acch-52572
- 26. Carson, E., Fargher, N., Zhang, Y. (2016), Trends in Auditor Reporting in Australia: A Synthesis and Opportunities for Research, *Australian Accounting Review*, vol. 26, no. 3, pp. 226–42.
- 27. Chan, D. K., Li, X., Xin, Q. (2021), Institutional investor inattention and audit quality, *Journal of Accounting and Public Policy*, vol. 40, no. 3, 106857
- 28. Chen, C., Martin, X., Wang, X. (2013), Insider Trading, Litigation Concerns, and Auditor Going-Concern Opinions, *The Accounting Review*, vol. 88, no. 2, pp. 365-393
- 29. Chen, Q., Jiang, X., Zhang, Y. (2019), The Effects of Audit Quality Disclosure on Audit Effort and Investment Efficiency, *The Accounting Review*, vol. 94, no. 4, pp. 189-214
- Chen, T. T. Y., Zhang, F., Zhou, G. (2016), Secrecy Culture and Audit Opinion: Some International Evidence, *Journal of International Financial* Management & Accounting, vol. 28, no. 3, pp. 274-307
- 31. Cheong, C. S., Zurbruegg, R. (2016), Analyst forecasts and stock price informativeness: Some international evidence on the role of audit quality, *Journal of Contemporary Accounting & Economics*, vol. 12, no. 3, pp. 257–273
- Chu, L., Yaari, H. F., Zhang, P. (2022), The Estimated Propensity to Issue Going Concern Audit Reports and Audit Quality, *Journal of Accounting*, *Auditing & Finance*, https://doi.org/10.1177/0148558X221079
- 33. De Simone, L., Ege, M. S., & Stomberg, B. (2015), Internal control quality: The role of auditor-provided tax services, *The Accounting Review*, vol. 90, no. 4, pp. 1469–1496
- 34. DeFond, M., & Zhang, J. (2014), A review of archival auditing research, *Journal of Accounting and Economics*, vol. 58, no. 2–3, pp. 275–326
- Dhaliwal, D., Michas, P. N., Naiker, V., Sharma, D. (2020), Greater Reliance on Major Customers and Auditor Going-Concern Opinions, Contemporary Accounting Research, vol. 37, no. 1, pp. 160–188
- Durana, P., Michalkova, L., Privara, A., Marousek, J., and Tumpach, M. (2021). Does the life cycle affect earnings management and bankruptcy? *Oeconomia Copernicana* 12, 425–461. doi: 10.24136/oc.2021.015



- 37. Ernst & Young (2022), Noua directivă UE privind sustenabilitatea devine factor de schimbare. Available at: https://www.ey.com/ro_ro/news/2022/11/noua-directiva-ue-privind-sustenabilitatea-devine-factor-de-schi [Accessed August 10, 2023]
- 38. Feldmann, D. and Read, W. (2010), Auditor conservatism after Enron, *Auditing: A Journal of Practice & Theory*, vol. 29, no. 1, pp. 267-278
- Feng, M., Li, C. (2014), Are Auditors Professionally Skeptical? Evidence from Auditors' Going-Concern Opinions and Management Earnings Forecasts, *Journal of Accounting Research*, vol. 52 no. 5, pp. 1061-1085
- 40. Geiger, M. A., Raghunandan, K., Riccardi, W. (2014), The Global Financial Crisis: U.S. Bankruptcies and Going-Concern Audit Opinions, *Accounting Horizons*, vol. 28, no. 1, pp. 59-75
- 41. Grosu, M., Mihalciuc, C.C. (2021), RISK FACTORS REGARDING REVENUE RECOGNITION AS KEY AUDIT MATTERS (KAM), The USV Annals of Economics and Public Administration, Vol. 21, No. 2(34)
- Grosu, M., Mihalciuc, C.C., Robu, I.-B. (2023), (Non)Going Concern vs. Gain or Loss and Influence on Audit Opinion, *Audit Financiar*, vol. XXI, no. 1(169)/2023, pp. 109-123, DOI: 10.20869/AUDITF/2023/169/001
- 43. Grosu, M., Robu, I.-B., Istrate, C., Istrate, M. (2022), Influence of Gender Differences on the Quality of Financial Audit Engagements for Listed Companies, *Audit Financiar*, vol. XX, no. 2(166)/2022, pp. 304-319,
- Grosu, M., Robu, I-B., Istrate, C. (2020), The Quality of Financial Audit Missions by Reporting the Key Audit Matters, *Audit Financiar*, vol. XVIII, no. 1(157)/2020, pp. 182-195, DOI: 10.20869/AUDITF/2020/157/005
- Grosu, V., Mateş, D., Zlati, M.-L., Mihaila, S., Socoliuc, M., Ciubotariu, M.-S. (2020), Econometric Model for Readjusting Significance Threshold Levels through Quick Audit Tests Used on Sustainable Companies. Sustainability 12, 8136. doi: 10.3390/su12198136
- 46. Gul, F. A., Khedmati, M., Lim, E. K. Y., Navissi, F. (2018), Managerial ability, financial distress, and

- audit fees, *Accounting Horizons*, vol. 32, no. 1, pp. 29-51
- 47. Guo, Y., Delaney, D., Ahmed, A. (2020), Is an Auditor's Propensity to Issue Going Concern Opinions a Valid Measure of Audit Quality?, *Australian Accounting Review*, no. 93, vol. 30, pp. 144-153
- 48. Gutierrez, E., Minutti-Meza, M., Tatum, K. W., Vulcheva, M. (2018), Consequences of adopting an expanded auditor's report in the United Kingdom, *Review of Accounting Studies*, vol. 23, no. 4, pp. 1543-1587
- 49. Hardies, K., Breesch, D., Branson, J. (2016) Do (Fe)Male Auditors Impair Audit Quality? Evidence from Going-Concern Opinions, *European Accounting Review*, vol. 25, no. 1, pp. 7-34
- 50. Honkamäki, T., Mättö, M., Teittinen, H. (2022), The homogeneity of BIG4 audit reports after the implementation of key audit matters in the context of fair value accounting, *International Journal of Auditing*, vol. 26, no. 3, pp. 354-370
- Hossain, M., Raghunandan, K., Rama, D. V. (2020), Abnormal disclosure tone and going concern modified audit reports. *Journal of Accounting and Public Policy* 39, 106764. doi: 10.1016/j.jaccpubpol.2020.106764
- Hussin, N., Saleh, M. F. M., Ahmad, A., Rahmat, M. M. (2023), The association between audit firm attributes and key audit matters readability, *Asian Journal of Accounting Research*, https://doi.org/10.1108/AJAR-10-2022-0317
- 53. IAASB, (2021), Handbook of International Quality Control, Auditing, Review, Other Assurance, and Related Services Pronouncements. Available at: https://www.iaasb.org/publications/2021-handbook-international-quality-control-auditing-review-other-assurance-and-related-services [Accessed August 9, 2023].
- 54. IAASB, (2020), Manualul de Reglementări Internaționale de Control al Calității, Audit, Revizuire, Alte Servicii de Asigurare și Servicii Conexe (vol I), Ediția 2020, Traduse și republicate de Camera Auditorilor Financiari din România, București, 2022
- 55. Istrate, C., Bunget, O.C., Popa, I.E. (2020), Justifications for the Modified Opinions and for Other Observations in the Audit Reports, *Audit Financiar*,



- vol. XVIII, no. 4(160)/2020, pp. 785-800, DOI: 10.20869/AUDITF/2020/160/026
- 56. Ittonen, K., Peni, E. (2012), Auditor's Gender and Audit Fees, *International Journal of Auditing*, vol. 16, no. 1, pp. 1–18
- 57. Ittonen, K., Vahamaa, E., Vahamaa, S. (2013), Female auditors and accrual quality, *Accounting Horizons*, vol. 27, no. 2, pp. 205-228
- 58. Jaba, E. (2002), *Statistică*, ediția a 3-a, Editura Economică, București
- 59. Jones, J. J. (1991), Earnings Management During Import Relief Investigations. *Journal of Accounting Research* 29, 193–228. doi: 10.2307/2491047
- 60. Kaplan, S. E., Williams, D. D. (2013), Do Going Concern Audit Reports Protect Auditors from Litigation? A Simultaneous Equations Approach, *The Accounting Review*, vol. 88, no. 1, pp. 199–232
- 61. Khan, S. A., Lobo, G., Nwaeze, E. T. (2017), Public re-release of going-concern opinion and market reaction, *Accounting and Business Research*, vol. 47, no. 3, pp. 237-267
- 62. Kim, M. (2021), Effects of managerial overconfidence and ability on going-concern decisions and auditor turnover, *Advances in Accounting*, vol. 54, 100549
- 63. Köhler, A., Ratzinger-Sakel, N., and Theis, J. (2020), The Effects of Key Audit Matters on the Auditor's Report's Communicative Value: Experimental Evidence from Investment Professionals and Non-professional Investors. *Accounting in Europe* 17, 1–24. doi: 10.1080/17449480.2020.1726420
- 64. Kothari, S. P., Leone, A. J., and Wasley, C. E. (2005), Performance matched discretionary accrual measures. *Journal of Accounting and Economics* 39, 163–197. doi: 10.1016/j.jacceco.2004.11.002
- 65. Kung, F.H., Chang, Y.S., Zhou, M. (2019), The effect of gender composition in joint audits on earnings management, *Managerial Auditing Journal*, vol. 34, no. 5, pp. 549-574,
- 66. Lennox, C., Kausar, A. (2017), Estimation risk and auditor conservatism, *Review of Accounting Studies*, vol. 22, no. 5, pp. 185–216.
- 67. Lin, H. L., Yen, A. R. (2022), Auditor rotation, key audit matter disclosures, and financial reporting quality, *Advances in Accounting*, vol. 57, 100594

- Mareque, M., López-Corrales, F., Pedrosa, A. (2017), Audit reporting for going concern in Spain during the global financial crisis, *Economic* Research-Ekonomska Istraživanja, vol. 30, no. 1, pp. 154-183
- 69. Minutti-Meza, M. (2021), The art of conversation: the expanded audit report, *Accounting and Business Research*, vol. 51, no. 5, pp. 548-581
- 70. Moroney, R., Phang, S. Y., Xiao, X. (2021), When Do Investors Value Key Audit Matters?, *European Accounting Review*, vol. 30, no. 1, pp. 63-82
- 71. Nekhili, M., Gull, A. A., Chtioui, T., Radhouane, I. (2019), Gender-diverse boards and audit fees: What difference does gender quota legislation make?, *Journal of Business Finance and Accounting*, vol. 47, no. 1-2, pp. 52-99
- 72. Read, W. J., Yezegel, A. (2018), Going-concern opinion decisions on bankrupt clients: Evidence of longlasting auditor conservatism?, *Advances in Accounting*, vol. 40, pp. 20–26
- 73. Robu, A., Mironiuc, M., Robu, I.-B. (2012), A Practical Model for Testing the "Going-Concern" Assumption in the Financial Audit Engagement for Romanian Quoted Companies. *Audit Financiar* 10, 13–24
- 74. Robu, I.B. (2012), O perspectivă financiară asupra triunghiului fraudei, *Audit Financiar*, 10(1), pp. 12-23
- 75. Robu, I.B. (2021), Calitatea informației financiare: fundamentări contabile, modelări econometrice și analize statistice, Ed. Performantica, Iasi
- 76. Roychowdhury, S. (2006), Earnings management through real activities manipulation. *Journal of Accounting and Economics* 42, 335–370. doi: 10.1016/j.jacceco.2006.01.002
- 77. Ruiz-Barbadillo, E., Gómez-Aguilar, N., De Fuentes-Barberá, C,. García-Benau, M. A. (2004), Audit quality and the going-concern decision-making process: Spanish evidence, *European Accounting Review*, vol. 13, no. 4, pp. 597-620
- 78. Toumeh, A.A., Yahya, S. (2019), "A Review of Earnings Management Techniques: An IFRS Perspective", *Global Business and Management Research: An International Journal*, Vol. 11, No. 3, pp. 1-13.



- 79. Viana Jr., D. B., Lourenço, I. (2022), Financial distress, earnings management and Big 4 auditors in emerging markets, *Accounting Research Journal*, vol. 35, no. 5, pp. 660-675
- 80. Yang, S., Liu, Y., Mai, Q. (2018), Is the quality of female auditors really better? Evidence based on the
- Chinese A-share market, *China Journal of Accounting Research*, vol. 11, no. 4, pp. 325–350
- 81. 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*, vol. 35, no. 2, pp. 167-192