

EFFECTS OF AUDITS QUALITY ON EARNINGS MANAGEMENT: EVIDENCE FROM CROATIA

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ABSTRACT

In the contemporary business climate, companies are facing a dynamic, fast-changing, and unpredictable environment, resulting in the need for responsive, adaptable and agile management. Pressured by high standards and expectations regarding environmental, social, and governance (ESG) factors, companies are finding ways of fulfilling stakeholders' expectations, often challenged by preferable financial position and targeted financial performance. In those circumstances, the company's agents (management) use various adjustments to balance sheet items and profitability to ensure the disclosure of expected results. Thus, earnings management, usually measured by "abnormal" or discretionary accruals, deviates accurate financial results in annual financial statements and brings earnings quality into question. Corporate governance mechanisms are crucial in ensuring financial stability, sustainable business operations, and building trust with all stakeholders. Corporate governance mechanisms, such as external audits, have a significant role in improving a company's financial performance and accuracy and positively affect reducing and limiting earnings management. As a result of the research objective of the paper, we have created an audit quality proxy to measure the quality of financial statement audits. Our research covers 69 non-financial companies from the Zagreb stock exchange from 2015 to 2023 (520 observations). To test research hypotheses, we used panel data methods. Results indicate that discretionary accruals are not lower in the case of higher audit quality for Croatian listed companies, which indicates that auditors are ineffective in detecting earnings management. However, those discretionary accruals are lower in the case of a modified auditor's opinion.

Key words: *earnings management, discretionary accruals, earnings quality, financial statement audits, audit quality.*

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1. INTRODUCTION

The disruptive, unpredictable, dynamic, and insecure business environment significantly changes companies' strategies and objectives by forcing them to be agile and flexible to cope with those challenges and survive in the market successfully. Managers face new, challenging conditions and requirements to fulfil expectations in such an environment. During unstable business conditions and crises, agency conflicts are even more pronounced. "Managers are eager to inflate reported earnings to get more compensation; on the other hand, managers want to reduce agency costs to yield more earnings."¹ Thus, companies must ensure effective and efficient corporate governance mechanisms to provide stakeholders with reliable and objective information on the financial position and business performance of the company's operations. In that context, independent auditors and financial statement audits play an essential role as external corporate governance mechanism². Considering that auditors' task is to protect stakeholders' interests, they can help to alleviate agency conflicts³. "The existence of information asymmetry may allow the managers to manipulate earnings to show a rosy picture of a firm."⁴ However, external auditors' services have a role in reducing information asymmetry⁵. "Hence, the auditing process is presumed to assist as a monitoring mechanism that would

¹ Verma, D., Dawar, V., Chaudhary, P.: Do Audit attributes impact earnings quality? Evidence from India, *Asian Journal of Accounting Research*, 9(1) 2024, p. 27.

² Lin, J. W., Hwang, M. I.: Audit quality, corporate governance, and earnings management: A Meta-Analysis, *International journal of auditing*, 14(1) 2010, pp. 57-77; Chen, H. et al.: Effects of audit quality on earnings management and cost of equity capital: Evidence from China, *Contemporary Accounting Research*, 28(3) 2011, pp. 892-925; Alzoubi, E. S. S.: Audit quality and earnings management: Evidence from Jordan, *Journal of Applied Accounting Research*, 17(2) 2016, pp. 170-189; Zgarni, I., Hlioui, K., Zehri, F.: Effective audit committee, audit quality and earnings management: Evidence from Tunisia, *Journal of Accounting in Emerging Economies*, 6(2) 2016, pp. 138-155; Le, B., Moore, P. H.: The impact of audit quality on earnings management and cost of equity capital: evidence from a developing market, *Journal of Financial Reporting and Accounting*, 21(3) 2023, pp. 695-728; Bawuah, I.: Audit committee effectiveness, audit quality and earnings management: evidence from Ghana, *Cogent Business and Management*, 11(1) 2024, pp. 2315318; Mwangi, J.: Effect of Audit Quality on Earnings Management Practices, *American Journal of Accounting*, 6(1) 2024, pp. 1-12.

³ Van Tendeloo, B., Vanstraelen, A.: Earnings management and audit quality in Europe: evidence from the private client segment market, *European Accounting Review*, 17(3) 2008, p. 448.

⁴ Barghathi, Y., Mirani, S., Khan, N. U.: Audit quality and earnings management after communicating Key Audit Matters (KAMs) in the UAE—audacity and auditors' perspectives, *Journal of Accounting and Management Information Systems*, 20(2) 2021, p. 181.

⁵ Awuye, I. S.: The impact of audit quality on earnings management: Evidence from France, *Journal of Accounting and Taxation*, 14(1) 2022, p. 62.

diminish incentives of managers to manage earnings.”⁶ External auditors play a significant role in catching possible earnings management caused by managers, i.e., preventing discretionary accruals. The ability of auditors to prevent discretionary or abnormal accruals represents audit quality. Thus, audit quality is essential to effective corporate governance⁷. “The quality of audit services is defined to be the market-assessed joint probability that a given auditor will both (a) discover a breach in the client’s accounting system, and (b) report the breach.”⁸ “The term audit quality encompasses the key elements that create an environment which maximizes the likelihood that quality audits are performed on a consistent basis.”⁹ Audit quality represents the capability of auditors to discover and report any errors in a financial statement¹⁰, as well as provides independent and reliable financial statements¹¹, and serves as a signal of a company’s commitment to transparency and reliable financial reporting process¹². However, an auditor’s performance is a multi-dimensional concept, largely dependent on the applied set of auditing standards, the auditor’s expertise and competencies, and the resources and technology available in the audit company. Thus, audit quality is a result of number of factors¹³. A higher audit quality characterizes auditor reputation, industry expertise, and regulatory reforms¹⁴, as well as “ability of an auditor to provide an independent audit service and assurance that the audited financial statement is free from mate-

⁶ Alzoubi, E. S. S.: Audit Quality and Earnings Management: Evidence from Jordan, *Journal of Applied Accounting Research*, 17(2) 2016, pp. 170–89, p. 171.

⁷ Bawuah, I.: Audit committee effectiveness, audit quality and earnings management: evidence from Ghana, *Cogent Business and Management*, 11(1) 2024, pp. 2315318.

⁸ Deangelo, L. E.: Auditor size and audit quality, *Journal of Accounting and Economics*, 3(3) 1981, pp. 183-199.

⁹ International Auditing and Assurance Standards Board (IAASB). A Framework for Audit Quality: Key Elements That Create an Environment for Audit Quality, 2014.

¹⁰ Adekanye, A. V.: *Impact of audit quality on earnings management of listed manufacturing companies in Nigeria*, Kwara: Postgraduate School of Kwara State, Master of Science thesis, 2019, p. 12.

¹¹ Bawuah, I.: Audit committee effectiveness, audit quality and earnings management: evidence from Ghana, *Cogent Business and Management*, 11(1) 2024, pp. 2315318.

¹² Mwangi, J.: Effect of Audit Quality on Earnings Management Practices, *American Journal of Accounting*, 6(1) 2024, pp. 4-5.

¹³ Lin, J. W., Hwang, M. I.: Audit quality, corporate governance, and earnings management: A Meta-Analysis, *International journal of auditing*, 14(1) 2010, p. 60.

¹⁴ Mwangi, J.: Effect of Audit Quality on Earnings Management Practices, *American Journal of Accounting*, 6(1) 2024, p. 8.

rial errors, misstatement and manipulation of figures.”¹⁵ Audit quality can be determined from at least two aspects. For stakeholders, absence of material misstatement indicates higher audit quality, and auditors define audit quality as complying with all professional requirements¹⁶.

Diminishing, manipulating, tailoring, and arranging accounting data blurs transparency and decreases fairness and objectivity of the financial reporting process and its results disclosed in financial statements. Following the Conceptual Framework for Financial Reporting of the IFRS Foundation, “if financial information is to be useful, it must be relevant and faithfully represent what it purports to represent”¹⁷. The company prepares its financial statements under applicable financial reporting frameworks, like globally accepted IFRS, US GAAP, or other national standards. Those standards encompass significant accounting principles, policies, and estimates relevant to the valuation and recognition of financial statement items to provide financial information about the company that is useful to existing and potential stakeholders. Managers use different accounting policies and estimates to give stakeholders an objective and correct representation of the company’s financial position and business performance. Besides, to maximize company wealth, managers adjust earnings¹⁸. Such adjustments of earnings by managers are known as earnings management. It is important to emphasize that earnings management includes choices that conform to the applicable financial reporting framework. Earnings management is not fraudulent in nature¹⁹. It “can be achieved by various means such as the use of accruals, changes in accounting methods, and changes in capital structure (e.g., debt defeasance, debt-equity swaps)”²⁰. Managers use earnings management to help the company or its managers achieve their goals²¹. Sometimes, managers use earnings management to achieve specific

¹⁵ Isiaka, O. A.: *Effect of Audit Quality on Earnings Management of Listed Manufacturing Firms in Nigeria*, Kwara: Kwara State University, Master of Science thesis, 2019, p. 28.

¹⁶ Barghathi, Y., Collison, D., Crawford, L.: Earnings management and audit quality: stakeholders’ perceptions, *Journal of Management and Governance*, 22(3) 2018, pp. 629-659.

¹⁷ IFRS Foundation: *Conceptual Framework for Financial Reporting*, 2025.

¹⁸ Becker, C. L. et al.: The effect of audit quality on earnings management, *Contemporary Accounting Research*, 15(1) 1998, p. 5.

¹⁹ Abdul Rahman, R., Haneem Mohamed Ali, F.: Board, audit committee, culture and earnings management: Malaysian evidence, *Managerial Auditing Journal*, 21(7) 2006, p. 785.

²⁰ Jones, J. J.: Earnings management during import relief investigations, *Journal of Accounting Research*, 29(2) 1991, p. 206.

²¹ Sun, J., Liu, G., Lan, G.: Does female directorship on independent audit committees constrain earnings management?, *Journal of Business Ethics*, 99(3) 2011, p. 370.

objectives, like reaching user reference points in EPS²² or targeted value of an entity²³. However, in some cases, managers are driven by wrong goals to achieve their benefit, leading to unjustified underestimation or overestimation of accounting items, recording non-existent or avoiding recording of existing accounting transactions, which results in fraudulent financial reporting. The question is how to detect such malicious manipulations of earnings. It is important to emphasize that some authors equalize earnings management with earnings manipulations or opportunistic use of accounting policies and estimate flexibility. “Managers employ earnings management as an opportunistic behaviour in order to satisfy their personal objective or to place the firm in a better economic performance.”²⁴ “In other words, earnings management hides a firm’s true performance from stakeholders, diminishes the quality of accounting information and consequently affects cost of capital.”²⁵

As an essential external corporate governance mechanism, external audit helps and provides stakeholders with reasonable assurance that financial statements are free from material misstatements. In that context, the quality of auditors’ activities represents an important question. The audit quality is a multi-dimensional issue primarily determined by internal factors. However, those internal factors are not available to external stakeholders. External stakeholders have at their disposal only the result of the overall audit process in the form of independent auditor’s reports. Thus, our research objective is to create an audit quality proxy based on publicly available data to approximate the quality of auditors’ activities. Furthermore, this paper aims to investigate whether higher level of audit quality is associated with lower earnings management, i.e., to investigate whether auditors are effective in detecting earnings management. Finally, we analysed whether modifications of the auditor’s opinion lower earnings management and improve financial performance transparency and objectivity. To fulfil these objectives, we designed two research hypotheses:

H1. Higher audit quality is associated with lower discretionary accruals in audited financial statements.

H2. In the case of a modified auditor’s opinion, discretionary accruals are lower.

²² Jordan, C. E., Clark, S. J., Hames, C. C.: The impact of audit quality on earnings management to achieve user reference points in EPS, *The Journal of Applied Business Research*, 26(1) 2010, p. 19.

²³ Tache, M.: The incidence of earnings management on audit quality, *Proceedings of the International Conference on Business Excellence*, 15(1) 2021, p. 785.

²⁴ Isiaka, O. A.: *Effect of Audit Quality on Earnings Management of Listed Manufacturing Firms in Nigeria*, Kwara: Kwara State University, Master of Science thesis, 2019, p. 21.

²⁵ Orazalin, N., Akhmetzhanov, R.: Earnings management, audit quality, and cost of debt: evidence from a Central Asian Economy, *Managerial Auditing Journal*, 34(6) 2019, p. 696.

2. LITERATURE REVIEW

Over the years many authors have researched effects of corporate governance mechanisms like external audit on earnings management²⁶.

²⁶ Becker, C. L. et al.: The effect of audit quality on earnings management, *Contemporary Accounting Research*, 15(1) 1998, pp. 1-24; Johl, S., Jubb, C. A., Houghton, K. A.: Earnings management and the audit opinion: evidence from Malaysia, *Managerial Auditing Journal*, 22(7) 2007, pp. 688-715; Van Tendeloo, B., Vanstraelen, A.: Earnings management and audit quality in Europe: evidence from the private client segment market, *European Accounting Review*, 17(3) 2008, pp. 447-469; Caramanis, C., Lennox, C.: Audit effort and earnings management, *Journal of Accounting and Economics*, 45(1) 2008, pp. 116-138; Jordan, C. E., Clark, S. J., Hames, C. C.: The impact of audit quality on earnings management to achieve user reference points in EPS, *The Journal of Applied Business Research*, 26(1) 2010, pp. 19-30; Chen, H. et al.: Effects of audit quality on earnings management and cost of equity capital: Evidence from China, *Contemporary Accounting Research*, 28(3) 2011, pp. 892-925; Tsiouridou, M., Spathis, C.: Audit opinion and earnings management: Evidence from Greece, *Accounting Forum*, 38(1) 2014, pp. 38-54; Alzoubi, E. S. S.: Audit quality and earnings management: Evidence from Jordan, *Journal of Applied Accounting Research*, 17(2) 2016, pp. 170-189; Zgarni, I., Hlioui, K., Zehri, F.: Effective audit committee, audit quality and earnings management: Evidence from Tunisia, *Journal of Accounting in Emerging Economies*, 6(2) 2016, pp. 138-155; Houqe, M. N., Ahmed, K., Van Zijl, T.: Audit quality, earnings management, and cost of equity capital: evidence from India, *International Journal of Auditing*, 21(2) 2017, pp. 177-189; Lopes, A. P.: Audit Quality and Earnings Management: Evidence from Portugal, *Athens Journal of Business & Economics*, 4(2) 2018, pp. 179-192; Barghathi, Y., Collison, D., Crawford, L.: Earnings management and audit quality: stakeholders' perceptions, *Journal of Management and Governance*, 22(3) 2018, pp. 629-659; Thu, P. A. et al.: Perceived audit quality, earnings management and cost of debt capital: evidence from the energy listed firms on Vietnam's stock market, *International Journal of Energy Economics and Policy*, 8(6) 2018, pp. 120-127; El Guindy, M. N., Basuony, M. A.: Audit firm tenure and earnings management: the impact of changing accounting standards in UK Firms, *The Journal of Developing Areas*, 52(4) 2018, pp. 167-181; Orazalin, N., Akhmetzhanov, R.: Earnings management, audit quality, and cost of debt: evidence from a Central Asian Economy, *Managerial Auditing Journal*, 34(6) 2019, pp. 696-721; Adekanye, A. V.: *Impact of audit quality on earnings management of listed manufacturing companies in Nigeria*, Kwara: Postgraduate School of Kwara State, Master of Science thesis, 2019; Isiaka, O. A.: *Effect of Audit Quality on Earnings Management of Listed Manufacturing Firms in Nigeria*, Kwara: Kwara State University, Master of Science thesis, 2019; Mollik, A. T. et al.: Effects of audit quality and audit committee characteristics on earnings management during the global financial crisis – evidence from Australia, *Australasian Accounting, Business and Finance Journal*, 14(4) 2020, pp. 85-115; Barghathi, Y., Collison, D., Crawford, L.: Earnings management and audit quality: stakeholders' perceptions, *Journal of Management and Governance*, 22(3) 2018, pp. 629-659; Tache, M.: The incidence of earnings management on audit quality, *Proceedings of the International Conference on Business Excellence*, 15(1) 2021, pp. 783-792; Awuye, I. S.: The impact of audit quality on earnings management: Evidence from France, *Journal of Accounting and Taxation*, 14(1) 2022, pp. 52-63; Salehi, M. et al.: The effect of mandatory audit firm rotation on earnings management and audit fees: evidence from Iran, *Journal of Risk and Financial Management*, 15(3) 2022, pp. 102; Choi, A. et al.: The differential effect of accrual-based and real earnings management

To measure earnings management, majority of authors used the approach of approximating non-discretionary and discretionary accruals. Some of the most used models for these purposes are the Jones (1991) model²⁷ and the Jones (1991) model modified by Dechow et al. (1995)²⁸. Next to these two models, many authors used the model proposed by Kothari et al. (2005).²⁹ Other

on audit fees: international evidence., *Accounting and Business Research*, 52(3) 2022, pp. 254-290; Abu Afifa, M. M., Saleh, I. H., Haniah, F. F.: Does earnings management mediate the relationship between audit quality and company performance? Evidence from Jordan, *Journal of Financial Reporting and Accounting*, 21(3) 2023, pp. 747-774; Duong Thi, C.: Audit quality, institutional environments, and earnings management: an empirical analysis of new listings, *SAGE Open*, 13(2) 2023; Le, B., Moore, P. H.: The impact of audit quality on earnings management and cost of equity capital: evidence from a developing market, *Journal of Financial Reporting and Accounting*, 21(3) 2023, pp. 695-728; Verma, D., Dawar, V., Chaudhary, P.: Do Audit attributes impact earnings quality? Evidence from India, *Asian Journal of Accounting Research*, 9(1) 2024, pp. 25-34.

²⁷ Becker, C. L. et al.: The effect of audit quality on earnings management, *Contemporary Accounting Research*, 15(1) 1998, pp. 1-24; Caramanis, C., Lennox, C.: Audit effort and earnings management, *Journal of Accounting and Economics*, 45(1) 2008, pp. 116-138; Tache, M.: The incidence of earnings management on audit quality, *Proceedings of the International Conference on Business Excellence*, 15(1) 2021, pp. 783-792; Awuye, I. S.: The impact of audit quality on earnings management: Evidence from France, *Journal of Accounting and Taxation*, 14(1) 2022, pp. 52-63.

²⁸ Chen, H., et al.: Effects of audit quality on earnings management and cost of equity capital: Evidence from China, *Contemporary Accounting Research*, 28(3) 2011, pp. 892-925; Tsiouridou, M., Spathis, C.: Audit opinion and earnings management: Evidence from Greece, *Accounting Forum*, 38(1) 2014, pp. 38-54; Alzoubi, E. S. S.: Audit quality and earnings management: Evidence from Jordan, *Journal of Applied Accounting Research*, 17(2) 2016, pp. 170-189; Zgarni, I., Hlioui, K., Zehri, F.: Effective audit committee, audit quality and earnings management: Evidence from Tunisia, *Journal of Accounting in Emerging Economies*, 6(2) 2016, pp. 138-155; Lopes, A. P.: Audit Quality and Earnings Management: Evidence from Portugal, *Athens Journal of Business & Economics*, 4(2) 2018, pp. 179-192; Orzalin, N., Akhmetzhanov, R.: Earnings management, audit quality, and cost of debt: evidence from a Central Asian Economy, *Managerial Auditing Journal*, 34(6) 2019, pp. 696-721; Adekanye, A. V.: *Impact of audit quality on earnings management of listed manufacturing companies in Nigeria*, Kwara: Postgraduate School of Kwara State, Master of Science thesis, 2019; Salehi, M. et al.: The effect of mandatory audit firm rotation on earnings management and audit fees: evidence from Iran, *Journal of Risk and Financial Management*, 15(3) 2022, pp. 102; Choi, A., Karim, K., Zhang, Y.: Earnings management risk and audit pricing: Evidence from big bath accounting, *Journal of Business Finance and Accounting*, 51(7-8) 2024, pp. 1593-2274; Abu Afifa, M. M., Saleh, I. H., Haniah, F. F.: Does earnings management mediate the relationship between audit quality and company performance? Evidence from Jordan, *Journal of Financial Reporting and Accounting*, 21(3) 2023, pp. 747-774; Le, B., Moore, P. H.: The impact of audit quality on earnings management and cost of equity capital: evidence from a developing market, *Journal of Financial Reporting and Accounting*, 21(3) 2023, pp. 695-728.

²⁹ El Guindy, M. N., Basuony, M. A.: Audit firm tenure and earnings management: the impact of changing accounting standards in UK Firms, *The Journal of Developing Areas*, 52(4) 2018,

used models are developed by Burgstahler et al. (2006) model³⁰, Raman and Shahrur (2008) model³¹, the Jones-Evans (1995) model³² and the McNichols (2002) model³³.

2.1. AUDITORS' SIZE (BIG N)

Most of the researchers who investigated effects of external auditing on earnings management measured quality of external auditors as a size of auditing company, most often segregated as Big N and non-Big N auditors. Big N auditors “have more capital, technology, human resources, and experiences that permit them to afford higher audit quality compared to the non-Big 4 audit firms”³⁴. However, research results are conflicting. In that context, Mollik et al.³⁵ did not found significant differences between Big 4 and non-Big 4 auditors in constraining firms' earnings management during the crisis³⁶ on the sample of Australian firms during the Global Financial Crisis (GFC). Some of the authors concluded that discretionary accruals are even higher when financial

pp. 167-181; Orazalin, N.; Akhmetzhanov, R.: Earnings management, audit quality, and cost of debt: evidence from a Central Asian Economy, *Managerial Auditing Journal*, 34(6) 2019, pp. 696-721; Mollik, A. T. et al.: Effects of audit quality and audit committee characteristics on earnings management during the global financial crisis – evidence from Australia, *Australasian Accounting, Business and Finance Journal*, 14(4) 2020, pp. 85-115; Le, B., Moore, P. H.: The impact of audit quality on earnings management and cost of equity capital: evidence from a developing market, *Journal of Financial Reporting and Accounting*, 21(3) 2023, pp. 695-728.

³⁰ Van Tendeloo, B., Vanstraelen, A.: Earnings management and audit quality in Europe: evidence from the private client segment market, *European Accounting Review*, 17(3) 2008, pp. 447-469.

³¹ Thu, P. A., et al.: Perceived audit quality, earnings management and cost of debt capital: evidence from the energy listed firms on Vietnam's stock market, *International Journal of Energy Economics and Policy*, 8(6) 2018, pp. 120-127.

³² Awuye, I. S.: The impact of audit quality on earnings management: Evidence from France, *Journal of Accounting and Taxation*, 14(1) 2022, pp. 52-63.

³³ Verma, D., Dawar, V., Chaudhary, P.: Do Audit attributes impact earnings quality? Evidence from India, *Asian Journal of Accounting Research*, 9(1) 2024, pp. 25-34.

³⁴ Alzoubi, E. S. S.: Audit quality and earnings management: Evidence from Jordan, *Journal of Applied Accounting Research*, 17(2) 2016, p. 184.

³⁵ Mollik, A. T. et al.: Effects of audit quality and audit committee characteristics on earnings management during the global financial crisis – evidence from Australia, *Australasian Accounting, Business and Finance Journal*, 14(4) 2020, pp. 85-115.

³⁶ Mollik, A. T. et al.: Effects of audit quality and audit committee characteristics on earnings management during the global financial crisis – evidence from Australia, *Australasian Accounting, Business and Finance Journal*, 14(4) 2020, p. 108.

statements are audited by Big N auditors³⁷. Thus, Alves, S.³⁸ examined the combined effect of audit committee existence and external audit on earnings management and concluded that earnings management in companies audited by non-Big 4 audit firms is smaller than in companies audited by Big 4 audit firms³⁹. A research made by Awuye, I. S.⁴⁰ confirms this. He found that Big 4 auditors do not limit earnings management levels and that their clients are more likely to have higher levels of earnings management⁴¹.

However, most of the authors found that discretionary accruals are lower in cases when financial statements are audited by Big N auditors⁴². Becker, C. L., et al.⁴³ concluded that in the case of non-Big Six auditors, discretionary accruals are 1.5% of assets higher than in the case of Big Six auditor's reports⁴⁴.

³⁷ Awuye, I. S.: The impact of audit quality on earnings management: Evidence from France, *Journal of Accounting and Taxation*, 14(1) 2022, pp. 52-63; Alves, S.: The impact of audit committee existence and external audit on earnings management, *Journal of Financial Reporting & Accounting*, 11(2) 2013, pp. 143-165.

³⁸ Alves, S.: The impact of audit committee existence and external audit on earnings management, *Journal of Financial Reporting & Accounting*, 11(2) 2013, pp. 143-165.

³⁹ Alves, S.: The impact of audit committee existence and external audit on earnings management, *Journal of Financial Reporting & Accounting*, 11(2) 2013, p. 158.

⁴⁰ Awuye, I. S.: The impact of audit quality on earnings management: Evidence from France, *Journal of Accounting and Taxation*, 14(1) 2022, pp. 52-63.

⁴¹ Awuye, I. S.: The impact of audit quality on earnings management: Evidence from France, *Journal of Accounting and Taxation*, 14(1) 2022, p. 62.

⁴² Becker, C. L. et al.: The effect of audit quality on earnings management, *Contemporary Accounting Research*, 15(1) 1998, pp. 1-24; Van Tendeloo, B., Vanstraelen, A.: Earnings management and audit quality in Europe: evidence from the private client segment market, *European Accounting Review*, 17(3) 2008, pp. 447-469; Jordan, C. E., Clark, S. J., Hames, C. C.: The impact of audit quality on earnings management to achieve user reference points in EPS, *The Journal of Applied Business Research*, 26(1) 2010, pp. 19-30; Lopes, A. P.: Audit Quality and Earnings Management: Evidence from Portugal, *Athens Journal of Business & Economics*, 4(2) 2018, pp. 179-192; Debnath, N. C., Chowdhury, S. P., Khan, S.: The impact of audit quality on real earnings management: evidence from Bangladesh, *International Journal of Disclosure and Governance*, 19(2) 2022, pp. 218-231; Bawuah, I.: Audit committee effectiveness, audit quality and earnings management: evidence from Ghana, *Cogent Business and Management*, 11(1) 2024, pp. 2315318.

⁴³ Becker, C. L. et al.: The Effect of Audit Quality on Earnings Management, *Contemporary Accounting Research*, 15(1) 1998, pp. 1-24.

⁴⁴ Becker, C. L. et al.: The Effect of Audit Quality on Earnings Management, *Contemporary Accounting Research*, 15(1) 1998, p. 19.

Van Tendeloo, B.; Vanstraelen, A.⁴⁵ indicate that “Big 4 audit firms provide a uniform level of audit quality for private companies across countries”⁴⁶. Authors found that privately held companies engage less in earnings management when they have Big 4 auditors only in countries with a high tax alignment⁴⁷. Jordan, C. E., et al.⁴⁸ concluded that managers of companies audited by small audit companies manipulate earnings to round up EPS to user reference points. Results obtained by Lopes, A. P.⁴⁹ suggest that companies audited by a Big 4 have a lower degree of manipulation of results⁵⁰. Debnath, N. C., et al.⁵¹ confirmed a statistically significant negative relationship between Big 4 and real earnings management⁵².

⁴⁵ Van Tendeloo, B., Vanstraelen, A.: Earnings management and audit quality in Europe: evidence from the private client segment market, *European Accounting Review*, 17(3) 2008, pp. 447-469.

⁴⁶ Van Tendeloo, B., Vanstraelen, A.: Earnings management and audit quality in Europe: evidence from the private client segment market, *European Accounting Review*, 17(3) 2008, p. 448.

⁴⁷ Van Tendeloo, B., Vanstraelen, A.: Earnings management and audit quality in Europe: evidence from the private client segment market, *European Accounting Review*, 17(3) 2008, p. 464.

⁴⁸ Jordan, C. E., Clark, S. J., Hames, C. C.: The impact of audit quality on earnings management to achieve user reference points in EPS, *The Journal of Applied Business Research*, 26(1) 2010, pp. 19-30.

⁴⁹ Lopes, A. P.: Audit Quality and Earnings Management: Evidence from Portugal, *Athens Journal of Business & Economics*, 4(2) 2018, pp. 179-192.

⁵⁰ Lopes, A. P.: Audit Quality and Earnings Management: Evidence from Portugal, *Athens Journal of Business & Economics*, 4(2) 2018, pp. 188-189.

⁵¹ Debnath, N. C., Chowdhury, S. P., Khan, S.: The impact of audit quality on real earnings management: evidence from Bangladesh, *International Journal of Disclosure and Governance*, 19(2) 2022, pp. 218-231.

⁵² Debnath, N. C., Chowdhury, S. P., Khan, S.: The impact of audit quality on real earnings management: evidence from Bangladesh, *International Journal of Disclosure and Governance*, 19(2) 2022, p. 229.

2.2. OTHER AUDIT QUALITY PROXIES

As audit quality proxies, besides auditor's size, the authors used, authors used audit fees⁵³, industry specialization⁵⁴, audit tenure⁵⁵; some of them used additional indicators like audit rotation⁵⁶, joint audit⁵⁷, and others. Caramanis, C.;

⁵³ Alzoubi, E. S. S.: Audit quality and earnings management: Evidence from Jordan, *Journal of Applied Accounting Research*, 17(2) 2016, pp. 170-189; Adekanye, A. V.: *Impact of audit quality on earnings management of listed manufacturing companies in Nigeria*, Kwara: Postgraduate School of Kwara State, Master of Science thesis, 2019; Isiaka, O. A.: *Effect of Audit Quality on Earnings Management of Listed Manufacturing Firms in Nigeria*, Kwara: Kwara State University, Master of Science thesis, 2019; Verma, D., Dawar, V., Chaudhary, P.: Do Audit attributes impact earnings quality? Evidence from India, *Asian Journal of Accounting Research*, 9(1) 2024, pp. 25-34.

⁵⁴ Johl, S., Jubb, C. A., Houghton, K. A.: Earnings management and the audit opinion: evidence from Malaysia, *Managerial Auditing Journal*, 22(7) 2007, pp. 688-715; Zgarni, I., Hlioui, K., Zehri, F.: Effective audit committee, audit quality and earnings management: Evidence from Tunisia, *Journal of Accounting in Emerging Economies*, 6(2) 2016, pp. 138-155; Abu Afifa, M. M., Saleh, I. H., Haniah, F. F.: Does earnings management mediate the relationship between audit quality and company performance? Evidence from Jordan, *Journal of Financial Reporting and Accounting*, 21(3) 2023, pp. 747-774; Duong Thi, C.: Audit quality, institutional environments, and earnings management: an empirical analysis of new listings, *SAGE Open*, 13(2) 2023; Le, B., Moore, P. H.: The impact of audit quality on earnings management and cost of equity capital: evidence from a developing market, *Journal of Financial Reporting and Accounting*, 21(3) 2023, pp. 695-728.

⁵⁵ Zgarni, I. et al.: Effective Audit Committee, Audit Quality and Earnings Management Evidence from Tunisia, *Journal of Accounting in Emerging Economies*, 6(2) 2016, pp. 138-155; Adekanye, A. V.: *Impact of Audit Quality on Earnings Management of Listed Manufacturing Companies in Nigeria*, Postgraduate School of Kwara State University, Master of Science (M.Sc.), 2019; Isiaka, O. A.: *Effect of Audit Quality on Earnings Management of Listed Manufacturing Firms in Nigeria*, 2019, Kwara State University, Master of Science (M.Sc.); Abu Afifa, M. M., Saleh, I. H., Haniah, F. F.: Does Earnings Management Mediate the Relationship Between Audit Quality and Company Performance? Evidence from Jordan, *Journal of Financial Reporting and Accounting*, 21(3) 2023, pp. 747-774; Duong Thi, C.: Audit Quality, Institutional Environments, and Earnings Management: An Empirical Analysis of New Listings, *SAGE Open*, 13(2) 2023; Le, B.; Hearn Moore, P.: The Impact of Audit Quality on Earnings Management and Cost of Equity Capital: Evidence from a Developing Market, *Journal of Financial Reporting and Accounting*, 21(3) 2023, pp. 695-728; Verma, D., et al.: Do Audit Attributes Impact Earnings Quality? Evidence from India, *Asian Journal of Accounting Research*, 9(1) 2024, pp. 25-34.

⁵⁶ Zgarni, I., Hlioui, K., Zehri, F.: Effective audit committee, audit quality and earnings management: Evidence from Tunisia, *Journal of Accounting in Emerging Economies*, 6(2) 2016, pp. 138-155.

⁵⁷ Verma, D., Dawar, V., Chaudhary, P.: Do Audit attributes impact earnings quality? Evidence from India, *Asian Journal of Accounting Research*, 9(1) 2024, pp. 25-34; Adekanye, A. V.: *Impact of audit quality on earnings management of listed manufacturing companies in Nigeria*, Kwara: Postgraduate School of Kwara State, Master of Science thesis, 2019.

Lennox, C.⁵⁸ tested audit efforts on earnings management where audit quality is measured by audit hours and concluded that audit effort reduces the extent to which managers' report aggressively high earnings and that they are more prone to report income-increasing abnormal accruals when auditing hours are lower⁵⁹. Similarly to audit hours, Guindy, M. N. El; Basuony, M. A. K.⁶⁰ investigated the association between audit firm tenure, and earnings management (EM) and whether using the same accounting standards is conditional. The authors found that longer audit firm tenure does not compromise auditor independence but improves audit quality⁶¹. As for audit tenure, audit firm rotation could impact earnings management. Thus, Salehi, M., et al.⁶² investigated the effects of audit firm rotation on earnings management and concluded that the mandatory audit firm rotation rule significantly increased accruals-based earnings management but did not significantly influence real earnings management⁶³.

2.3. MULTIPLE AUDIT QUALITY PROXIES

Finally, significant number of authors used more than one proxy to assess audit quality. However, most of them included them in the model as separate variables. Thus, Zgarni, I., et al.⁶⁴ used the auditor size (dummy: Big 4=1), industry specialisation (dummy: m-firm sales ratio>10%=1), and tenure of auditor (number of consecutive years that the client has retained a particular

⁵⁸ Caramanis, C., Lennox, C.: Audit effort and earnings management, *Journal of Accounting and Economics*, 45(1) 2008, pp. 116-138.

⁵⁹ Caramanis, C., Lennox, C.: Audit effort and earnings management, *Journal of Accounting and Economics*, 45(1) 2008, p. 136.

⁶⁰ El Guindy, M. N., Basuony, M. A.: Audit firm tenure and earnings management: the impact of changing accounting standards in UK Firms, *The Journal of Developing Areas*, 52(4) 2018, pp. 167-181.

⁶¹ El Guindy, M. N., Basuony, M. A.: Audit firm tenure and earnings management: the impact of changing accounting standards in UK Firms, *The Journal of Developing Areas*, 52(4) 2018, p. 179.

⁶² Salehi, M. et al.: The effect of mandatory audit firm rotation on earnings management and audit fees: evidence from Iran, *Journal of Risk and Financial Management*, 15(3) 2022, pp. 102.

⁶³ Salehi, M. et al.: The effect of mandatory audit firm rotation on earnings management and audit fees: evidence from Iran, *Journal of Risk and Financial Management*, 15(3) 2022, pp. 102.

⁶⁴ Zgarni, I., Hlioui, K., Zehri, F.: Effective audit committee, audit quality and earnings management: Evidence from Tunisia, *Journal of Accounting in Emerging Economies*, 6(2) 2016, pp. 138-155.

audit firm) to measure audit quality⁶⁵. The authors found that the existence of industry specialist auditors negatively affects companies' engagement in earnings management. Additionally, they found that the higher effectiveness of audit committees is significantly related to the auditor's tenure and to reducing earnings management⁶⁶. Alzoubi, E. S. S.⁶⁷ studied the association between audit quality and earnings management. His results indicate that audit quality, measured by audit fees and Big 4 audit companies, is significantly negatively associated with earnings management. The author's conclusion is consistent with previous studies that the level of EM between companies engaging the services of Big 4 auditors is significantly lower compared to companies acquiring audit services from non-Big 4 auditors. Adekanye, A. V.⁶⁸ used several audit quality indicators: audit firm size, joint audit service, audit financial dependence, auditor's experience and audit tenure. The author found that audit firm size, joint audit services, and audit fees have a significant negative relationship with earnings management⁶⁹. On the other hand, auditors' experience has no significant relationship with earnings management, and audit tenure has a significant positive influence on earnings management⁷⁰. Isiaka, O. A.⁷¹ measured audit quality by audit firm size, audit fee, and audit tenure. The research results indicate a negative relationship between audit firm size and audit fee on earnings management, which leads to the conclusion "that large audit firms and adequate audit fee would drastically reduce the level of earnings management in the Nigerian manufacturing companies."⁷² The authors also found that longer audit tenure compromises the audit quality due to the positive ef-

⁶⁵ Zgarni, I., Hlioui, K., Zehri, F.: Effective audit committee, audit quality and earnings management: Evidence from Tunisia, *Journal of Accounting in Emerging Economies*, 6(2) 2016, p. 145.

⁶⁶ Zgarni, I., Hlioui, K., Zehri, F.: Effective audit committee, audit quality and earnings management: Evidence from Tunisia, *Journal of Accounting in Emerging Economies*, 6(2) 2016, p. 152.

⁶⁷ Alzoubi, E. S. S.: Audit quality and earnings management: Evidence from Jordan, *Journal of Applied Accounting Research*, 17(2) 2016, pp. 170-189.

⁶⁸ Adekanye, A. V.: *Impact of audit quality on earnings management of listed manufacturing companies in Nigeria*, Kwara: Postgraduate School of Kwara State, Master of Science thesis, 2019.

⁶⁹ Adekanye, A. V.: *Impact of audit quality on earnings management of listed manufacturing companies in Nigeria*, Kwara: Postgraduate School of Kwara State, Master of Science thesis, 2019, p. 62.

⁷⁰ Adekanye, A. V.: *Impact of audit quality on earnings management of listed manufacturing companies in Nigeria*, Kwara: Postgraduate School of Kwara State, Master of Science thesis, 2019, p. 62.

⁷¹ Isiaka, O. A.: *Effect of Audit Quality on Earnings Management of Listed Manufacturing Firms in Nigeria*, Kwara: Kwara State University, Master of Science thesis, 2019.

⁷² Isiaka, O. A.: *Effect of Audit Quality on Earnings Management of Listed Manufacturing Firms in Nigeria*, Kwara: Kwara State University, Master of Science thesis, 2019, p. 92.

fect of audit tenure on earnings management⁷³. Altogether, they concluded that audit quality significantly negatively affects earnings management. Abu Afifa, M. M., et al.⁷⁴ measured audit quality by three proxies (auditor's size, auditor's industry specialisation, and audit tenure). Their findings show a low level of audit quality, which encourages managers to manipulate earnings. Also, results indicate that managers tend to reduce rather than increase earnings⁷⁵. Duong Thi, C.⁷⁶ measured audit quality by Big 4, auditor tenure, and auditor industry specialisation. The results indicate that financial statements audited by Big 4 do not differ from those audited by non-Big 4 companies in the context of earnings management. The results are the same regarding auditor tenure and auditor industry specialisation⁷⁷. Finally, Verma, D., et al.⁷⁸ observed auditor size (Big 4), auditor fee, auditor tenure, and auditor rotation. The authors' results indicate a negative relationship between audit quality and discretionary accruals (an inverse proxy for earnings quality). Although the relationship between auditor size and earnings management is negative, it is not statistically significant. Authors concluded that "cutting audit fees have a high chance of diluting reported earnings quality"⁷⁹.

⁷³ Isiaka, O. A.: *Effect of Audit Quality on Earnings Management of Listed Manufacturing Firms in Nigeria*, Kwara: Kwara State University, Master of Science thesis, 2019, p. 92.

⁷⁴ Abu Afifa, M. M., Saleh, I. H., Haniah, F. F.: Does earnings management mediate the relationship between audit quality and company performance? Evidence from Jordan, *Journal of Financial Reporting and Accounting*, 21(3) 2023, pp. 747-774.

⁷⁵ Abu Afifa, M. M., Saleh, I. H., Haniah, F. F.: Does earnings management mediate the relationship between audit quality and company performance? Evidence from Jordan, *Journal of Financial Reporting and Accounting*, 21(3) 2023, p. 767.

⁷⁶ Duong Thi, C.: Audit quality, institutional environments, and earnings management: an empirical analysis of new listings, *SAGE Open*, 13(2) 2023.

⁷⁷ Duong Thi, C.: Audit quality, institutional environments, and earnings management: an empirical analysis of new listings, *SAGE Open*, 13(2) 2023, p. 16.

⁷⁸ Verma, D., Dawar, V., Chaudhary, P.: Do Audit attributes impact earnings quality? Evidence from India, *Asian Journal of Accounting Research*, 9(1) 2024, pp. 25-34.

⁷⁹ Verma, D., Dawar, V., Chaudhary, P.: Do Audit attributes impact earnings quality? Evidence from India, *Asian Journal of Accounting Research*, 9(1) 2024, pp. 31-32.

2.4. AUDITORS' OPINION

Several authors investigated relationship between audit opinions and earnings management⁸⁰. Johl, S., et al.⁸¹ investigated whether high abnormal accruals result in the qualification of auditors' opinion and whether this outcome is contingent on the auditor's quality. The authors found that high earnings management measured by abnormal accruals positively relates to qualifications⁸². In contrast to this conclusion, Tsipouridou, M.; Spathis, C.⁸³, who also investigated the effects of auditors' opinions on earnings management, concluded that audit opinions are unrelated to earnings management. On the other hand, Saeedi, M.; Hemmati, M.⁸⁴ studied the moderating role of audit quality in the relationship between audit reports and earnings management. To approximate audit quality, they applied Anis's (2020) model with eight indicators (auditor size, auditor expertise in the industry, auditor experience, auditor partner of the company, change of auditor, auditor tenure, size of company auditor and joint auditor, auditor delay). The authors concluded that the auditor's opinion does not significantly affect earnings management. However, "earnings management has a significant impact on the auditor's opinion, companies with high earnings management (optional accruals level) may receive a revised audit opinion if they have a high-quality audit"⁸⁵. The results of the different studies are not quite consistent. Although most of the studies assumed a positive relationship between discretionary accruals and auditor's opinion modification, i.e. in the case of higher earnings management, the auditors would modify their opinion; the results of this paper suggest a negative relationship and there

⁸⁰ Johl, S., Jubb, C. A., Houghton, K. A.: Earnings management and the audit opinion: evidence from Malaysia, *Managerial Auditing Journal*, 22(7) 2007, pp. 688-715; Tsipouridou, M., Spathis, C.: Audit opinion and earnings management: Evidence from Greece, *Accounting Forum*, 38(1) 2014, pp. 38-54; Saeedi, M., Hemmati, M.: The moderating role of audit quality on the relationship between audit report and earnings management, *New Applied Studies in Management, Economics & Accounting*, 5(1) 2022, pp. 72-91.

⁸¹ Johl, S., Jubb, C. A., Houghton, K. A.: Earnings management and the audit opinion: evidence from Malaysia, *Managerial Auditing Journal*, 22(7) 2007, pp. 688-715.

⁸² Johl, S., Jubb, C. A., Houghton, K. A.: Earnings management and the audit opinion: evidence from Malaysia, *Managerial Auditing Journal*, 22(7) 2007, p. 709.

⁸³ Tsipouridou, M., Spathis, C.: Audit opinion and earnings management: Evidence from Greece, *Accounting Forum*, 38(1) 2014, pp. 38-54.

⁸⁴ Saeedi, M., Hemmati, M.: The moderating role of audit quality on the relationship between audit report and earnings management, *New Applied Studies in Management, Economics & Accounting*, 5(1) 2022, pp. 72-91.

⁸⁵ Saeedi, M., Hemmati, M.: The moderating role of audit quality on the relationship between audit report and earnings management, *New Applied Studies in Management, Economics & Accounting*, 5(1) 2022, pp. 72-91.

are several reasons for this. Firstly, in the case of opinion modification, the auditors will expand their audit procedures and gather more audit evidence to confirm this opinion. In this case, they will put more effort into examining certain items and transactions. In these circumstances, there is more probability to discover and decrease or eliminate inadequate discretionary accruals. Secondly, expressing the auditor's opinion is not a moment, i.e. audit engagement is a process during which auditors constantly communicate with the management and those charged with governance. In that context, according to ISA 260 (Revised) *Communicating with those charged with governance*, during the audit engagement, auditors communicate any significant matters arising during the audit that are in the auditor's professional judgment relevant and impact the financial reporting process. Thus, in those circumstances, in our opinion, auditors and managers are more cautious, which raises the probability of discovering and eliminating discretionary accruals before issuing an auditor's report compared to financial statements that are seemingly fair and objective at first impression. Finally, by this hypothesis, this paper is questioning the level of professional judgment and scepticism that auditors apply in expected circumstances, i.e. in circumstances of established, large, and financially successful corporations with powerful management structures.

3. METHODOLOGY AND SAMPLE

3.1. MEASURING EARNINGS MANAGEMENT

Many measure earnings management by accruals⁸⁶. Authors decompose total accruals into non-discretionary accruals and discretionary or abnormal ac-

⁸⁶ Jones, J. J.: Earnings management during import relief investigations, *Journal of Accounting Research*, 29(2) 1991, pp. 193-228; Be´ dard, J., Chtourou, S. M., Courteau, L.: The effect of audit committee expertise, independence, and activity on aggressive earnings management, *Auditing: A journal of practice & theory*, 23(2) 2004, pp. 13-35; Abdul Rahman, R., Haneem Mohamed Ali, F.: Board, audit committee, culture and earnings management: Malaysian evidence, *Managerial Auditing Journal*, 21(7) 2006, pp. 783-804; Lin, J. W., Hwang, M. I.: Audit quality, corporate governance, and earnings management: A Meta-Analysis, *International journal of auditing*, 14(1) 2010, pp. 57-77; Jordan, C. E., Clark, S. J., Hames, C. C.: The impact of audit quality on earnings management to achieve user reference points in EPS, *The Journal of Applied Business Research*, 26(1) 2010, pp. 19-30; Sun, J., Liu, G., Lan, G.: Does female directorship on independent audit committees constrain earnings management?, *Journal of Business Ethics*, 99(3) 2011, pp. 369-382; Qi, B., Tian, G.: The impact of audit committees personal characteristics on earnings management: Evidence from China, *The Journal of Applied Business Research*, 28(6) 2012, pp. 1331-1344; Alves, S.: The impact of audit committee existence and external audit on earnings management, *Journal of Financial Reporting & Accounting*, 11(2) 2013, pp. 143-165; Habbash, M., Sindezingue, C., Salama, A.: The effect of

cruals. Non-discretionary or normal accruals “are estimates by managers that represent changes in the underlying economic performance of the company.”⁸⁷ They are non-controllable by management and represent changes in business environment that affect business operations and financial performance. Researchers measure non-discretionary accruals as errors from the total accruals’ regression model⁸⁸. Conversely, discretionary accruals “are not dictated by firm conditions but are rather managed”⁸⁹. Those accruals represent the

audit committee characteristics on earnings management: evidence from the United Kingdom, *International Journal of Disclosure and Governance*, 10(1) 2013, pp. 13-38; Tspouridou, M., Spathis, C.: Audit opinion and earnings management: Evidence from Greece, *Accounting Forum*, 38(1) 2014, pp. 38-54; He, L., Yang, R.: Does industry regulation matter? New evidence on audit committees and earnings management, *Journal of Business Ethics*, 123(4) 2014, pp. 573-589; Lopes, A. P.: Audit Quality and Earnings Management: Evidence from Portugal, *Athens Journal of Business & Economics*, 4(2) 2018, pp. 179-192; Adekanye, A. V.: *Impact of audit quality on earnings management of listed manufacturing companies in Nigeria*, Kwara: Postgraduate School of Kwara State, Master of Science thesis, 2019; Barghathi, Y., Mirani, S., Khan, N. U.: Audit quality and earnings management after communicating Key Audit Matters (KAMs) in the UAE—audacity and auditors’ perspectives, *Journal of Accounting and Management Information Systems*, 20(2) 2021, pp. 173-198; Tache, M.: The incidence of earnings management on audit quality, *Proceedings of the International Conference on Business Excellence*, 15(1) 2021, pp. 783-792; Debnath, N. C., Chowdhury, S. P., Khan, S.: The impact of audit quality on real earnings management: evidence from Bangladesh, *International Journal of Disclosure and Governance*, 19(2) 2022, pp. 218-231; Choi, A. et al.: The differential effect of accrual-based and real earnings management on audit fees: international evidence., *Accounting and Business Research*, 52(3) 2022, pp. 254-290; Choi, H., Karim, K., Zhang, Y.: Earnings management risk and audit pricing: Evidence from big bath accounting, *Journal of Business Finance and Accounting*, 51(7-8) 2024, pp. 1593-2274; Duong Thi, C.: Audit quality, institutional environments, and earnings management: an empirical analysis of new listings, *SAGE Open*, 13(2) 2023; Alzoubi, E. S. S.: Audit quality and earnings management: Evidence from Jordan, *Journal of Applied Accounting Research*, 17(2) 2016, pp. 170-189; Bawuah, I.: Audit committee effectiveness, audit quality and earnings management: evidence from Ghana, *Cogent Business and Management*, 11(1) 2024, pp. 2315318; Mwangi, J.: Effect of Audit Quality on Earnings Management Practices, *American Journal of Accounting*, 6(1) 2024, pp. 1-12.

⁸⁷ Abdul Rahman, R., Haneem Mohamed Ali, F.: Board, audit committee, culture and earnings management: Malaysian evidence, *Managerial Auditing Journal*, 21(7) 2006, p. 790.

⁸⁸ Mohd Saleh, N., Mohd Iskandar, T., Mohid Rahmat, M.: Audit committee characteristics and earnings management: Evidence from Malaysia, *Asian Review of Accounting*, 15(2) 2007, pp. 147-163; Qi, B., Tian, G.: The impact of audit committees personal characteristics on earnings management: Evidence from China, *The Journal of Applied Business Research*, 28(6) 2012, pp. 1331-1344; Alves, S.: The impact of audit committee existence and external audit on earnings management, *Journal of Financial Reporting & Accounting*, 11(2) 2013, pp. 143-165; Tache, M.: The incidence of earnings management on audit quality, *Proceedings of the International Conference on Business Excellence*, 15(1) 2021, pp. 783-792.

⁸⁹ Tspouridou, M.; Spathis, C.: Audit opinion and earnings management: Evidence from Greece, *Accounting Forum*, 38(1) 2014, p. 43.

financial reporting strategy of adjusting accounting transactions, resulting in changes in financial results⁹⁰. “Discretionary accruals are adjustments to cash flows selected by the manager to affect reported income”⁹¹. “Earnings management, often measured by accruals manipulation or income smoothing, is a practice employed by firms to influence their reported financial results in order to meet or exceed market expectations, achieve desired financial goals, or project a more stable financial performance.”⁹² “Earnings management is an acknowledged unethical accounting practice with serious adverse effects on firms.”⁹³ Thus, discretionary or abnormal accruals are the most used measure of earnings management⁹⁴. A higher level of discretionary accruals, positive or negative, indicates a greater level of earnings management.”⁹⁵

For the purposes of this paper, the Jones model⁹⁶ was applied to calculate accruals as a change in non-cash working capital before income taxes payable less total depreciation expense. However, considering the available data, the approach was modified. Total accruals were calculated ($TACCI_t$) as change in

⁹⁰ Bawuah, I.: Audit committee effectiveness, audit quality and earnings management: evidence from Ghana, *Cogent Business and Management*, 11(1) 2024, pp. 2315318.

⁹¹ Adekanye, A. V.: *Impact of audit quality on earnings management of listed manufacturing companies in Nigeria*, Kwara: Postgraduate School of Kwara State, Master of Science thesis, 2019, p. 20.

⁹² Mwangi, J.: Effect of Audit Quality on Earnings Management Practices, *American Journal of Accounting*, 6(1) 2024, p. 2.

⁹³ Bawuah, I.: Audit committee effectiveness, audit quality and earnings management: evidence from Ghana, *Cogent Business and Management*, 11(1) 2024, pp. 2315318.

⁹⁴ Lin, J. W., Hwang, M. I.: Audit quality, corporate governance, and earnings management: A Meta-Analysis, *International journal of auditing*, 14(1) 2010, pp. 57-77; Sun, J., Liu, G., Lan, G.: Does female directorship on independent audit committees constrain earnings management?, *Journal of Business Ethics*, 99(3) 2011, pp. 369-382; Alves, S.: The impact of audit committee existence and external audit on earnings management, *Journal of Financial Reporting & Accounting*, 11(2) 2013, pp. 143-165; Lopes, A. P.: Audit Quality and Earnings Management: Evidence from Portugal, *Athens Journal of Business & Economics*, 4(2) 2018, pp. 179-192; Adekanye, A. V.: *Impact of audit quality on earnings management of listed manufacturing companies in Nigeria*, Kwara: Postgraduate School of Kwara State, Master of Science thesis, 2019; Tache, M.: The incidence of earnings management on audit quality, *Proceedings of the International Conference on Business Excellence*, 15(1) 2021, pp. 783-792; Debnath, N. C., Chowdhury, S. P., Khan, S.: The impact of audit quality on real earnings management: evidence from Bangladesh, *International Journal of Disclosure and Governance*, 19(2) 2022, pp. 218-231; Bawuah, I.: Audit committee effectiveness, audit quality and earnings management: evidence from Ghana, *Cogent Business and Management*, 11(1) 2024, pp. 2315318.

⁹⁵ Tspouridou, M.; Spathis, C.: Audit opinion and earnings management: Evidence from Greece, *Accounting Forum*, 38(1) 2014, p. 43.

⁹⁶ Jones, J. J.: Earnings management during import relief investigations, *Journal of Accounting Research*, 29(2) 1991, pp. 193-228.

non-cash working capital, which is calculated as a difference between change in current assets ($\Delta CA_{i,t}$) other than cash ($\Delta Cash_{i,t}$) and change in current liabilities ($\Delta CL_{i,t}$) other than income taxes payable ($\Delta IT_{i,t}$), less total depreciation and amortization expenses ($DAE_{i,t}$) (1):

$$TACC_{i,t} = [\Delta CA_{i,t} - \Delta Cash_{i,t}] - [\Delta CL_{i,t} - \Delta IT_{i,t}] - DAE_{i,t} \quad (1)$$

Jones, J. J.⁹⁷ assumed that nondiscretionary accruals are constant from period to period⁹⁸. Considering that earnings management studies usually focus on managements' use of discretionary accruals, it is preferable to disaggregate total accruals into discretionary ($DA_{i,t}$) and nondiscretionary ($NDA_{i,t}$) components (2):

$$TACC_{i,t} = NDA_{i,t} + DA_{i,t} \quad (2)$$

Thus, Dechow, P. M., et al.⁹⁹ modified the Jones, J. J.¹⁰⁰ model "to measure discretionary accruals with error when discretion is exercised over revenues"¹⁰¹. In this modified model, the authors estimated nondiscretionary accruals during the period in which they hypothesized earnings management as follows (3):

$$\frac{TACC_{i,t}}{A_{i,t-1}} = \alpha_1 \left[\frac{1}{A_{i,t-1}} \right] + \alpha_2 \left(\frac{\Delta REV_{i,t} - \Delta REC_{i,t}}{A_{i,t-1}} \right) + \alpha_3 \left(\frac{PPE_{i,t}}{A_{i,t-1}} \right) + \varepsilon_{i,t} \quad (3)$$

Where $TACC_{i,t}$ are total accruals of a company i in period t , $A_{i,t-1}$ is one-year lagged total assets, $\Delta REV_{i,t}$ are change in total revenues of a company i for period $t-1$ to t , $\Delta REC_{i,t}$ are change in account receivables of a company i for period $t-1$ to t , and $PPE_{i,t}$ are property, plant, and equipment of a company i for year t . "The only adjustment relative to the original Jones Model is that the change in revenues is adjusted for the change in receivables in the event peri-

⁹⁷ Jones, J. J.: Earnings management during import relief investigations, *Journal of Accounting Research*, 29(2) 1991, pp. 193-228

⁹⁸ Jones, J. J.: Earnings management during import relief investigations, *Journal of Accounting Research*, 29(2) 1991, p. 207.

⁹⁹ Dechow, P. M., Sloan, R. G., Sweeney, A. P.: Detecting Earnings Management Author(s): Detecting Earnings Management, *Accounting Review*, 70(2) 1995, pp. 193-225.

¹⁰⁰ Jones, J. J.: Earnings management during import relief investigations, *Journal of Accounting Research*, 29(2) 1991, pp. 193-228.

¹⁰¹ Dechow, P. M., Sloan, R. G., Sweeney, A. P.: Detecting Earnings Management Author(s): Detecting Earnings Management, *Accounting Review*, 70(2) 1995, p. 199.

od.”¹⁰² Thus, nondiscretionary accruals ($NDA_{i,t}$) are the residual of the regression model (3), and discretionary accruals ($DA_{i,t}$) are calculated as the difference between total accruals ($TACC_{i,t}$) and nondiscretionary accruals ($NDA_{i,t}$). Finally, considering that discretionary accruals ($DA_{i,t}$) can be profit increasing (positive) and profit decreasing (negative), we used the absolute value of $|DA_{i,t}|$ to reflect the volume of earnings management best.

3.2. MEASURING AUDIT QUALITY

To assess audit quality, in this paper, multiple variables were used in after reviewing previous studies. As in most studies, we also used the Big 4 ($Big4_{i,t}$) indicator quantified as a dummy variable was used, assigning 1 if Big4 companies audit financial statements and otherwise 0. Next to the auditors’ size, additional five indicators were used to approximate the audit quality. Thus, the audit tenure ($ConEng_{i,t}$) was calculated as the proportion of the most prolonged audit duration, where a higher proportion represents lower audit quality. Higher audit quality was assumed in case a joint audit was conducted ($Type_{i,t}$), lower audit quality in case of first appointment ($IAPP_{i,t}$), and higher audit quality in case the auditor is an industry specialist ($IND_{i,t}$). Considering a small number of conducted audits by smaller auditors, industry specialists were determined only for the biggest auditors (EY, PwC, KPMG, Deloitte, and BDO) and assigned 1 to those observations (audited financial statements) if the auditor had more than 10% of conducted audits in a particular industry. Otherwise, 0 was assigned. Finally, the auditor’s report quality ($ARQ_{i,t}$) was determined as a combination of the number of pages in the auditor’s report ($PgNo_{i,t}$), reporting materiality detail in the auditor’s report ($MAT_{i,t}$), and the number of reported key audit matters ($KAM_{i,t}$). The number of pages in the auditor’s report ($PgNo_{i,t}$) is determined as the proportion of the largest page number and key audit matters ($KAM_{i,t}$) as a proportion of the largest KAM number reported. Materiality detail in the auditor’s report ($MAT_{i,t}$) is determined as a dummy variable, where 1 is assigned if materiality details are reported. Overall, the audit quality proxy ($AQ_{i,t}$) is determined as follows (4):

$$AQ_{i,t} = Big4_{i,t} + Type_{i,t} - ConEng_{i,t} - 1APP_{i,t} + IND_{i,t} + ARQ_{i,t} \quad (4)$$

where auditor’s report quality ($ARQ_{i,t}$) is determined as (5):

$$ARQ_{it} = \frac{1}{3} PnNo_{it} + \frac{1}{3} Mat_{it} + \frac{1}{3} KAM_{it} \quad (5)$$

¹⁰² Dechow, P. M., Sloan, R. G., Sweeney, A. P.: Detecting Earnings Management Author(s): Detecting Earnings Management, *Accounting Review*, 70(2) 1995, p. 199.

The auditor's report quality ($ARQ_{i,t}$) is a continuous variable that ranges from 0 to 1. The audit quality proxy ($AQ_{i,t}$) is also a continuous variable that can be negative or positive. A higher value represents higher audit quality.

3.3. SAMPLE SELECTION AND DATA

Our research focuses on companies listed on the Zagreb Stock Exchange in 2024. In July 2024, there were 86 listed companies, which was the starting point in selecting appropriate companies to include in the sample. However, respecting differences in the structure of financial statements and business concepts, financial institutions were excluded from the sample. Such an approach is consistent with previous research¹⁰³. Thus, seven credit institutions, three insurance companies, and three investment funds were excluded from the sample. Additionally, four non-financial companies for which there were fewer than six observations ($x_{i,t} < 6, t=1, \dots, 9$) were also removed from the research sample. Finally, a total of 69 companies were included in the further analysis. To enhance the communicative value and relevance of the auditor's report, the IAASB revised the International Standards on Auditing (ISAs) requirements that address its structure and content, which are effective for audits of financial statements for periods ending on or after December 15, 2016. These requirements are especially relevant for public interest entities. Revisions significantly changed the auditor's report's length, structure, and content from 2016 onwards. Thus, our analysis of audit quality covers periods from 2016 to 2023, the year with the last available data. However, financial data for 2015 was also collected with the aim to calculate lagged variables. Due to specific missing data and outliers found, our final sample includes 69 companies with 521 observations from 2015 to 2023, which makes it an unbalanced panel data.

¹⁰³ Houqe, M. N., Ahmed, K., Van Zijl, T.: Audit quality, earnings management, and cost of equity capital: evidence from India, *International Journal of Auditing*, 21(2) 2017, pp. 177-189; Habbash, M., Alghamdi, S.: Audit quality and earnings management in less developed economies: the case of Saudi Arabia, *Journal of Management and Governance*, 21(2) 2017, pp. 351-373; Isiaka, O. A.: *Effect of Audit Quality on Earnings Management of Listed Manufacturing Firms in Nigeria*, Kwara: Kwara State University, Master of Science thesis, 2019; Abu Afifa, M. M., Saleh, I. H., Haniah, F. F.: Does earnings management mediate the relationship between audit quality and company performance? Evidence from Jordan, *Journal of Financial Reporting and Accounting*, 21(3) 2023, pp. 747-774; Le, B., Moore, P. H.: The impact of audit quality on earnings management and cost of equity capital: evidence from a developing market, *Journal of Financial Reporting and Accounting*, 21(3) 2023, pp. 695-728; Verma, D., Dawar, V., Chaudhary, P.: Do Audit attributes impact earnings quality? Evidence from India, *Asian Journal of Accounting Research*, 9(1) 2024, pp. 25-34.

3.4. MODEL SPECIFICATION

To test our research hypotheses, two models were designed. Firstly, the effects of audit quality on discretionary accruals were tested by using its absolute approximation. Next to the dependent ($|DA_{i,t}|$) and independent variable ($AQ_{i,t}$), several control variables were included ($CONTROL_{i,t}$) in the model to ensure that the relationship between the dependent and independent variable is not being driven by some other unobserved factors (6):

$$|DA_{i,t}| = f(AQ_{i,t}, CONTROL_{i,t}) \quad (6)$$

Five indicators were used as control variables: a dummy variable if the company is listed on the Zagreb Stock Exchange (because not all companies are listed in all the observed years, (dummy variable: 1 if listed, 0 if not listed) in the observed year ($LISTED_{i,t}$), the natural logarithm of total assets ($LnASSET_{i,t}$)¹⁰⁴, return on total assets calculated as the ratio of earnings before interests and after taxation and total assets ($ROA_{i,t}$)¹⁰⁵, leverage ratio calculated as proportion of total debt in total assets ($LEV_{i,t}$)¹⁰⁶, and growth magnitude calculated as ratio of changes in total revenues between two years and total revenues in

¹⁰⁴ Nguyen, T. T. H., Ibrahim, S., Giannopoulos, G.: Detecting earnings management: a comparison of accrual and real earnings manipulation models, *Journal of Applied Accounting Research*, 24(2) 2023, pp. 344-379; Isiaka, A. O.: *Effect of Audit Quality on Earnings Management of Listed Manufacturing Firms in Nigeria*, Kwara: Kwara State University, Master of Science thesis, 2019; Bawuah, I.: Audit committee effectiveness, audit quality and earnings management: evidence from Ghana, *Cogent Business and Management*, 11(1) 2024, pp. 2315318; Duong Thi, C.: Audit quality, institutional environments, and earnings management: an empirical analysis of new listings, *SAGE Open*, 13(2) 2023; Debnath, N. C., Chowdhury, S. P., Khan, S.: The impact of audit quality on real earnings management: evidence from Bangladesh, *International Journal of Disclosure and Governance*, 19(2) 2022, pp. 218-231; Awuye, I. S.: The impact of audit quality on earnings management: Evidence from France, *Journal of Accounting and Taxation*, 14(1) 2022, pp. 52-63; Tache, M.: The incidence of earnings management on audit quality, *Proceedings of the International Conference on Business Excellence*, 15(1) 2021, pp. 783-792; Orazalin, N., Akhmetzhanov, R.: Earnings management, audit quality, and cost of debt: evidence from a Central Asian Economy, *Managerial Auditing Journal*, 34(6) 2019, pp. 696-721.

¹⁰⁵ Nguyen, T. T. H., Ibrahim, S., Giannopoulos, G.: Detecting earnings management: a comparison of accrual and real earnings manipulation models, *Journal of Applied Accounting Research*, 24(2) 2023, pp. 344-379; Duong Thi, C., *supra* note 1; Debnath, N. C., Chowdhury, S. P., Khan, S., *supra* note 1; Orazalin, N., Akhmetzhanov, R., *supra* note 1.

¹⁰⁶ Isiaka, A. O., *supra* note 1; Nguyen, T. T. H., Ibrahim, S., Giannopoulos, G., *supra* note 1; Bawuah, I., *supra* note 1; Le, B., Moore, P. H., *supra* note 2; Duong Thi, C., *supra* note 1; Debnath, N. C., Chowdhury, S. P., Khan, S., *supra* note 1; Awuye, I. S., *supra* note 1; Tache, M., *supra* note 1; Orazalin, N., Akhmetzhanov, R., *supra* note 1.

$t-1$ ($GROW_{i,t}$)¹⁰⁷. Finally, our first model in regression form was developed as follows (7):

$$|DA_{i,t}| = \alpha_0 + \alpha_1 AQ_{i,t} + \alpha_2 LISTED_{i,t} + \alpha_3 LnASSETS_{i,t} + \alpha_4 ROA_{i,t} + \alpha_5 LEV_{i,t} + \alpha_6 GROW_{i,t} + \varepsilon_{i,t} \quad (7)$$

The assumption is that in the case of a modified auditor's opinion, discretionary accruals are lower. To test this assumption, an additional model was created in which absolute discretionary accruals are dependent ($|DA_{i,t}|$) on audit opinion independent variable ($AO_{i,t}$). Again, the same control variables were used as in the previous model. Thus, our second model in regression form is as follows (8):

$$|DA_{i,t}| = \alpha_0 + \alpha_1 AO_{i,t} + \alpha_2 LISTED_{i,t} + \alpha_3 LnASSETS_{i,t} + \alpha_4 ROA_{i,t} + \alpha_5 LEV_{i,t} + \alpha_6 GROW_{i,t} + \varepsilon_{i,t} \quad (8)$$

To test the research hypotheses, an appropriate panel data model was used, depending on the results of tested assumptions of every model (fixed effects, random effects, ordinary least squares).

4. RESEARCH RESULTS

The regression analysis was conducted to test whether independent variables used to calculate audit quality proxy are relevant in the model. The obtained model is statistically significant (p-value 0.000), and the adjusted R² of 0.9228 signals that the model accurately predicts values. Independent variables in the model are statistically significant (p-value 0.000) with the expected sign. The values of VIF between 1.087 and 1.276 indicate that there is no multicollinearity problem between independent variables. However, a low Durbin-Watson test with a value of 0.558 indicates an autocorrelation problem. To overcome this problem, robust errors were applied in the model. Audit quality proxy (AQ) descriptions show that its average value is 2.213, with a standard deviation of 1.687 and a median of 2.239. To create a dummy variable of audit quality proxy (AQ dummy), the median value as a cut-point (2.239) was used. 1 was assigned to the observations with a value higher than the median, and in the case of a lower value, 0 was assigned.

Table 1 shows descriptive statistics for all variables covered by the research. Thus, the average value of discretionary accruals (DA) is 0.053 and the median value is 0.050. These results indicate that, on average, companies in Croatia manage earnings to increase them. However, to best reflect the earnings management volume,

¹⁰⁷ Le, B., Moore, P. H., *supra* note 2; Debnath, N. C., Chowdhury, S. P., Khan, S., *supra* note 1; Tache, M., *supra* note 1.

the absolute value of discretionary accruals (IDA) was used. The average value of 0.992 for listed companies indicates that most observations are listed in the observing year. This is important because listed companies (LISTED) are much more regulated in the context of financial statement audits and reporting requirements. Total assets, being the most often used control variable in the form of the natural logarithm (LnASSETS), was used. The return on assets (ROA) indicates that observations are, on average, profitable (2.6%), more than 50% of their assets are financed by debt (LEV), and the average growth rate (GROW) is negative (-4%). The median value of all those indicators is more favourable.

Regarding audit quality variables, on average, 56.6% of observations are audited by Big 4 auditors, 4.5% of observations were subject to joint audit (Type), specialised auditors (IND) audited 38% of audited financial statements, and 18.4% of auditor's reports represent first-year audits (1APP). Observing as a proportion (valued between 0 and 1), the average length of audit engagement (ConENG) is 0.137. The average score of auditor's reports quality (ARQ), valued between 0 and 1, is 0.426. Finally, overall audit quality (AQ) is, on average, 2.213, with a range of 7.48, where the minimum is -1.76 and the maximum is 5.72. A median value 2.239 was used as a cut-point for the dichotomous variables for audit quality (AQ dummy). On average, 17.8% of analysed auditor's reports had a modified auditor's opinion (AO).

Table 1. Descriptive statistics of variables used in the analysis

	Number of Observations	Mean	Standard Deviation	Median	Q1	Q3
DA	516	0.053	0.044	0.050	0.039	0.066
IDA	516	0.057	0.038	0.051	0.040	0.068
LISTED	516	0.992	0.088	1.000	1.000	1.000
LnASSETS	516	18.351	1.517	18.368	17.280	19.098
ROA	516	0.026	0.141	0.038	0.010	0.064
LEV	516	0.506	0.357	0.455	0.285	0.635
GROW	516	-0.040	0.700	0.047	-0.056	0.153
Big4	516	0.566	0.496	1.000	0.000	1.000
Type	516	0.045	0.207	0.000	0.000	0.000
IND	516	0.380	0.486	0.000	0.000	1.000
1APP	516	0.184	0.388	0.000	0.000	0.000
ConENG	516	0.137	0.162	0.111	0.037	0.185
ARQ	516	0.426	0.205	0.397	0.237	0.596
AQ	516	2.213	1.687	2.239	0.720	3.636
AQ dummy	516	0.492	0.500	0.000	0.000	1.000
AO	516	0.178	0.383	0.000	0.000	0.000

Source: authors' calculation

Descriptive analysis (Table 2) of earnings management by auditor's size (Big 4) (Panel A) shows that the average value of discretionary accruals (DA) for auditor's reports audited by Big 4 auditors is the same as the average value of those reports audited by non-Big 4 auditors, with the same standard deviation and median value. Thus, the Mann-Whitney U test (p-value 0.720) shows no statistically significant differences between discretionary accruals in observation audited by Big 4 and other auditors. This result indicates that observing audit quality using this single factor is insufficient. On the other side (Panel B), In the cases where audit quality was determined as high (AQ dummy), discretionary accruals (DA) are lower (0.051) compared to observations with lower audit quality (0.540). However, these differences are not statistically significant (Mann-Whitney U test p-value 0.265).

Table 2. Descriptive statistics of variables used in the analysis observed by auditors' size (Panel A), audit quality (Panel B), and auditor's opinion (Panel C)

	Mean	Standard Deviation	Median	Mean	Standard Deviation	Median
<i>Panel A. Auditor's size</i>						
	Others (Number of observations 224)			Big4 (Number of observations 292)		
DA	0.053	0.044	0.050	0.053	0.044	0.050
IDA1	0.058	0.037	0.050	0.057	0.039	0.051
LISTED	0.982	0.133	1.000	1.000	0.000	1.000
LnASSETS	17.745	1.321	17.804	18.816	1.494	18.707
ROA	0.020	0.192	0.038	0.030	0.083	0.037
LEV	0.532	0.444	0.435	0.486	0.271	0.467
GROW	-0.066	0.896	0.045	-0.021	0.499	0.047
Type	0.031	0.174	0.000	0.055	0.228	0.000
IND	0.179	0.384	0.000	0.534	0.500	1.000
1APP	0.214	0.411	0.000	0.161	0.368	0.000
ConEng	0.115	0.150	0.074	0.154	0.169	0.111
ARQ	0.500	0.203	0.571	0.370	0.188	0.317
AQ	0.815	1.114	0.667	3.286	1.194	3.362
AQ dummy	0.129	0.336	0.000	0.771	0.421	1.000
AO	0.201	0.402	0.000	0.161	0.368	0.000

	Mean	Standard Deviation	Median	Mean	Standard Deviation	Median
Panel B. Audit Quality						
	Lower Audit Quality (Number of observations 262)			Higer Audit Quality (Number of observations 254)		
DA	0.054	0.046	0.051	0.051	0.042	0.048
IDA1	0.060	0.038	0.052	0.054	0.038	0.049
LISTED	0.985	0.123	1.000	1.000	0.000	1.000
LnASSETS	17.967	1.367	17.980	18.747	1.563	18.676
ROA	0.018	0.186	0.039	0.033	0.069	0.035
LEV	0.552	0.438	0.453	0.459	0.239	0.455
GROW	-0.054	0.828	0.045	-0.026	0.536	0.047
Big4	0.256	0.437	0.000	0.886	0.319	1.000
Type	0.015	0.123	0.000	0.075	0.264	0.000
IND	0.107	0.310	0.000	0.661	0.474	1.000
1APP	0.321	0.468	0.000	0.043	0.204	0.000
ConEng	0.110	0.143	0.074	0.165	0.176	0.111
ARQ	0.449	0.208	0.513	0.403	0.199	0.346
AQ	0.824	0.989	0.736	3.646	0.851	3.666
AO	0.198	0.400	0.000	0.157	0.365	0.000
Panel C. Auditor's Opinion						
	Unmodified Auditor's Opinion (Number of observations 424)			Modified Auditor's Opinion (Number of observations 92)		
DA	0.056	0.045	0.051	0.039	0.036	0.043
IDA1	0.060	0.039	0.052	0.046	0.027	0.044
LISTED	0.990	0.097	1.000	1.000	0.000	1.000
LnASSETS	18.487	1.542	18.515	17.722	1.214	18.027
ROA	0.037	0.076	0.040	-0.028	0.287	0.020
LEV	0.451	0.296	0.428	0.759	0.485	0.692
GROW	-0.020	0.698	0.060	-0.133	0.702	-0.033
Big4	0.578	0.494	1.000	0.511	0.503	1.000
Type	0.04	0.212	0.000	0.033	0.179	0.000
IND	0.368	0.483	0.000	0.435	0.498	0.000
1APP	0.172	0.378	0.000	0.239	0.429	0.000
ConEng	0.138	0.160	0.111	0.134	0.172	0.074
ARQ	0.430	0.203	0.401	0.409	0.211	0.397
AQ	2.260	1.723	2.269	1.996	1.499	2.104
AQ dummy	0.505	0.501	1.000	0.435	0.498	0.000

Source: authors' calculation

Panel C shows differences in descriptive statistics of analysed variables related to auditors' opinion modifications. The results show that in the case of an unmodified auditor's opinion, the average value of discretionary accruals (DA) is 0.0557. In the case of modification of the opinion, this value is 0.036. Those differences are statistically significant by the Mann-Whitney U test (p-value 0.000). However, the auditor's opinion is not statistically significantly related to the audit quality (Mann-Whitney U test p-value 0.186), although average values show different values, i.e. in the case of modified opinion, average audit quality is 1.996. Auditor reports with unmodified opinions have higher audit quality, with an average value of 2.260.

Table 3. Correlation matrix between analysed variables

Variable		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
DA	(1)	1	.806**	0.029	.338**	-0.010	.450**	-0.001	-0.026	-0.035	-.144**
IDA1	(2)	.806**	1	0.000	.127**	.091*	.261**	-0.017	-0.062	-0.079	-.144**
LnASSETS	(3)	0.029	0.000	1	0.083	0.046	.094*	.351**	.296**	.257**	-.193**
ROA	(4)	.338**	.127**	0.083	1	-.312**	.418**	0.034	0.083	0.055	-.178**
LEV	(5)	-0.010	.091*	0.046	-.312**	1	-0.057	-0.064	-.125**	-.131**	.331**
GROW	(6)	.450**	.261**	.094*	.418**	-0.057	1	0.032	0.039	0.020	-0.062
Big4	(7)	-0.001	-0.017	.351**	0.034	-0.064	0.032	1	.727**	.636**	-0.052
AQ	(8)	-0.026	-0.062	.296**	0.083	-.125**	0.039	.727**	1	.837**	-0.060
AQ dummy	(9)	-0.035	-0.079	.257**	0.055	-.131**	0.020	.636**	.837**	1	-0.054
AO	(10)	-.144**	-.144**	-.193**	-.178**	.331**	-0.062	-0.052	-0.060	-0.054	1

Notes: **. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).

Source: authors' calculation

Table 3 shows the correlation matrix for the variables analysed in the research. The results indicate that discretionary accruals (DA) are not significantly related to audit quality proxy (AQ) and auditors' size (Big 4). However, although not significantly related, their relationship is negative, indicating that higher audit quality results in lower discretionary accruals (DA and IDA1). In contrast, the auditor's opinion (AO) is statistically significantly and negatively related to discretionary accruals (DA) at the significance level of 1%.

Table 4. Regression results

	I	II	III	IV
Dependent variable	IDA	IDA	IDA	IDA
LISTED	.0245189 (0.451)	.0267831 (0.385)	.0220693 (0.502)	.0199695 (0.550)
LnASSETS	.0073941 (0.336)	.0080123 (0.291)	.0072895 (0.351)	.0075914 (0.356)
ROA	.0156727 (0.738)	.0147657 (0.753)	.0171571 (0.719)	.0091477 (0.845)
LEV	.0176844 (0.264)	.0171505 (0.285)	.0200265 (0.193)	.0189216 (0.228)
GROW	.0125126 (0.090)*	.012813 (0.078)*	.0126824 (0.078)*	.0136007 (0.055)*
AQ			-.0012879 (0.443)	
Big4	-.0085715 (0.291)	-.0107965 (0.155)		
Type	.0092191 (0.018)**			
ConEng	.0019653 (0.852)			
1APP	.0015394 (0.577)			
IND	-.0012686 (0.812)			
ARQ	.0079055 (0.379)			
AO				-.0188777 (0.004)***
IDA				
R ²	0.0347	0.0345	0.0396	0.0496
Model significance F (p-value)	FE 3.16 (0.0017)	FE 2.34 (0.0409)	FE 2.36 (0.0392)	FE 2.32 (0.0427)
Hausman test	0.000	0.0004	0.0030	0.0014
Fixed Effects needed	Yes (0.000)	Yes (0.0000)	Yes (0.0000)	Yes (0.0000)
Wald test for groupwise heteroskedasticity	0.0000	0.0000	0.0000	0.0000
Autocorrelation	0.2835	0.2833	0.2898	0.2618
Robust Errors	Yes	Yes	Yes	Yes
Number of observations	512	512	512	512

Source: authors' calculation

Table 4 shows the results of our regression model designed to test the research hypotheses. Considering that the research data is in panel data, the panel data analysis was used to obtain more robust results. Firstly, we tested whether including time dimension in the model is necessary and which model to use, respectively – fixed effects (FE), random effects (RE), or ordinary least squares (OLS). To test whether FE or RE model better fits the data, i.e. to test whether the individual characteristics correlate with the regressors, the Hausman test was applied. If the test value is $p > 0.05$, they are not correlated, and the RE model should be used. In this case, the FE model fits the data better. The results suggest that time-fixed effects are needed in the following step, whereas in the case of $p\text{-value} > 0.05$, the FE model is not necessary, and OLS is the best fit for the data. In all the models, the results indicate that FE is the best fit for the data. Furthermore, the heterogeneity of the variance was tested, i.e., whether a heteroskedasticity problem existed or not. The Wald test for group-wise heteroskedasticity indicates that the variance of the residuals is unequal over a range of measured values ($p\text{-value} 0.000$). However, the Wooldridge test for autocorrelation in panel-data models showed no autocorrelation problem ($p\text{-value} > 0.05$). Nevertheless, to control for heteroskedasticity problems, here, the robust errors in the models were used. All created models are statistically significant.

The first research hypothesis in this paper is that higher audit quality results in lower earnings management measured by discretionary accruals in audited financial statements. For testing purposes, three models were created. In every model, the absolute value of discretionary accruals (IDAI) is the dependent variable, and the natural logarithm of total assets (LnASSETS), return on assets (ROA), leverage (LEV), and growth rate measured by revenue change (GROWTH) are control variables. In the first model (I), as independent variables, all the variables used to calculate audit quality proxy were used as separate indicators. The results suggested that only audit type – individual or joint audit (Type) have statistically significant and positive, i.e. increasing effect on the absolute value of discretionary accruals (IDAI). Interestingly, this result means that in the case of joint audits, earnings management is higher. As an independent variable, the following model (II) includes only auditors' size (Big 4) as an audit quality proxy, respecting most previous research. However, the result of this model does not indicate a significant influence of auditors' size on earnings management. The third model was used to test whether the audit quality level measured by the audit quality proxy (AQ) affects earnings management (IDAI). Considering that audit quality proxy (AQ) is not statistically significant in the model, the first research hypothesis cannot be accepted. Although insignificant, the results show a negative relationship, indicating that higher audit quality results in lower earnings management. However, auditors

are ineffective in reducing the earnings management of listed companies in Croatia.

On the other hand, a modified auditor's opinion is a factual representation of unfavourable business conditions presented in annual financial statements for a company. Although it does not signal earnings management or fraudulent financial reporting, it can be explicit attention direction for the auditors to perform more audit procedures and gather more reliable audit evidence with a lower materiality threshold from the one side. On the other, for companies, it can mean more caution and due professional care in earnings management. The focus was on testing whether earnings management measured by absolute discretionary accruals (IDA) is lower when the auditor issues a modified audit opinion (AO). The results confirm that in cases where the auditor's opinion is modified, discretionary accruals are statistically significantly lower, and by that, this research hypothesis was accepted.

5. CONCLUSION

New, disruptive, insecure, and dynamic business environments challenge managers with changing requirements and strategies to meet stakeholders' expectations. Those conditions may widen information asymmetry between agents and principles, i.e. additionally increase agency problems. Thus, corporate governance mechanisms have a crucial role in these agile and technology-boosted conditions. Regarding the financial condition and performance of the company, external auditors should ensure that financial statements are accurate and objective representations of financial results and should be able to prevent breaches and fraudulent financial reporting. The probability that a financial statement audit will discover material misstatement depends on the auditor's competencies and technological capabilities, available resources, audit procedures, sample size, quality of audit evidence, etc. Considering that auditors' performance is a multidimensional concept, the IAASB developed a framework for audit quality, summarizing key elements that create an environment for audit quality. The framework may be helpful for internal users; however, it does not apply to external stakeholders in assessing audit quality. The results of financial statement audits are publicly available in independent auditor's reports. Thus, measuring audit quality for external stakeholders is not a simple procedure with a single measure. Many researchers used different proxies to approximate audit quality based on publicly available data. In that context, the most used proxy is the auditor's size (Big N). Next to the size, researchers use audit fees, industry specialization, audit tenure, audit rotation, joint audit, and others to approximate audit quality. This paper results in a new

multidimensional measure of audit quality based on publicly available data. This measure combines multiple single variables previously used in studies with an additionally included construct for measuring auditor's report quality.

The primary objective of this paper was to investigate whether auditors effectively detect and prevent earnings management in listed non-financial companies in Croatia. Using a sample of 69 listed companies and their financial data from 2015 to 2023 (521 observations), it was found that higher audit quality is not associated with lower discretionary accruals, the most used measure of earnings management. There is no difference in the absolute value of discretionary accruals in financial statements audited by Big 4 or other auditors. Additionally, the audit quality level measured by the created proxy does not significantly affect earnings management measured by discretionary accruals, i.e. earnings management is not statistically significantly lower in cases of higher audit quality. The average value of discretionary accruals in the case of lower audit quality is 0.054, and in the case of higher audit quality, 0.051. These results could lead to several conclusions. Firstly, auditors are not effective in detecting earnings management. Reasons for this can be a subject of future research where researchers shall investigate internal audit quality factors to determine how auditors use professional judgment and scepticism on the one side and methodological aspects of auditing on the other. Next, auditors do not prevent earnings management in cases where higher or lower audit quality was assessed because they cause those adjustments by requiring write-offs, value adjustments or other corrections of balance sheet items. Finally, those adjustments may be present in financial statements before audits, but they represent valid applications of accounting policies and estimates according to applicable financial reporting framework. On the other side, studying the effects of modifying an auditor's opinion on earnings management level showed that in cases where auditors issued modifications of the opinion, discretionary accruals are statistically significantly lower. The average value of discretionary accruals in cases of unmodified opinion was 0.056, and in cases of modified opinion 0.039.

To enhance stakeholders' reliance on the information value of auditors' reports, auditors must exercise professional judgement and scepticism, ensure that they adopt applicable auditing standards consistently and apply appropriate methodologies in conducting financial statement audits, be transparent and objective, maintain professional competence and due care, have integrity and exhibit professional behaviour. Maintaining and exercising all these requirements and principles shall result in more reliable and comprehensive audit results. New advanced technology, digitalization processes, and data analytics shall have a role in improving audit results and not be an exit strategy for auditors to work less for the same results. Auditors must use the advantages

of technology to provide more comprehensive, reliable, and transparent audit results, increase audit quality, and further strengthen the value of independent auditors' reports and encourage stakeholders to rely on them more.

LITERATURE

1. Abdul Rahman, R., Haneem Mohamed Ali, F.: Board, audit committee, culture and earnings management: Malaysian evidence, *Managerial Auditing Journal*, 21(7) 2006, pp. 783-804.
- DOI: <https://doi.org/10.1108/02686900610680549>
2. Abu Afifa, M. M., Saleh, I. H., Haniah, F. F.: Does earnings management mediate the relationship between audit quality and company performance? Evidence from Jordan, *Journal of Financial Reporting and Accounting*, 21(3) 2023, pp. 747-774.
- DOI: <https://doi.org/10.1108/JFRA-08-2021-0245>
3. Adekanye, A. V.: *Impact of audit quality on earnings management of listed manufacturing companies in Nigeria*, Kwara: Postgraduate School of Kwara State, Master of Science thesis, 2019.
4. Alves, S.: The impact of audit committee existence and external audit on earnings management, *Journal of Financial Reporting & Accounting*, 11(2) 2013, pp. 143-165.
- DOI: <https://doi.org/10.1108/jfra-04-2012-0018>
5. Alzoubi, E. S. S.: Audit quality and earnings management: Evidence from Jordan, *Journal of Applied Accounting Research*, 17(2) 2016, pp. 170-189.
- DOI: <https://doi.org/10.1108/JAAR-09-2014-0089>
6. Awuye, I. S.: The impact of audit quality on earnings management: Evidence from France, *Journal of Accounting and Taxation*, 14(1) 2022, pp. 52-63.
- DOI: <https://doi.org/10.5897/JAT2021.0514>
7. Barghathi, Y., Collison, D., Crawford, L.: Earnings management and audit quality: stakeholders' perceptions, *Journal of Management and Governance*, 22(3) 2018, pp. 629-659.
- DOI: <https://doi.org/10.1007/s10997-017-9396-2>
8. Barghathi, Y., Mirani, S., Khan, N. U.: Audit quality and earnings management after communicating Key Audit Matters (KAMs) in the UAE—audacity and auditors' perspectives, *Journal of Accounting and Management Information Systems*, 20(2) 2021, pp. 173-198.
- DOI: <https://doi.org/10.24818/jamis.2021.02001>
9. Bawuah, I.: Audit committee effectiveness, audit quality and earnings management: evidence from Ghana, *Cogent Business and Management*, 11(1) 2024, pp. 2315318.
- DOI: <https://doi.org/10.1080/23311975.2024.2315318>

10. Be´dard, J., Chtourou, S. M., Courteau, L.: The effect of audit committee expertise, independence, and activity on aggressive earnings management, *Auditing: A journal of practice & theory*, 23(2) 2004, pp. 13-35.
- DOI: <https://doi.org/https://doi.org/10.2308/aud.2004.23.2.13>
11. Becker, Connie L., DeFond, M. L., Jiambalvo, J., Subramanyam, K. R.: The effect of audit quality on earnings management, *Contemporary Accounting Research*, 15(1) 1998, pp. 1-24.
- DOI: <https://doi.org/10.1111/j.1911-3846.1998.tb00547.x>
12. Caramanis, C., Lennox, C.: Audit effort and earnings management, *Journal of Accounting and Economics*, 45(1) 2008, pp. 116-138.
- DOI: <https://doi.org/10.1016/j.jacceco.2007.05.002>
13. Chen, H., Chen, J. Z., Lobo, G. J., Wang, Y.: Effects of audit quality on earnings management and cost of equity capital: Evidence from China, *Contemporary Accounting Research*, 28(3) 2011, pp. 892-925.
- DOI: <https://doi.org/10.1111/j.1911-3846.2011.01088.x>
14. Choi, A., Lee, E. Y., Park, S., Sohn, B. C.: The differential effect of accrual-based and real earnings management on audit fees: international evidence., *Accounting and Business Research*, 52(3) 2022, pp. 254-290.
- DOI: <https://doi.org/10.1080/00014788.2021.1911779>
15. Choi, H., Karim, K., Zhang, Y.: Earnings management risk and audit pricing: Evidence from big bath accounting, *Journal of Business Finance and Accounting*, 51(7-8) 2024, pp. 1593-2274.
- DOI: <https://doi.org/10.1111/jbfa.12764>
16. Deangelo, L. E.: Auditor size and audit quality, *Journal of Accounting and Economics*, 3(3) 1981, pp. 183-199.
- DOI: [https://doi.org/10.1016/0165-4101\(81\)90002-1](https://doi.org/10.1016/0165-4101(81)90002-1)
17. Debnath, N. C., Chowdhury, S. P., Khan, S.: The impact of audit quality on real earnings management: evidence from Bangladesh, *International Journal of Disclosure and Governance*, 19(2) 2022, pp. 218-231.
- DOI: <https://doi.org/10.1057/s41310-021-00137-x>
18. Dechow, P. M., Sloan, R. G., Sweeney, A. P.: Detecting Earnings Management Author(s): Detecting Earnings Management, *Accounting Review*, 70(2) 1995, pp. 193-225.
19. DeFond, M., Zhang, J.: A review of archival auditing research, *journal of accounting and economics*, 58(2-3) 2014, pp. 275-326.
- DOI: <https://doi.org/10.1016/j.jacceco.2014.09.002>
20. Duong Thi, C.: Audit quality, institutional environments, and earnings management: an empirical analysis of new listings, *SAGE Open*, 13(2) 2023.
- DOI: <https://doi.org/10.1177/21582440231180672>

21. El Guindy, M. N., Basuony, M. A.: Audit firm tenure and earnings management: the impact of changing accounting standards in UK Firms, *The Journal of Developing Areas*, 52(4) 2018, pp. 167-181.
- DOI: <https://doi.org/10.1353/jda.2018.0058>
22. Habbash, M., Alghamdi, S.: Audit quality and earnings management in less developed economies: the case of Saudi Arabia, *Journal of Management and Governance*, 21(2) 2017, pp. 351-373.
- DOI: <https://doi.org/10.1007/s10997-016-9347-3>
23. Habbash, M., Sindezingue, C., Salama, A.: The effect of audit committee characteristics on earnings management: evidence from the United Kingdom, *International Journal of Disclosure and Governance*, 10(1) 2013, pp. 13-38.
- DOI: <https://doi.org/10.1057/jdg.2012.2>
24. He, L., Yang, R.: Does industry regulation matter? New evidence on audit committees and earnings management, *Journal of Business Ethics*, 123(4) 2014, pp. 573-589.
- DOI: <https://doi.org/10.1007/s10551-013-2011-9>
25. Houqe, M. N., Ahmed, K., Van Zijl, T.: Audit quality, earnings management, and cost of equity capital: evidence from India, *International Journal of Auditing*, 21(2) 2017, pp. 177-189.
- DOI: <https://doi.org/10.1111/ijau.12087>
26. IFRS Foundation: Conceptual Framework for Financial Reporting, 2025, <<https://www.ifrs.org/issued-standards/list-of-standards/conceptual-framework//>>, last accessed on 02/12/2024.
27. International Auditing and Assurance Standards Board (IAASB). A Framework for Audit Quality: Key Elements That Create an Environment for Audit Quality, 2014, <https://www.iaasb.org/_flysystem/azure-private/publications/files/A-Framework-for-Audit-Quality-Key-Elements-that-Crete-an-Environment-for-Audit-Quality-2.pdf>, last accessed on 11/12/2024.
28. Isiaka, A. O.: *Effect of Audit Quality on Earnings Management of Listed Manufacturing Firms in Nigeria*, Kwara: Kwara State University, Master of Science thesis, 2019.
29. Johl, S., Jubb, C. A., Houghton, K. A.: Earnings management and the audit opinion: evidence from Malaysia, *Managerial Auditing Journal*, 22(7) 2007, pp. 688-715.
- DOI: <https://doi.org/10.1108/02686900710772591>
30. Jones, J. J.: Earnings management during import relief investigations, *Journal of Accounting Research*, 29(2) 1991, pp. 193-228.
- DOI: <https://doi.org/10.2307/2491047>
31. Jordan, C. E., Clark, S. J., Hames, C. C.: The impact of audit quality on earnings management to achieve user reference points in EPS, *The Journal of Applied Business Research*, 26(1) 2010, pp. 19-30.
- DOI: <https://doi.org/10.19030/jabr.v26i1.273>

32. Le, B., Moore, P. H.: The impact of audit quality on earnings management and cost of equity capital: evidence from a developing market, *Journal of Financial Reporting and Accounting*, 21(3) 2023, pp. 695-728.
- DOI: <https://doi.org/10.1108/JFRA-09-2021-0284>
33. Lin, J. W., Hwang, M. I.: Audit quality, corporate governance, and earnings management: A Meta-Analysis, *International journal of auditing*, 14(1) 2010, pp. 57-77.
- DOI: <https://doi.org/10.1111/j.1099-1123.2009.00403.x>
34. Lopes, A. P.: Audit Quality and Earnings Management: Evidence from Portugal, *Athens Journal of Business & Economics*, 4(2) 2018, pp. 179-192.
- DOI: <https://doi.org/10.30958/ajbe.4.2.4>
35. Mohd Saleh, N., Mohd Iskandar, T., Mohid Rahmat, M.: Audit committee characteristics and earnings management: Evidence from Malaysia, *Asian Review of Accounting*, 15(2) 2007, pp. 147-163.
- DOI: <https://doi.org/10.1108/13217340710823369>
36. Mollik, A. T., Mir, M., McIver, R., Bepari, M. K.: Effects of audit quality and audit committee characteristics on earnings management during the global financial crisis – evidence from Australia, *Australasian Accounting, Business and Finance Journal*, 14(4) 2020, pp. 85-115.
- DOI: <https://doi.org/10.14453/aabfj.v14i4.6>
37. Mwangi, J.: Effect of Audit Quality on Earnings Management Practices, *American Journal of Accounting*, 6(1) 2024, pp. 1-12.
- DOI: <https://doi.org/10.47672/ajacc.1783>
38. Nguyen, T. T. H., Ibrahim, S., Giannopoulos, G.: Detecting earnings management: a comparison of accrual and real earnings manipulation models, *Journal of Applied Accounting Research*, 24(2) 2023, pp. 344-379.
- DOI: <https://doi.org/10.1108/JAAR-08-2021-0217>
39. Orazalin, N., Akhmetzhanov, R.: Earnings management, audit quality, and cost of debt: evidence from a Central Asian Economy, *Managerial Auditing Journal*, 34(6) 2019, pp. 696-721.
- DOI: <https://doi.org/10.1108/MAJ-12-2017-1730>
40. Qi, B., Tian, G.: The impact of audit committees personal characteristics on earnings management: Evidence from China, *The Journal of Applied Business Research*, 28(6) 2012, pp. 1331-1344.
- DOI: <https://doi.org/10.19030/jabr.v28i6.7347>
41. Saeedi, M., Hemmati, M.: The moderating role of audit quality on the relationship between audit report and earnings management, *New Applied Studies in Management, Economics & Accounting*, 5(1) 2022, pp. 72-91.
- DOI: <https://doi.org/10.22034/nasmea.2022.176191>

42. Salehi, M., Zimon, G., Tarighi, H., Gholamzadeh, J.: The effect of mandatory audit firm rotation on earnings management and audit fees: evidence from Iran, *Journal of Risk and Financial Management*, 15(3) 2022, pp. 102.
- DOI: <https://doi.org/10.3390/jrfm15030102>
43. Sun, J., Liu, G., Lan, G.: Does female directorship on independent audit committees constrain earnings management?, *Journal of Business Ethics*, 99(3) 2011, pp. 369-382.
- DOI: <https://doi.org/10.1007/s10551-010-0657-0>
44. Tache, M.: The incidence of earnings management on audit quality, *Proceedings of the International Conference on Business Excellence*, 15(1) 2021, pp. 783-792.
- DOI: <https://doi.org/10.2478/picbe-2021-0073>
45. Thu, P. A., Khanh, T. H. T., Ha, N. T. T., Khuong, N. V.: Perceived audit quality, earnings management and cost of debt capital: evidence from the energy listed firms on Vietnam's stock market, *International Journal of Energy Economics and Policy*, 8(6) 2018, pp. 120-127.
- DOI: <https://doi.org/10.32479/ijeep.6992>
46. Tsipouridou, M., Spathis, C.: Audit opinion and earnings management: Evidence from Greece, *Accounting Forum*, 38(1) 2014, pp. 38-54.
- DOI: <https://doi.org/10.1016/j.accfor.2013.09.002>
47. Van Tendeloo, B., Vanstraelen, A.: Earnings management and audit quality in Europe: evidence from the private client segment market, *European Accounting Review*, 17(3) 2008, pp. 447-469.
- DOI: <https://doi.org/10.1080/09638180802016684>
48. Verma, D., Dawar, V., Chaudhary, P.: Do Audit attributes impact earnings quality? Evidence from India, *Asian Journal of Accounting Research*, 9(1) 2024, pp. 25-34.
- DOI: <https://doi.org/10.1108/AJAR-12-2022-0428>
49. Zgarni, I., Hlioui, K., Zehri, F.: Effective audit committee, audit quality and earnings management: Evidence from Tunisia, *Journal of Accounting in Emerging Economies*, 6(2) 2016, pp. 138-155.
- DOI: <https://doi.org/10.1108/JAEE-09-2013-0048>