# The Impact of Audit Quality on Reducing Earnings Management Practices in the Jordanian Industrial Companies



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- Abstract This study aimed to identify the effect of audit quality in reducing manage-
- ment's opportunistic behavior. Management's opportunistic behavior was measured
- <sub>3</sub> by the level of earnings management. The study relied on secondary data for a sample
- of (40) companies listed on the Amman Stock Exchange during the period (2019–
- $_{5}$  2022). The study found that higher audit quality is linked to a lower level of earnings
- 6 management. Specifically, both audit fees and non-audit services had an impact on
- earnings management. While there was no effect of the size of the audit. The study
- 8 focuses on the need to pay sufficient attention when selecting auditors and comparing
- 9 them, and that the choice between auditors should not be based on personal consid-
- erations and low fees, but rather that the choice be made by focusing on the auditor's
- competence and quality.
- 12 **Keywords** Audit Quality · Earnings Management · Audit Firm Size · Audit
- 13 Fees · Non-audit Services
- JEL Classification G3 · G33 · M13 · O15

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#### 1 Introduction

Providing high-quality annual financial reports is critical to various stakeholders due to its critical influence on credit decisions and resource allocation to enhance companies' market values [25, 30]. The companies' management prepares these reports in accordance with the requirements of international accounting and financial reporting standards, which allows them to choose the appropriate accounting policies for them [2, 29]. This may allow managers to abuse discretion to achieve their preferred level of profits [14]. In this case, managers either postpone recognition of expenses or recognize revenues early [16, 20]. The late nineties and early first decade of the twenty-first century witnessed a set of accounting scandals, which were in essence revolving around the phenomenon of earnings management [3, 19] (Goncharov 2005), which led to great concern among practitioners and regulators about the phenomenon of earnings management, which led to an increase in interest in it in the accounting literature [9] (Loomis 1999), because the accounting numbers are considered relevant due to their great relationship to the market values of companies [6, 14] (Barth et al. 2001).

The appointment of an external auditor is one of the tools that helps in monitoring the opportunistic behavior of managers [7]. According to agency theory, appointing an external auditor alleviates the agency problem by reducing information asymmetry [24]. In order for the auditor to be an effective tool in monitoring management behavior, audit operations must be of high quality [5, 21]. Audit quality is related to the auditor's ability to detect violations committed by managers, including earnings management [18, 22].

Many researchers explain the reasons for the failure of companies due to the weak corporate governance of these companies, as well as the weak protection by the regulatory authorities [11], and the inability of the regulatory authorities to monitor the performance of the administration due to the obstruction of obtain accurate and trustworthy information about the several situations of the management's performance (Jensen and Meckling 1976). Hence, a number of theories have emerged on the scene to try to solve these problems, such as the agency theory that explains the interrelationships between corporate management and shareholders and explains the causes of problems that may arise as a result of conflict of interests [13] (Dalton et al. 2007), and tries to reach appropriate solutions to mitigate the unwanted effects out for the problem of information inconsistency. According to the agency theory, solving these problems requires the presence of the external auditor as a third party who expresses an impartial opinion regarding the fairness of the data provided by management [18]. To fill the gap in the relevant literature in the Jordanian environment, this study came to explore the effect of audit quality on earnings management in Jordanian companies listed on the ASE.

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## 2 Literature Review and Development of Hypothesis

Researchers have conducted many empirical studies worldwide to understand the role of audit quality and their impact on earnings management. However, the existing literature presented contradictory results. Previous studies have used a number of factors that determine the quality of financial reports, and corporate control mechanisms have been among the factors most discussed in previous studies.

The quality of the external auditor is an important factor affecting the quality of financial reporting [31]. The quality of financial reporting is related to the quality of auditing [17]. An auditor with a good reputation is keen to exercise sufficient care before issuing the audit report, as stakeholders trust the financial reports that are audited by an auditor with a good reputation [20]. This is due to the fact that the probability of discovery of doubtful accounting practices by third parties may to some extent lead to the administration being obliged to follow the accounting practices set forth in the accounting standards [1, 17]. However, previous studies failed to demonstrate this. Alsaeed [8] did not find a correlation between quality of auditing measured by the brand of large audit firms and discretionary accruals, and similarly found no significant relationship between the quality of external audit and the level of voluntary disclosures. Duong [17] found that audit quality not associated with reduced earnings management. The literature on auditing assumes that auditors are determinants of earnings quality or quality of financial reporting because they reduce errors that may occur during the preparation of financial reports [16]. Some studies, such as [26], have predicted that the auditor's capability to reveal errors is one of the characteristics and characteristics of a good auditor. DeAngelo [15] argues that the risk of litigation and the costs associated with a loss of reputation will prompt auditors to report misstatements that may occur during financial reporting. Many of the theories presented by the experts indicated that the auditor's independence affects the quality of the financial reports by enhancing the quality of the audit. Where Watts and Zimmerman [27] says: "To create demand for audit services, markets must be convinced that auditors have some efficiency and that they have an acceptable level of independence from the client". Arens et al. [10] says: "The value of the audit depends heavily on the public's perception of the auditor's independence", which means that audit quality correlates with enhancing the dependability of the users of the financial reports with audited reports from an independent auditor.

In this context, Salehi et al. [23] concluded that there is no correlation between the quality of the audit and the quality of data in the financial reports that companies disclose. The study of Yasser and Soliman [28] aimed to explore the impact of audit quality on the quality of financial reports as measured by earnings management in companies listed in Egypt. Quality of the audit was measured by the "size of the audit company, audit industry specialized". The results showed that the quality of auditors has a significant positive relationship with earnings management. Bala et al. [12] aimed to test the effect of the auditor's brand name as measured by the names of Big 4 companies on earnings management. Interestingly, the study found that auditors outside the Big Four companies have a greater ability to reduce earnings management.

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Alhadab [4] found that the abnormal audit fees were negatively associated with profit management, as higher audit fees reduced managers' ability to manipulate reported profits.

Based on the literature discussion, the following hypotheses are proposed:

- Ho: There is no impact of audit quality on the earnings management practices in Jordanian industrial companies.
- Hol: There is no impact of audit firm size on earnings management practices in Jordanian industrial companies.
- Ho2: There is no impact of audit fees on earnings management practices in Jordanian industrial companies.
- Ho3: There is no impact of non-audit services on earnings management practices in Jordanian industrial companies.

# 109 3 Methodology of the Study

# 110 3.1 Population and Sample

The study population consists of all Jordanian industrial companies listed on the ASE during the period from 2019 to 2022. The study sample consisted of companies whose financial reports are available for all study periods, which numbered (40) companies.

# 3.2 Measurement of Study Variables

#### 116 Dependent Variable (earnings management)

There are many models used to measure earnings management. In this study, the modified Jones (1995) model was relied on. This model is based on a discretionary accrual measure. Where it is resorted to calculating the total receivables through the difference between the operating cash flow and the operating net profit.

### 121 Independent Variables (Audit quality)

- Audit firm size (ASZ): "dummy variable that has value (1) if a company is audited by a Big 4 and takes a value (0) otherwise".
- Audit fees (AFE): "Natural logarithm of audit fees".
- Non-audit services (NAS): "dummy variable that has value (1) if a company has non-audit services by the audit firm and takes a value (0) otherwise".

# 4 Hypothesis Testing

## 4.1 Results of First Sub-Hypothesis Test

Ho1: There is no impact of audit firm size on earnings management practices in Jordanian industrial companies.

The results in the above Table 1 indicate that the significance level (probability = 0.235), which means that the size of the audit firm has no effect on the earnings management practices. This finding is in line with the results of Alsaeed [8] who did not find a correlation between audit qualities measured by the brand of large audit firms and discretionary accrual. However, this result was different from what he had reached Yasser and Soliman [28] study which found that the quality of auditors measured by size of the audit company has a significant positive correlation with earnings management.

# 4.2 Results of Second Sub-Hypothesis Test

Ho2: There is no impact of audit fees on earnings management practices in Jordanian industrial companies.

The results in the table above indicate that the significance level (probability = 0.000), which means that audit fees have an impact on earnings management practices. This result can be explained by the fact that large audit fees may create an economic link between the auditor and the client, which leads to affecting the independence of the auditor and leads to a decrease in the quality of financial reports. Also, the audit client increases audit fees as a bribe until it affects the independence of the auditor and pushes him not to report on fraudulent management practices. This finding is consistent with the findings of Blankley et al. (2012), which found that higher audit fees lead to an increase in the quality of reports, as well as what Choi et al. (2010) found that higher audit fees are positively related to the level of non-discretionary accruals, which indicates a lower quality of financial reporting.

# 4.3 Results of Third Sub-Hypothesis Test

Ho3: There is no impact of non-audit services on earnings management practices in Jordanian industrial companies.

The results in the table above indicate that the significance level (probability = 0.000), which means that non-audit services have an impact on earnings management practices.

This result can be explained by the fact that non-audit services weaken the independence of the external auditor, which is the main factor that contributes to the low

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quality of auditing, and thus the low quality of financial reports, as the auditor may be subject to management pressures in order to maintain the revenues of these services and thus hide bad news or not management compliance with financial reporting requirements, which reduces the quality of information that companies report. This finding is consistent with the study by Frankel et al. (2002) which found that the existence of an economic relationship between the audit firm and the client other than the audit process will weaken the independence of the auditor, which reduces his resistance to the audit client's desire to manipulate the accounting regulations, which weakens the quality of financial reports, as this result is consistent with what Hay indicated (2017) that non-audit services are linked to the auditor's loss of independence, which is indicated by the low quality of audit, due to the possibility of the auditor being subject to management pressures, which reduces the quality of financial reports.

However, this result does not agree with the findings of the study of Chung and Kallapur (2003), where the study concluded that there is no relationship between the fees for non-audit services and the voluntary accruals of companies, and it also differs from what was found in the study of Ashbaugh et al. (2003) and the study of Kinney et al. (2004) in terms of the absence of a relationship between the fees for non-audit services and the optional dues of the auditors, and this difference may be due to the asymmetry of the study application environment.

# 4.4 Results of Main Hypothesis Test

Ho: There is no impact of audit quality on the earnings management practices in Jordanian industrial companies.

The results of testing this main hypothesis indicate that earnings management is related to audit quality. The results in the above table show that the independent study variables explain (79.9%) of the variance in profit management, while other factors remain constant. This result can be explained theoretically by the fact that a high-quality auditor will be able to proactively correct any distortions resulting from the opportunistic behavior of management, which is consistent with what Fama has argued and Jensen (1983) that the credibility and transparency of the company's financial reports depend on the effectiveness of the company's own control mechanisms, and accordingly the researcher can say that the audit of financial reports by a third party, the external auditor, can improve the quality of the financial information that the management discloses, This is because the possibility of discovering suspicious accounting practices by the third party may lead to some extent obligating the management to follow the accounting practices stipulated in the accounting standards.

This result is consistent with the theoretical assumption that using high-quality auditors sends a message to stakeholders that the financial reports do not contain material errors, given that they have been approved by auditors who seek to preserve their reputation and avoid the risks associated with litigation. Therefore, they are less

subject to pressure from audit clients. This result is consistent with the findings of the study by Dechow et al. [16], which indicated the role of external auditors in mitigating intentional and unintentional errors, and also agrees with what Persakisa and George (2016) indicated that increasing audit quality reduces profit management, and also agrees with the findings of Yasser and Soliman study [28], which indicated that the quality of auditors has a significant positive relationship with earnings management.

#### 5 Conclusion

The main objective of the study was to measure the impact of audit quality on the earnings management. The study relied on secondary data extracted from the annual reports of the study sample companies during the period (2019–2022). This study shows that the practice of earnings management is not a common phenomenon among Jordanian industrial companies, which confirms the different motives of departments towards profit management practices and thus the quality of financial reports. The results of the data analysis indicate that there is a significant impact of audit quality on earnings management practices in the Jordanian industrial companies, where there was an impact of both audit fees and non-audit services at the level of earnings management practices in the Jordanian industrial companies, while there was no impact of audit firm size.

Based on the results that have been reached, the study recommends the need to give sufficient attention when choosing auditors and to compare among them, and that personal considerations and low fees should not be based on the selection between auditors, but that the selection be through focusing on the efficiency of the auditor and the quality of the services he provides, and that The auditor is sufficiently familiar with the principles and standards of international auditing and accounting, with the need to focus on keeping pace with modern developments in the profession, which plays an important role in reducing the role of competition between audit offices in determining fees. The study also recommends the need to pay attention and encourage the association of audit offices with international companies that adhere to strict quality standards, and the audit team possesses sufficient skills and is properly qualified in the application of international accounting standards and international auditing standards, which leads to a higher quality of auditing, which in turn will lead to an increase in the confidence of users of financial reports in companies. Audit place. As well as educating users of financial reports in general and investors in particular of the importance of audit quality and making it the appropriate basis when choosing an auditor, through the issuance of professional bulletins to educate the parties benefiting from the financial statements.

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Dependent variable	Independent variables	Regression coefficient	Calculated t value	Prob
Earnings management	Audit firm size (ASZ)	-0.071	-1.192	0.235
	Audit fees (AFE)	-0.001	-4.684	0.000
	Non-audit services (NAS)	0.005	2.354	0.020
$R^2$		0.799		
Adj R <sup>2</sup>		0.727		
F		11.114		
Prob		0.000		

Table 1 Results of the test of the study model based on the fixed effects model

## References

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- Abdul Rahman, R., Haneem Mohamed Ali, F.: Board, audit committee, culture and earnings management: Malaysian evidence. Manag. Audit. J. 21(7), 783–804 (2006). https://doi.org/10. 1108/02686900610680549
- 2. Al-Beshtawi, S.H., Zraqat, O.M., Moh'd Al-hiyasat, H.: The impact of corporate governance on non financial performance in Jordanian commercial banks and Islamic banks. Int. J. Financ. Res. 5(3), 54–67 (2014). https://doi.org/10.5430/ijfr.v5n3p54
- Al-Enzy, N.S.K., Monem, R., Nahar, S.: IFRS experience and earnings quality in the GCC region. Int. J. Manag. Finance 19(3), 670–690 (2023). https://doi.org/10.1108/IJMF-09-2021-0410
- Alhadab, M.: Abnormal audit fees and accrual and real earnings management: evidence from UK. J. Financ. Reporting Acc. 16(3), 395–416 (2018). https://doi.org/10.1108/JFRA-07-2017-0050
- Alhawamdeh, H., Abdel Muhsen Irsheid Alafeef, M., Abdel Mohsen Al-Afeef, M., Alkhawaldeh, B.Y., Nawasra, M., Al\_Rawashdeh, H. A. A., Al-Eitan, G.N.: The relationship between marketing capabilities and financial performance: the moderating role of customer relationship management in Jordanian SMES. Cogent Bus. Manage. 11(1), 2297458 (2024). https://doi.org/10.1080/23311975.2023.2297458
- Alotaibi, M.Z., Alotibi, M.F., Zraqat, O.M.: The impact of information technology governance in reducing cloud accounting information systems risks in telecommunications companies in the state of Kuwait. Mod. Appl. Sci. 15(1), 143–151 (2021). https://doi.org/10.5539/mas.v15 n1p143
- Alrashidi, M., Almutairi, A., Zraqat, O.: The impact of big data analytics on audit procedures: evidence from the Middle East. J. Asian Finance, Econ. Bus. 9(2), 93–102 (2022). https://doi. org/10.13106/jafeb.2022.vol9.no2.0093
- Alsaeed, K.: The association between firm-specific characteristics and disclosure: the case of Saudi Arabia. Manag. Audit. J. 21(5), 476–496 (2006). https://doi.org/10.1108/026869006106 67256
- Alzoubi, E.S.S.: Audit committee, internal audit function and earnings management: evidence from Jordan. Meditari Accountancy Res. 27(1), 72–90 (2019). https://doi.org/10.1108/ MEDAR-06-2017-0160
- Arens A., Randal J.E.: Mark Beasley-Auditing and Assurance Services. An Integrated Approach, 15th edn. Prentice Hall, Boston (2014)
- 11. Assenso-Okofo, O., Jahangir Ali, M., Ahmed, K.: The impact of corporate governance on the relationship between earnings management and CEO compensation. J. Appl. Acc. Res. 22(3), 436–464 (2021). https://doi.org/10.1108/JAAR-11-2019-0158

- 12. Bala, H., Amran, N.A., Shaari, H.: Auditor brand name and financial reporting fraud of listed
   companies in Nigeria. J. Adv. Res. Bus. Manage. Stud. 11(1), 84–94 (2018). https://www.aka
   demiabaru.com/submit/index.php/arbms/article/view/1294
- Brekumi, H.A., Sarpong-Danquah, B., Owusu-Afriyie, R., Gyimah, P.: Nexus among internal audit quality, corporate governance and performance of selected banks in Africa. Glob. Bus.
   Rev. (2023). https://doi.org/10.1177/09721509221147432
- 280 14. Cahyani, A.D., Firmansyah, A.: Managerial ability, earnings management and fair value
   281 accounting: does debt policy matter? Jurnal Dinamika Akuntansi dan Bisnis 10(1), 43–60
   282 (2023). https://doi.org/10.24815/jdab.v10i1.27544
- DeAngelo, L.E.: Auditor size and audit quality. J. Account. Econ. 3(3), 183–199 (1981). https://doi.org/10.1016/0165-4101(81)90002-1
- Dechow, P.M., Richardson, S.A., Tuna, I.: Why are earnings kinky? An examination of the earnings management explanation. Rev. Acc. Stud. 8, 355–384 (2003). https://doi.org/10.1023/A:1024481916719
- Duong Thi, C.: Audit quality, institutional environments, and earnings management: an empirical analysis of new listings. SAGE Open 13(2), 21582440231180670 (2023). https://doi.org/10.1177/21582440231180672
- 18. Houqe, M.N., Ahmed, K., Van Zijl, T.: Audit quality, earnings management, and cost of equity
   capital: evidence from India. Int. J. Audit. 21(2), 177–189 (2017). https://doi.org/10.1111/ijau.
   12087
- Hussien, L.F.M., Aledwan, B.A., Zraqat, O.M.: The extent of applying the balanced scorecard in the Jordanian banks, and its effects on performance. J. Soc. Sci. (COES&RJ-JSS) 6(3), 532–547 (2017). https://doi.org/10.25255/jss.2017.6.3.532.547
- Hussien, L., Okour, S., AlRawashdeh, H., Ali, O., Zraqat, O., Zureigat, Q.: Explanatory factors for asymmetric cost behavior: evidence from Jordan. Int. J. Innov. Creativity Change 15(4), 201–219 (2021)
- 21. Koutoupis, A., Pazarskis, M., Drogalas, G.: Auditing corporate governance statements in Greece—the role of internal auditors. Corp. Governance: Int. J. Bus. Soc. **18**(5), 1007–1020 (2018). https://doi.org/10.1108/CG-02-2018-0095
- 22. Piot, C.: Agency costs and audit quality: evidence from France. Eur. Acc. Rev. **10**(3), 461–499 (2001). https://doi.org/10.1080/713764630
- Salehi, M., Moradi, M., Paiydarmanesh, N.: The effect of corporate governance and audit quality on disclosure quality: evidence from Tehran stock exchange. Period. Polytech. Soc.
   Manag. Sci. 25(1), 32–48 (2017). https://doi.org/10.3311/PPso.8354
- 24. Saputra, W.: The impact of auditor's independence on audit quality: a theoretical approach.
  Int. J. Sci. Technol. Res. **4**(12), 348–353 (2015)
- 25. Selleslagh, T., Ceustermans, S.: The usefulness of financial reporting quality in the access to bank debt for private firms. Acc. Europe 1–27 (2024). https://doi.org/10.1080/17449480.2024.
- 26. Uang, J.Y., Citron, D.B., Sudarsanam, S., Taffler, R.J.: Management going-concern disclosures:
   impact of corporate governance and auditor reputation. Eur. Financ. Manag. 12(5), 789–816
   (2006). https://doi.org/10.1111/j.1468-036X.2006.00277.x
- Watts Ross, L., Zimmerman Jerold, L.: Positive Accounting Theory. Prentice Hall International,
   Inc., (1986)
- 28. Yasser, S., Soliman, M.: The effect of audit quality on earnings management in developing countries: the case of Egypt. Int. Res. J. Appl. Financ. 9(4), 216–231 (2018)
- Zalata, A., Roberts, C.: Internal corporate governance and classification shifting practices: an analysis of UK corporate behavior. J. Acc. Audit. Financ. 31(1), 51–78 (2016). https://doi.org/10.1177/0148558X15571736
- 30. Zraqat, O.M.: The moderating role of business intelligence in the impact of big data on financial reports quality in Jordanian telecom companies. Mod. Appl. Sci. **14**(2), 71–85 (2020). https://doi.org/10.5539/mas.v14n2p71
- 31. Zraqat, O., Zureugat, Q., Al-Rawashdeh, H.A., Okour, S.M., Hussien, L.F., Al-Bawab, A.A.:
  The effect of corporate social responsibility disclosure on market performance: evidence from

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Jordan, J. Asian Financ. Econ. Bus. **8**(8), 453–463 (2021). https://doi.org/10.13106/jafeb.2021. vol8.no8.0453