

The Impact of Audit Firm's Size and Rotation on Accounting and Real Earning Management Practices: A Field Study on Iraqi Stocks Market.

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Abstract

This study investigates the effect of audit firm rotation and audit committee size on earnings management of the listed companies in the Iraq Stock Exchange. The objective of this research is to examine the effectiveness of the above-mentioned audit and corporate governance mechanisms in curbing opportunistic financial reporting practices in the institutional setting of an emerging market. The study used a balanced panel data set of 20 listed companies with 5-year observations, for a total of 100 firm-year observations. The sample covered a wide range of sectors including finance, industry, agriculture, services, telecommunications, insurance and real estate. Control variables were firm size, leverage and return on assets. Tests of multicollinearity, heteroscedasticity, autocorrelation were performed and regression models were estimated with the method of Feasible Generalized least squares. The results have shown that there is no significant effect of audit firm rotation on earnings management but there is a positive effect. Therefore, the change of external audit firm did not significantly restrict the earnings management practices of the sampled companies. In contrast, audit committee size has a positive and statistically significant impact on earnings management, implying that more effective oversight of larger committees does not necessarily exist. The only variable that consistently exerted significant negative effect on earnings management was the firm size. Financial leverage and return on assets were statistically insignificant. The study concludes that the formal existence of audit and governance mechanisms is not a guarantee for their effectiveness in substance. This means reinforcing the independence, financial expertise, professional competence and effective supervisory power of audit committees, rather than simply increasing the size of audit committees or formalizing auditor rotation requirements....

Keywords: Audit Firm Rotation, Audit Committee Size, Earnings Management, Audit Quality, Corporate Governance, Iraq Stock Exchange..

Introduction

Financial statements are the main tool on which interested parties – investors, creditors, regulators and government – rely on to shape their economic decisions, which makes the quality and reliability of these statements an essential pillar for the stability and efficiency of the financial markets. However, agency theory holds that dividing ownership from managerial control within joint stock companies creates a potential clash of interests. Management occupies one side, while investors and owners occupy the other, because managers possess internal information that external parties cannot access to the same extent, a condition described as information asymmetry. This may lead them to exploit the elasticity margin in accounting standards to target declared profits towards specific management goals, whether to meet market expectations, meet debt contract terms, or obtain performance-related rewards. This behavior is known in the accounting literature as "earnings management", which takes two main forms: the first is accounting, based on the exploitation of flexibility in estimating non-cash accounting items (estimated accruals), and the second is real, based on changing the actual operational, investment, and financing decisions of the company – such as overproduction, reducing estimated expenses, or manipulating the timing of sales – making it relatively harder to detect than the accounting type.

Against this potential clash of interests, credibility in financial reporting depends partly on external audit. It belongs to the principal external governance mechanisms and seeks to curb opportunistic management practices through independent assurance concerning both the fairness of financial statements and whether they contain material misrepresentation. (1981) supplied the foundation for a concept in early scholarship on accounting, especially through DeAngelo's theoretical account. The relationship of the size of an audit office with the quality

of the audit services provided is established. It was argued that unlike smaller professional practices, larger firms have both an incentive and a reputation to protect. Therefore, they adopt more strict independence policies and employ more stringent levels of professionalism to their work. Audit firm rotation is defined as a supplementary control mechanism, whether it is voluntary or a mandated control. Its theoretical intent is to avoid a long-term partnership of mutual interest from developing between management and the auditor, because familiarity through repeated dealings could gradually diminish the auditor's independence.

The theoretical literature suggests that size and turnover in audit offices positively influence the quality of financial reporting. This being said, in differing economic contexts, the impacts of these two variables on earnings management are still inconsistent. The result of such accounting would likely be mixed evidence rather than a final determination. Studies of developed and emerging markets have found that the larger audit firms are associated with lower levels of earnings management. Evidence specific to Iraq is different; the studies mostly focused on its market did not identify a similar relationship, resulting in an unresolved cross-market situation in that national context. The empirical evidence on turnover in auditors is also inconsistent. Some studies link mandatory rotation to an increase in accounting earnings management, but they do not extend this observed association to its real form of such managerial activity.

Joint analysis of these variables is particularly relevant to the Iraqi Stock Exchange, a market still emerging whose institutional setting differs from the settings covered by much earlier research. The distinguishing features include the strength with which legislation is enforced, the prevailing ownership structure, and how far corporate governance mechanisms have developed. Together, these conditions may reshape the association linking external auditor characteristics with managerial conduct related to reported earnings within this national setting. Accordingly, the present field investigation examines the joint effects of audit office turnover and size on the accounting as well as real forms of earnings management among companies on the Iraqi Stock Exchange. Its results are intended to extend Arab accounting scholarship by supplying current empirical evidence from a local setting. The analysis also offers supervisory authorities, professional bodies, and investors an applied foundation for assessing reports issued by listed companies, evaluating their financial quality, and making decisions on the basis of that documented evidence.

Study Problem

Creditors, investors, and other stakeholder groups base many economic decisions on how reliable financial reports are. Yet separating ownership from managerial control creates competing interests under agency theory, potentially prompting management to use earnings management either for internal objectives or in response to market expectations. Such conduct can involve an accounting form (Accounting/Accrual Earnings Management) or a real form achieved by altering actual operating choices as well as decisions about finance and investment (Real Earnings Management). External audit provides independent oversight that restrains opportunistic conduct while supporting confidence in financial statements. Within companies, the main factors shaping profit management include audit quality, which is commonly represented by audit office size, audit fees, and the auditor's tenure through these standard measures used to evaluate its quality.

The existing scholarship on accounting has yet to provide a firm conclusion with respect to the practices surrounding earnings management and the characteristics of the audit firm, especially rotation and size. Instead, empirical studies have yielded vastly different results based on the economic setting that is relevant to the market. Accounting scholarship drawn from the developing as well as developed markets has often linked larger audit firms with lower levels of earnings management. These studies typically found that audit firm size had a negative and significant association with earnings management. The observed association with tenure of the auditor was the exact opposite: its estimated association was positive, and the tenure of the auditor was negatively associated with earnings management. The other studies of Nigerian-listed financial firms also found that the audit firm size was negatively associated with earnings management, and that the audit fees also had a negative association, although the result did not achieve statistical significance.

Contradictory and inconclusive evidence has also emerged. A comparison of the Omani and Iraqi markets found no statistically meaningful association linking profit management with either audit firm size or auditor change in the two countries. Negative associations appeared instead for three other audit characteristics: the auditor's industry experience, when the audit report was issued, and the auditor's opinion. Thus, the measures used to represent audit quality did not behave uniformly across these distinct national settings. Recent research also incorporated earlier evidence concerning registered banks in France and Germany together with those in United Kingdom. That evidence indicates that the effect of audit firm size on earnings management changes between institutional settings. Earlier comparisons examined earnings management among companies using large audit firms and those using other auditors; their outcomes differed with the applicable regulatory and legal framework, demonstrating that this characteristic does not exert an identical influence in every setting.

For companies traded in Tehran, compulsory auditor rotation was associated with a significant rise in earnings management measured through discretionary accruals. By contrast, neither audit fees nor real-activity earnings

management changed significantly under the same requirement. These different results cast basic doubt on the proposition that requiring turnover necessarily strengthens auditor independence and independently prevents opportunistic conduct by corporate management in practice.

This particular issue needs to be addressed in the Iraqi stock market environment, as it is an emerging market characterized by relatively weak institutional governance mechanisms, limited enforcement of audit standards, and centralization of ownership, factors that would weaken the supposed supervisory role of auditor size and turnover compared to developed markets. The existing research in accounting has not come to a firm conclusion regarding the practices of earnings management, and the attributes of the audit firm, particularly rotation and size. Instead, empirical studies have provided extremely different results owing to the economic circumstances relevant to the market. Scholarships in accounting from both developed and developing markets have often associated larger audit firms with lower levels of earnings management. Most of these studies have found that the audit firm size had a negative and significant association with earnings management. The estimated association with tenure of the auditor was the exact opposite: its estimated association was positive, and the tenure of the auditor was negatively associated with earnings management. The other studies of Nigerian-listed financial firms also found that the audit firm size was negatively associated with earnings management, and that the audit fees also had a negative association, although the result did not achieve statistical significance.

The research problem therefore reflects two connected deficiencies. First, existing empirical findings disagree over the direction, magnitude, and nature of influence exerted by audit office turnover and size on accounting practices and real earnings management. Second, no comprehensive field investigation has considered both factors jointly as rotation and size in the Iraq Stock Exchange. This omission matters because the exchange represents an emerging setting with organizational and institutional features unlike those of the markets examined in most earlier studies. Evidence generated elsewhere may consequently fail to describe such conduct accurately in the Iraqi context. The study expresses this problem through one central research question:

How do the turnover and size of an audit firm affect accounting practices together with real earnings management among companies currently traded through the Iraq Stock Exchange?

This central question gives rise to the sub-questions below:

How does audit firm size affect accounting earnings management practices estimated using discretionary maturities among the companies currently traded through the Iraq Stock Exchange within that particular market?

Among companies traded through the Iraq Stock Exchange, how does audit firm size influence the practices used for real earnings management within this market context?

How does audit firm turnover affect accounting earnings management practices among companies that currently trade through the Iraq Stock Exchange?

How do changes in audit firm turnover relate to real earnings management behaviors of entities trading on the Iraq Stock Exchange?

3. The importance of studying

Several related dimensions account for this study's importance; they fall into two categories, namely scientific and theoretical relevance versus practical and applied value.

First: Scientific Theoretical Importance

1. The study addresses a gap that remains in accounting scholarship. Its importance lies in examining, within one setting, the combined influence of audit firm turnover and size on both the accounting form and the real form of earnings management. Only a few studies have taken all of these factors into account at the same time. Most previous studies analyzed turnover and size separately or focused on one type of earnings management and analyzed the other. This type of treatment, combined with the limits of the existing research, is aimed precisely at what is lacking in literature. One recent study examined how turnover and the size of audit firms affected the accounting premises and the real management of the earnings of the listed companies in Egypt. Because that work closely resembles the present model, reproducing its design in Iraq is scientifically necessary. Replication permits a direct test of whether the findings can be generalized when the institutional context changes from Egypt to another national environment, rather than assuming that the original results apply across settings.

2. Agency Theory in a distinct emerging institutional environment receives a further empirical test in this study, alongside the theory of audit quality. These perspectives treat audit office size as an indicator of the auditor's independence and capacity to identify opportunistic managerial conduct. They also regard office size as a major factor associated with audit quality and with limiting such conduct in financial reporting. Testing these propositions in the present setting shows whether the theoretical expectations remain applicable where institutional conditions differ from those examined previously. Since most of the evidence on which these hypotheses are based came from developed markets or from other emerging markets. Having different regulatory characteristics than Iraq, testing them in the Iraqi stock market environment—which is characterized by relative weakness in governance and legislative enforcement mechanisms—contributes to determining whether these theoretical hypotheses are universally valid or context-dependent.

3. This method accounts for two simultaneous forms of earnings management, thus illustrating how control instruments interact with diverse managerial strategies. Using this approach may help identify the “substitution effect” referenced in previous studies. This effect occurs when the benefit of closer oversight of estimated benefits is obtained, management moves to real earnings management and refrains from using accounting-based earnings management. Analyzing both forms together is indicative of whether the control framework is simply pushing management conduct toward the other form. In Iraq, research on the Iranian listed companies has documented a comparable phenomenon that also deserves attention. Concurrently imposing that audit office to rotate also showed an important increase in accounting profit management, whereas real profit management showed no such significant change. The contrast raises an important question about whether the control mechanism really achieves its goal. Studying this pattern in the Iraqi context may provide the answer to the question raised.

Second: Practical Applied Importance

1. Authorities and legislators may utilize the evidence as empirical data in the creation and/or revision of regulations governing mandated audit firm turnover and auditor selection standards. This pertains to both the Iraqi Securities Commission and professional organizations regulating the audit profession. Such evidence is relevant in this case, as international research regarding policy helpfulness is still inconsistent. Previous research noted that mandatory rotation failed to curb opportunistic, managerial actions in select settings and in fact aligned with greater accounting-based profit management. The results can inform whether existing selection and rotation policies should be retained, modified, or applied differently.

2. Data drawn from these studies can inform both financial analysts and investors. Prospective and current participants at the Iraq Stock Exchange can understand the impact of varying the size and tenure of audit offices on the reliability of earnings. This understanding enables participants to evaluate the quality of the financial reports when they make their investment decisions. The utility of this information is significant, particularly because analysts have a weak opinion of reports of earnings, and this is a significant impediment faced by analysts of developing markets. An objective evaluation of characteristics of auditors provides the required framework to better evaluate the performance and the associated risks of the investment.

3. Evidence shows firms and auditors how choosing audit providers of different sizes, whether local or international and large or small, can impact report quality and market reputation. The study helps Iraq-based audit practices understand market position and how that impacts the additional value delivered to clients. The analysis primarily focuses on the auditor choice option and the reduction of opportunistic behavior that affects financial reporting. These insights make a link to company selection and the credibility of the report perceived to be offered by the appointed auditor along with the added service value offered by the appointed auditor.

4. Objectives of the study

The previously identified research problem and its sub-questions establish one principal objective for this study, from which the following organized set of specific and related sub-goals is developed:

Main Objective:

The primary goal of this study is to evaluate the impact of both turnover and size of audit offices in Iraq on accounting practices, as well as real earnings management techniques employed by companies listed on the Iraq Stock Exchange. The study uses company data in an actual setting and performs field-based analytical research. This study also assesses if the findings reported by previous studies in different settings can be applicable to Iraq. This encompasses the research of comparable studies on companies listed in Egypt that have analyzed similar variables in order to enable this analysis to evaluate the scope of the earlier studies in comparable contexts in Iraq.

Sub-objectives:

1. Objective One: Measuring the Effect of Audit Office Size on Accounting Earnings Management. This component seeks to test how audit firm size, represented by Big Audit Firm versus smaller providers, affects the relevant accounting practices. Non-Big Audit Firm) status is examined in relation to accounting earnings management, measured through optional discretionary accruals, among companies traded on the Iraq Stock Exchange. Earlier findings do not agree. Some research reports that audit firm size has a statistically significant negative effect on earnings management, whereas other work identifies no comparable relationship. Evidence comparing Oman with Iraq, in particular, found no significant link between Audit Office Size and revenue management. The comparison therefore tests whether large and smaller providers differ under Iraqi market conditions.

2. Objective Two: Assessing How Audit Office Size Affects Operational Profit Practices. This part examines whether larger auditors deter real earnings management, including manipulation through overproduction, altered sales, and reductions in estimated expenses. Because this form of earnings management changes operating choices, identifying it is harder than detecting its accounting counterpart. The analysis must therefore establish whether larger auditing practices possess a stronger capacity than their smaller counterparts to uncover or

discourage such conduct. This objective distinguishes the auditor's possible effect on operational manipulation from its influence on accounting-based methods.

3. Objective Three: Assessing Auditor Rotation and Accounting Earnings Management. This component analyzes the output results from changing an audit firm on a specific section of the accounting form related to the discretionary component of management's earnings activities. Some studies support this result. Compulsory auditor changes were found to promote discretionary earnings activities at elevated levels in certain markets. This consideration raises the issue of whether policy changes are effective as oversight mechanisms. The primary goal of this evaluation is to determine whether the aforementioned findings hold true for situations in Iraq in the absence of presuming that evidence from other markets applies as is.

5- Study Hypotheses

The study hypotheses follow from the previously defined research problem and sub-objectives. Because earlier accounting scholarship reports different directions for relationships among its variables, each hypothesis was stated using the conventional statistical approach. Accordingly, the non-null formulation H_0 was assessed against the alternative formulation H_1 , as presented in the following section.

Table (1) summarizes the study hypotheses.

Symbol	Alternative Hypothesis Text (H1)	Independent variable	Dependent variable
H1.1.a	Negative impact on the size of the audit office	Audit Office Size	Accounting Earnings Management
H1.1.b	Negative impact on the size of the audit office	Audit Office Size	Real Profit Management
H1.2.a	Impact of the Audit Office Turnover	Audit Office Rotation	Accounting Earnings Management
H1.2.b	Impact of the Audit Office Turnover	Audit Office Rotation	Real Profit Management
H1.3	Substitution relationship between the two types	Level of Audit Control	The relationship between the two species

6- Previous Studies

This section reviews the most prominent peer-reviewed scientific studies related to the study variables, arranged in ascending chronological order from oldest to most recent, focusing on the objective, methodology, and most important findings of each study, in preparation for locating the current study within the existing literature.

1. (DeAngelo's, 1981) study provides the theoretical foundation for later scholarship concerning audit firm size and audit quality. Its conceptual account links auditor size with independence and the capacity to identify deviations in financial reporting. The reasoning is that large practices have stronger economic reasons to protect their professional standing. Compared with small firms, they should consequently be less willing to accept opportunistic management practices. This argument established the characteristic as an important theoretical indicator of both auditor incentives and the expected reliability of assurance work. This theoretical proposition became the conceptual point of departure for most subsequent empirical investigations examining how earnings management relates to the volume of an auditor.

2. (Rashed, 2020) Study most closely matches the present research in its variables and title. It examined how audit firm turnover and size jointly affected accounting practices and real earnings management, although the empirical setting comprised companies listed in Egypt. Its direct relevance therefore comes with a different national environment that warrants testing in Iraq. That investigation used actual field observations and standard models to measure the real and accounting forms of earnings management. Its design therefore offers the nearest methodological guide for constructing this research, provided that differences between the two settings are considered. Market structure and governing regulations form the central differences separating Iraq's environment from that of Egypt.

3. (Rahman, Flayyih, & Salih, 2021) empirically evaluated how external audit quality influenced earnings management among industrial companies in Iraq that traded on the Iraqi Stock Exchange from 2010 through 2017. The analysis drew on published financial-statement information covering selected industrial firms and used auditor characteristics to assess quality in relation to reported managerial behavior. This investigation was among

the earlier efforts to build a local evidence base concerning the connection between audit quality and earnings management specifically in Iraq's industrial sector, although it did not directly examine the turnover variable.

4. (The study of Salehi, Zimon, Tarighi, & Gholamzadeh, 2022) examined how requiring an audit firm's rotation affected earnings management and audit fees among companies in Tehran's securities market. Applying the panel data method, the researchers analyzed 1030 observations covering 103 companies across the years 2003 through 2012. The design therefore linked a mandatory auditor-change requirement with both reported managerial outcomes and the fees paid for assurance services.). This investigation is important because it considered turnover in relation to both forms of earnings management. Its findings indicated that mandatory audit firm rotation significantly increased accrual-based behavior measured through discretionary accruals. In contrast, the compulsory-rotation requirement did not significantly affect either real-activity management or audit fees. The results therefore distinguish the response of the accrual measure from that of real operating conduct under the same rotation rule. The researchers concluded that Iran's audit office's mandatory turnover requirements did not succeed in preventing the administration's opportunistic behavior under the difficult financial conditions caused by economic sanctions.

5. (Wahab, Velashani, & Salehi, 2023) compared Iraq with Oman to assess the association between audit quality and earnings management. The construct of audit quality was represented by audit office size, auditor change, the auditor's industry experience, when the audit report was issued, and the auditor's opinion. Using EViews and panel statements, the analysis covered 28 banks traded on the Iraq Stock Exchange and 8 banks on the Muscat Securities Exchange over 2015 to 2021. This design enabled the same auditor characteristics to be evaluated across both national banking markets. No statistically significant association was identified between profit management and either audit office size or auditor change in the Omani and Iraqi markets. In contrast, negative relationships appeared across the two countries for the auditor's industry experience, when the audit report was issued, and the auditor's opinion. The findings separated size and change measures from the three other auditor characteristics, which moved in the opposite direction relative to managed profits. This study is considered one of the most important reference studies of the Iraqi environment in particular, but it was limited to the banking sector only and did not address the audit office turnover variable as an explicit independent variable.

6. (Qader & Cek, 2023) used a quantitative approach to assess whether independent external-auditor work improves accounting information of a financial nature at banks in Iraq's northern Kurdistan Region. Evidence came from questionnaire responses supplied by 342 employees working for commercial banking institutions located across the north of Iraq. Better accounting information of a financial nature was associated with greater freedom and independence for external auditors while completing their duties. This result offers indirect support for the proposition that audit-related attributes, including independence alongside auditor size, influence how much quality is achieved in financial outputs produced within Iraq and its particular institutional environment.

7. (Ayyed, 2024) study investigated how external audit quality characteristics affect earnings management among banks traded on the Iraq Stock Exchange. For earnings management, measurement relied on the Modified Jones Model, thereby linking the selected auditor attributes with an accrual-based approach. The research stressed that economic units traded on the Iraqi Stock Exchange urgently require a high-quality external audit to support sound financial reporting. By limiting the methods management uses to alter profits, the external auditor helps secure more reliable reports. This conclusion strengthens the practical relevance of examining the issue specifically within Iraq and its institutional environment.

8. (Jameel, Al-Sendy, & Hamoudi, 2024) studied how auditing committee characteristics relate to earning management. Annual reports of a series of Dubai-based banks, from 2010 to 2022, were utilized in this study. Findings revealed statistically significant results for both auditing committee independence and membership size. This study strengthens the role of the core of internal governance and external monitoring in limiting the financially opportunistic practices of the committees, due to a relationship between composition and autonomy.

9. (Uwakwe & Mohs, 2025) investigated how audit quality influences earnings management for American companies included in S&P 500 from 2018 through 2022. The selected measures were auditor size (Big Four), audit fees, and auditor retention. A quantitative approach using panel data was applied, while estimated entitlements represented earnings management. The design evaluated three auditor attributes against one accrual-related indicator across this U.S. sample. The findings indicated that auditor retention affected Earnings management positively, although the estimate was statistically non-significant. Audit office size, by contrast, produced an influence that was negative and statistically meaningful. Financial indebtedness had a positive but insignificant effect, whereas cash flow produced a morally negative influence. Firm size likewise reduced managed earnings significantly, implying that profit manipulation occurs less often in bigger companies than among their smaller counterparts.

10. (Tran, Pham, Tran, & Bui, 2025) investigated the effect of audit office size on audit quality in Vietnam. As an economy still developing, the country seeks stronger audit quality so that misstatements contained in financial statements are reduced. Important findings from earlier research were reviewed. They included evidence that audit firm size influences earnings management measured through discretionary accruals among listed companies

operating across Germany, United Kingdom, and France within their respective legal settings. The investigation found that the association connecting audit office size with audit quality remains actively debated and has been approached from several perspectives. Some researchers report that auditor size is significantly correlated with the standard of audit services provided. Other studies, however, do not identify equivalent evidence. The continuing disagreement means that neither the direction nor the consistency of this relationship has been settled across the examined settings.

11. (Itodo, Ibrahim, Aliyu, Garba, & Ndagi, 2026) Study assessed how audit quality affects earnings management among Nigerian-listed financial service companies across 2012 to 2023. From 45 financial firms on the exchange, the researchers chose 32 companies. Empirical estimation relied on a Fixed Effect Regression model, allowing selected audit attributes to be tested against the reported management measure while accounting for company-level differences. Audit office size reduced earnings management among Nigeria-listed financial service firms, with the estimated effect being both negative and statistically significant. By comparison, audit fees were also negatively related to earnings management, but that association remained non-significant.

Commenting on previous studies

Prior research shows that the empirical relationship connecting earnings management with audit firm size differs sharply by setting. Studies from Nigeria, Vietnam, and America often report an effect that is morally negative. Iraqi evidence differs: the relevant domestic study (2023) did not establish a significant association between earnings management and auditor office size. These contrasting results indicate that this characteristic may not operate uniformly when institutional conditions vary across national markets. None of Iraq's cross-sectional investigations examined rotation directly and jointly with auditor size, including (Rahman et al., 2021; Wahab et al., 2023; Ayyed, 2024). By contrast, research conducted in neighboring Iran by Salehi et al. (2022) reported controversial findings concerning how the variable influenced accounting earnings classified as subreal under managerial control. This gap leaves the combined operation of rotation and size unresolved for Iraq. Thus, the present study bridges this dual gap by: (a) combining the two variables of volume and turnover together in a single model, similar to the methodology of Rashed (2020) but in an Iraqi environment that is completely different from the Egyptian market environment, and (b) examining both accounting and real types of earnings management together, which none of the Iraqi studies reviewed above have addressed in an integrated way to date.

7- research methodology

The preceding research established this study's theoretical basis and surveyed scholarship concerning audit quality and auditor rotation, together with the different forms in which earnings management may occur. This research turns from theory to evidence. The empirical aim is to determine whether audit firm size, auditor rotation, and audit committee size jointly influence earnings management practices among companies presently traded through the Iraqi Stock Exchange today.

This question is important because earnings management arises where managerial interests may separate from those of the external users who rely on financial statements. An important safeguard against managers having an incentive to present a picture of performance which is rosier, or more favourable, than the underlying results would suggest is the external audit. Audit effectiveness in performing this function is thought to vary with features including the auditor's rotation and tenure, as well as how strongly the audit committee supervises reporting activities overall in each company. Iraq provides a useful, institutionally under-studied national market for examining these relationships. The regulatory environment and ownership structures of the Iraqi market are different from the developed markets where most of the prior evidence has been gathered.

The research follows this organizational structure. Section 7.2 describes population and sample. Section 7.3 describes the measurement of the dependent, independent and control variables. Section 7.4 presents both the hypotheses and their corresponding regression model. Section 7.5 reports results from the empirical analysis. Descriptive statistics and correlation matrix are followed by diagnostic tests and finally estimation of the models. Section 7.6 closes by discussing implications arising from these reported empirical findings.

7.1 Population and Sample

The study population comprises companies currently traded on the Iraqi Stock Exchange. From the complete population, researchers selected 20 companies and followed them for five years, resulting in a balanced panel of 100 firm-year observations. The sample companies represented various market sectors, including basic-resource activities; property and real estate business; pharmaceuticals and healthcare; food, tobacco, and beverages; and leisure-related tourism. Other participating firms undertook business in insurance, banking, and telecommunications, providing the sample with broad sector coverage. This means the sample mirrors the composition of the exchange in its entirety rather than just any single industry.

Data availability decided which firms entered the selected sample. We have kept only those companies for which we have financial statements, audit reports and governance disclosures available for the entire five-year period,

so that the panel will be balanced and free of gaps which would otherwise interrupt the analysis. Applying this criterion gives every firm an equal observation count, preventing estimated associations from being distorted when companies enter or exit the selected group over the period being analyzed. Information was obtained from published company annual reports together with disclosures issued by the Iraqi Stock Exchange.

Table (1) shows the sample firms. The companies cover a broad range of agricultural, industrial, service, and financial activities. This diversity gives reasonable breadth relative to the market's scale and permits earnings management to be evaluated against audit characteristics across multiple business models rather than being confined to only one sector.

Table (1): The study sample

ID	Company name
1	Al-Mamoura Real Estate Investment
2	Al-Hilal Industries
3	Iraqi For Tufted Carpets
4	Al-Ameen Estate Investment
5	Modern Chemical Industries
6	Al-Ahlyia for Agricultural Production
7	Iraqi Company for the Production and Marketing of Meat and Field Crops
8	Iraqi Agricultural Products
9	Al Arabiya Islamic Bank
10	Asia Al Iraq Islamic Bank for Investment and Finance
11	Kurdistan International Islamic Bank for Investment and Development
12	National Bank of Iraq
13	Middle East for Production and Marketing of Fish
14	Asia Cell Telecommunications
15	Region Trade Bank for Investment and Finance
16	Trans Iraq Bank for Investment
17	Union Bank of Iraq
18	Dar Al-Salam for Insurance
19	Al-Hamraa for Insurance
20	AL-Wiaam for Financial Investment

Source: prepared by the researcher

7-3 Measurement of Variables

The study employs one dependent variable, two independent variables, plus three control variables. The definitions and measurement procedures for each appear below.

7.3.1 The dependent variable: earnings management

This study considers Earnings management as its dependent variable. The dispositional variation used to adjust reported earnings relative to what would be derived from applying neutrality standards to accounting, is called Earnings management. Earnings management cannot be directly observed, so, as a proxy for discretion, the measurement relies on the reported profit. Other things being equal, more of this indicator means more extensive earnings management in the firm under consideration. The measure used here integrates the real and accounting dimensions of earnings management into a single indicator, which is denoted y . This indicator is the dependent variable in every model.

7.3.2 The first independent variable: audit firm rotation

The first independent variable, audit firm rotation, is represented as x_1 . This variable describes whether a company changed its external audit firm during the year. Its dummy coding assigns one whenever the audit provider

changed; if there was no replacement, the assigned value is zero. Auditor rotation needs to be studied because it has two contradictory effects on auditor independence. Periodic audit firm rotation has the potential to refresh the relations surrounding the engagement and to diminish the familiarity that might erode independence when tenure becomes prolonged. From this point of view, changing the appointed auditor should reinforce earnings management practices. A competing view holds that an auditor appointed recently lacks the client-specific knowledge accumulated gradually over time. Because this knowledge helps identify manipulation, its initial absence could temporarily weaken the auditor's constraining effect. Thus, the sign and significance of this variable tell us which of these effects dominates the Iraqi market.

7.3.3 The second independent variable: audit committee size

The second independent variable is audit committee size, denoted x_2 . This is the number of members on the audit committee of the company for the reporting year. The audit committee has oversight responsibilities for both the company's financial reporting and the work of the external auditor. Size of the committee is often used as an indicator of how well the body can fulfill the oversight responsibility within the company. A larger committee is a stronger signal lending provide comfort that discretionary adjustments to reported earnings are limited. Beyond a certain point, adding additional members may add little value. This variable examines the impact on this discretionary discretionary adjustment on reported earnings

7.3.4 The control variables

Each model is composed of three control variables to account for company attributes that have been consistently found to impact earnings management. Each model is composed of three control variables to account for company attributes that have been consistently found to impact earnings management. The size of the firm, represented as labeled size, is measured by applying a natural log transformation to total assets. This control is based on the assumption that large firms will, in practice, face more thorough examinations and will have more sophisticated corporate reporting systems. Financial leverage, labeled lev, is equal to total liabilities/total assets. The measure controls for the incentives that firms that are financially leveraged may face to manage reported earnings in such a way that their debt covenants are satisfied. Return on assets, labeled roa, is equal to pre-tax net income/total assets. It controls for how managers set target profitability goals within the firm.

7.4 Model Specification and Hypotheses

Separate regression models test how the two audit characteristics relate to earnings management. Each model estimates one independent variable's effect while holding constant firm size, financial indebtedness, and return on assets throughout the analysis. The model's overall specification appears in the following form.

$$EM_{i,t} = \alpha_i + \beta_1 X_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 LEV_{i,t} + \beta_4 ROA_{i,t} + \epsilon_{it}$$

In the equation, EM represents earnings management and X represents the independent variable tested, either audit firm rotation or audit committee size. All other terms correspond to the control variables. Using this foundation, three hypotheses are tested in their respective null forms.

H1: Among companies traded through the Iraqi Stock Exchange, neither audit firm rotation nor audit committee size has a significant correlation with earnings management when the two audit characteristics are considered.

H2: For companies traded through the Iraqi Stock Exchange, audit firm rotation has no statistically significant impact on earnings management.

H3: For companies traded through the Iraqi Stock Exchange, audit committee size has no statistically significant impact on earnings management.

The first hypothesis is examined through the correlation matrix, while the second and third are examined through the regression models. The models are estimated by Feasible Generalized Least Squares for the reasons set out in the diagnostic tests below.

This section presents the empirical results in the order in which the analysis was carried out. It begins with the descriptive statistics, then reports the correlation matrix, which addresses the first hypothesis, and the diagnostic tests, which guide the choice of estimation method. It then presents the estimation of the two models, which address the second and third hypotheses, and closes with a short conclusion.

7.5 empirical results

7.5.1 Descriptive statistics

Table (2) reports the number of observations, the mean, the standard deviation, and the lowest and highest values for each continuous variable, together with the two audit variables. Across the 100 firm-year observations, these statistics concisely describe the dataset's principal characteristics.

Table (2): Descriptive statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
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Earnings management (y)	100	0.623	1.448	0.016	10.207
Audit firm rotation (x1)	100	0.250	0.435	0.000	1.000
Audit committee size (x2)	100	3.500	0.503	3.000	4.000
Firm size (size)	100	16.932	2.916	12.467	23.597
Financial leverage (lev)	100	0.640	1.743	0.001	11.627
Return on assets (roa)	100	0.033	0.079	-0.216	0.461

Source: Stata output

Earnings management statistics include a mean of 0.623, a standar deviation of 1.448, and a range from 0.016 to 10.207. With these statistics for the entire sample, it can be stated that earnings management practice was modest for most firms, while it was extensive for a small number of firms. The small number of firms raises the upper end of the range far beyond the mean, indicating that earnings management was highly skewed rather than moderately evenly dispersed across the sampled firms. Earnings management statistics show a mean of 0.250, indicating that the auditor changed in one quarter of all firm-year observations. The mean audit committee size is 3.500, with membership varying narrowly from three to four. Sampled committees are therefore broadly comparable in size, while auditor change occurs in a minority of the observed company years.

firm size serving as the control variable, is on average 16.932 with a standard deviation of 2.916. Values in the data set range from 12.467 to 23.597. The combination of relatively small companies and significantly larger companies in the sample is appropriate. Financial leverage has an average of 0.640 with a standard deviation of 1.743 and a maximum of 11.627. These numbers indicate that liabilities in the sample exceed assets, a situation present only in a limited number of companies. Return on assets has a meager average of 0.033 with a standard deviation of 0.079, and a data range from -0.216 to 0.461. Consequently, both profitable and loss-making firms appear in the sample. The positive skewness evident in several of these variables is also important in choosing the approach to estimation. It suggests that the residuals will not behave in the way that the ordinary least squares approach assumes.

7.5.2 Correlation matrix

Table (3) contains the correlation matrix for pairwise associations among all study variables; brackets display the level of significance attached to each reported coefficient. The matrix offers an initial indication of relationship direction and strength. It also tests hypothesis one by assessing whether earnings management is correlated with audit firm rotation and audit committee size.

Table (3): Correlation matrix

	(1)	(2)	(3)	(4)	(5)	(6)
(1) y	1.000					
(2) x1	0.110	1.000				
(3) x2	0.182	0.115	1.000			
(4) size	-0.351*	0.107	0.290*	1.000		
(5) lev	-0.029	-0.112	-0.166	-0.094	1.000	
(6) roa	-0.127	-0.127	-0.007	0.079	-0.043	1.000

Source: Stata output. * denotes significance at the 0.05 level.

The matrix associates audit firm rotation weakly and positively with earnings management (0.110). There is no statistical significance. With respect to audit committee size, the positive coefficient is stronger at (0.182), however, significance is reached at the one-tenth level. At this initial bivariate stage, consequently, the two audit

variables do not show a strong or unambiguous correlation with earnings management, a result more relevant to hypothesis one. Among control variables, firm size has a significant negative correlation with earnings management (-0.351), suggesting larger firms engage less in earnings management. The debt ratio and return on assets, however, display weak correlations that are statistically insignificant. The variables that explain have uniformly low intercorrelations. Their largest coefficient is 0.290, observed between audit committee size and firm size. This pattern suggests that multicollinearity should have little effect on the regressions. Regression analysis assesses how audit variables relate to earnings management more completely because, unlike bivariate correlation, it can consider the influence exerted by specific company characteristics in the sample.

7.5.3 Validation (diagnostic) tests

Before estimating the models, three diagnostic tests were carried out to judge how suitable the data are for regression analysis and to guide the choice of estimation method. These tests cover multicollinearity, heteroscedasticity, and autocorrelation, and the results are reported for both models together.

a) The multicollinearity test

The multicollinearity test checks how serious the problem of multicollinearity is in the models. For every variable, the Variance Inflation Factor (VIF) and Tolerance (TOL) were computed. As a general rule, the analysis indicates no multicollinearity when VIF remains below 10 while tolerance exceeds 0.1 for that variable. Table (4) displays all the reported results.

Table (4): The multicollinearity test results

Variables	First model (x1)		Second model (x2)	
	VIF	TOL	VIF	TOL
Independent variable	1.043	0.958	1.117	0.895
Firm size	1.027	0.974	1.102	0.908
Financial leverage	1.022	0.978	1.033	0.968
Return on assets	1.028	0.973	1.009	0.991
Mean VIF	1.030		1.065	

Source: Stata output

Table (4) shows that for both models, multicollinearity is absent. For each model, all VIF values approach one, and all are well below the threshold of 10. Furthermore, all tolerance values draw close to one, and all are well above the limit of 0.1. The mean VIF came to 1.030 in the first model, and 1.065 in the second. With respect to the correlation matrix, the remaining explanatory variables, based on the correlation matrix, are reasonably independent of the other variables, therefore, the regression estimates are not under threat from severely inflated standard errors, nor are they under threat from instability in regression coefficients.

b) The heteroscedasticity test

Homoscedasticity is a fundamental ordinary least squares assumption requiring error terms to exhibit variance that remains constant. The Breusch-Pagan procedure tested a null hypothesis specifying constant error variance; consequently, rejection indicates that heteroscedasticity exists in the model. Table (5) displays all the reported results.

Table (5): The heteroscedasticity test results

Model	Independent variable	Breusch-Pagan	P-value
First model	Audit firm rotation (x1)	100.73	0.0000
Second model	Audit committee size (x2)	131.99	0.0000

Source: Stata output

According to table (5), heteroscedasticity affects each of the two models. For model one, the Breusch-Pagan statistic equals 100.73; for model two, it equals 131.99. A p-value of 0.0000 applies to both cases, leading to firm rejection of the null hypothesis specifying constant error variance across the models. This is in line with the strong skewness found in the descriptive stats, and suggests the use of an estimation method correcting for non-constant error variance, instead of plain OLS.

c) The autocorrelation test

The autocorrelation test checks how much first-order autocorrelation is present in the models. The Wooldridge test was applied. When its p-value falls below 0.05, the null hypothesis specifying no first-order autocorrelation must be rejected. Table (6) displays all the reported results.

Table (6): Wooldridge autocorrelation test results

Model	Independent variable	Wooldridge F	P-value
First model	Audit firm rotation (x1)	448.157	0.0000
Second model	Audit committee size (x2)	535.828	0.0000

Source: Stata output

Table (6) indicates that first-order autocorrelation also affects both of the estimated models. Wooldridge statistics equal 448.157 for model one and 535.828 for model two. Because both cases have a p-value of 0.0000, the null hypothesis specifying an absence of autocorrelation must be rejected decisively across both models. The residuals are therefore correlated over time, which would render the standard errors of an ordinary least squares estimation unreliable.

Taken together, the diagnostic tests determine the choice of estimation method. The models are free of multicollinearity, but both suffer from heteroscedasticity and from first-order autocorrelation. Because ordinary least squares assume constant error variance and independent residuals, it would not give efficient estimates or reliable standard errors under these conditions. Hence, the study estimates both models using Feasible Generalized Least Squares (FGLS) which takes into account both non-constant variance of errors and correlated residuals and yields efficient, unbiased and consistent estimates.

7.5.4 Estimation of the models

The two models are now estimated by FGLS. Model one evaluates hypothesis two by estimating how audit firm rotation affects earnings management. Model two then evaluates hypothesis three, which concerns the effect produced by audit committee size.

a) The impact of audit firm rotation on earnings management

Table (7) presents the FGLS regression results for the effect of audit firm rotation on earnings management, controlling for firm size, leverage, and return on assets.

Table (7): The impact of audit firm rotation on earnings management

Variables	β	S.E.	t-value	P-value	Significance
Audit firm rotation (x1)	0.107	0.085	1.255	0.209	Insignificant
Firm size (size)	-0.114	0.014	-8.074	0.000	Significant
Financial leverage (lev)	-0.023	0.032	-0.734	0.463	Insignificant
Return on assets (roa)	-0.585	0.632	-0.926	0.354	Insignificant
Constant	2.450	0.253	9.698	0.000	Significant
Wald chi-square	66.002				
Prob > chi-square	0.000				
Observations	100				

Source: Stata output

Table (7) indicates that audit firm rotation does not significantly affect earnings management: its estimated coefficient is 0.107 and the corresponding reported p-value equals 0.209. The positive coefficient implies that changing audit firms corresponds to slightly greater earnings management. This pattern accords with an explanation in which an auditor appointed recently lacks the client-specific knowledge required to restrict manipulation. However, statistical significance is absent from the estimated effect; accordingly, the null hypothesis H2 is retained rather than rejected. The available Iraqi evidence therefore indicates no demonstrable effect of Audit firm rotation on earnings management within this market.

For the control variables, firm size produces a strong, significantly negative effect (coefficient -0.114, $p = 0.000$). The level of earnings management is therefore significantly lower among larger companies. This finding agrees with the previously reported correlation and supports an explanation based on bigger firms receiving closer external scrutiny. Financial indebtedness and return on assets are insignificant. Significance is established for the

overall model: its Wald chi-square equals 66.002 and its p-value equals 0.000. Taken together, the variables account for a meaningful share of variation in earnings management, although firm size is the principal factor driving this explanatory effect.

b) The impact of audit committee size on earnings management

Table (8) presents the FGLS regression results for the effect of audit committee size on earnings management, controlling for the same firm characteristics.

Table (8): The impact of audit committee size on earnings management

Variables	β	S.E.	t-value	P-value	Significance
Audit committee size (x2)	0.474	0.115	4.139	0.000	Significant
Firm size (size)	-0.132	0.023	-5.691	0.000	Significant
Financial leverage (lev)	0.008	0.034	0.246	0.806	Insignificant
Return on assets (roa)	-0.357	0.794	-0.450	0.653	Insignificant
Constant	1.026	0.223	4.601	0.000	Significant
Wald chi-square	34.900				
Prob > chi-square	0.000				
Observations	100				

Source: Stata output

Table (8) indicates that audit committee size affects earnings management positively and with clear statistical significance; the estimated coefficient is 0.474, while the corresponding p-value equals 0.000. H3 is therefore rejected because the significant estimate indicates that audit committee size affects earnings management in the sample. Nevertheless, the positive direction contradicts expectations based on monitoring: a larger audit committee corresponds to more earnings management rather than a reduction in such conduct.

This surprising result should be interpreted with caution. A possible explanation concerns audit committee membership, which varies only between four and three individuals across the sampled companies. This narrow and small measure may be too formal to represent the committee's actual effectiveness. A larger committee reflects compliance with a governance requirement rather than active oversight. For example, in a market where governance structures are adopted in form rather than in substance (e.g. when members are appointed for reasons other than their ability to scrutinise management), a larger committee may be associated with weaker as opposed to stronger monitoring. A proper interpretation is therefore that audit committee size itself neither restricts earnings management in Iraq nor prevents a positive association with it. The finding should not be read as evidence that adding committee members causes greater manipulation. Control variables: Once again, firm size produces a strong effect that is significantly negative (coefficient -0.132, $p = 0.000$), whereas financial indebtedness and return on assets remain insignificant. Overall model significance was established: Wald chi-square (34.900), $p = .000$.

7.5.5 Conclusion of the empirical results

Empirical analysis clearly depicts how audit characteristics relate to earnings management in Iraq. Regarding the examined mechanisms, however, that picture provides little encouragement about their effective operation within this national setting. For hypothesis one, the correlation matrix indicated that neither audit firm rotation nor audit committee size had a strong or significant bivariate association with earnings management. The correlation evidence therefore offers broad support for the first null hypothesis. For hypothesis two, regression estimates indicated that audit firm rotation did not significantly influence earnings management after company characteristics were held constant. The second null hypothesis therefore remains unrejected. For hypothesis three, audit committee size instead produces a statistically meaningful influence; consequently, the third null hypothesis must be rejected. Despite this significance, the estimated direction is positive, not negative. It conflicts with expectations that stronger committee oversight should restrict earnings management.

Considered jointly, these findings indicate that formally established audit mechanisms examined here did not constrain earnings management effectively in Iraq throughout the full interval covered by the analysis. Changing the auditor has no material effect, whereas a larger audit committee corresponds to greater earnings management instead of reducing that behavior. Thus, governance structures may exist in form but not in substance, i.e. without exercising real oversight. The only factor that is consistently and statistically significant in reducing earnings management in both models is firm size. This implies that the discipline caused by the increased visibility and

scrutiny of the larger firms has a greater effect in constraining earnings management than the specific audit mechanisms under review. This pattern accords with broader concerns in prior scholarship that arrangements for audit and governance depend heavily on their institutional setting. Mechanisms operating successfully within advanced markets might produce different effects when transferred directly into emerging economies whose institutional conditions are not equivalent.

7.6 Conclusion

This study provides an empirical investigation of how audit firm rotation and audit committee size affect earnings management among companies traded through the Iraqi Stock Exchange. The balanced panel contains 20 firms observed across five years, yielding 100 firm-year observations drawn from the market's agricultural, industrial, service, and financial business sectors. For earnings management, the study uses the dependent variable; audit firm rotation and audit committee size are independent variables. The control variables comprise financial leverage, return on assets, and firm size. The analysis was conducted through application of the FGLS method.

A sequence of diagnostic procedures preceded hypothesis testing so that an appropriate method of estimation could be selected. The Multicollinearity test examines whether the explanatory variables remain mutually independent. Every calculated VIF is approximately equal to one. Both models showed heteroscedasticity as per the Breusch-Pagan test and first order autocorrelation as per the Wooldridge test. The Ordinary Least Squares was not appropriate for the estimation because of the non-constant variance of errors and the correlation between residuals over time. Applying the Feasible Generalized Least Squares method produced estimates that were both unbiased and efficient.

The findings indicated that changing audit firms did not significantly affect earnings management. Consequently, the second null hypothesis remains unrejected by the available empirical evidence. Membership of an audit committee, however, produced an influence that was positive and statistically significant; the third null hypothesis was rejected, although the estimated direction contradicted the expected monitoring relationship. Bivariate correlation evidence, however, identified no statistically meaningful association linking earnings management with either of the audit variables. This finding provides support for null hypothesis one. The only consistent significant determinant reducing earnings management in both models was firm size alone.

Overall findings indicate that, during the examined period in Iraq, formally established mechanisms for audit considered by this study failed to constrain earnings management effectively within the sampled companies. Company visibility and size mattered substantially more than either auditor rotation or the membership size of its audit committee. The findings emphasize how much the institutional setting matters for arrangements governing audits and corporate oversight. Efforts to strengthen financial reporting quality in Iraq should therefore progress beyond merely having formal mechanisms for audit and focus on the substantive oversight that those mechanisms actually deliver.

7.7 Recommendations

Based on these findings, the study offers six recommendations to listed companies, committee members, and regulators whose work concerns the Iraqi Stock Exchange and its audit environment.

First, Iraqi regulators and standard-setters should evaluate the substantive oversight delivered by audit mechanisms rather than merely confirming that such mechanisms formally exist. The association between a larger audit committee and greater earnings management shows that satisfying governance rules only in form does not independently improve financial reporting quality. Attention should consequently move away from committee size and toward the genuine authority, expertise, and independence possessed by its members when they exercise oversight and challenge management decisions.

The second recommendation asks companies to strengthen audit committee member independence and qualifications instead of merely expanding membership in the audit committee. Within the present study, committee membership varied only from four to three, while the estimated direction associated with that narrowly distributed measure was unfavorable. The focus should be on appointing members with real financial expertise and independence of management so that the committee can really scrutinize the reporting process.

Third, the regulatory environment surrounding auditor rotation should be revisited. Because no detectable association links audit firm rotation with earnings management, mandatory rotation in its current implementation appears unable to restrict the behavior that the requirement is intended to control. The regulators should consider if rotation is used in a way which ensures auditor independence or if other measures like rotation of partners or cooling-off periods would be more effective.

Fourth, results indicate that company visibility and size exert stronger disciplinary influence than the examined formal auditing mechanisms in restricting earnings management. Regulators and companies should therefore direct particular attention toward smaller firms. Smaller listed firms do not face as much external scrutiny and may therefore require additional monitoring safeguards to compensate for the weaker market discipline to which they are subject.

Fifth, professional organizations should fund the development and training of auditors as well as audit committee members within Iraq, enabling mechanisms that exist formally to perform their substantive functions in practice.

The gap between the formal existence of audit arrangements and the apparent ineffectiveness of those arrangements suggests a need for capacity building rather than further formal requirements.

The sixth recommendation asks Iraqi investors and other users of financial statements to act cautiously. Neither a recently appointed auditor nor a large audit committee should be treated as reliable evidence that reporting quality is high, because this study found that neither characteristic restricted earnings management. Decisions should instead consider substantive oversight and broader evidence about report reliability.

7.8 Suggestions for Further Studies

Taken with limitations, the study's findings identify six avenues that subsequent research could pursue.

First, subsequent studies should broaden the sample beyond 20 firms and cover a period exceeding five years. A larger and longer panel would allow one to estimate the relationships examined here with greater precision and would allow one to use dynamic panel methods that a short panel cannot support.

Second, research should replace the audit committee size measure with richer indicators of audit committee quality. Measures include member independence, financial expertise, meeting frequency, and the share of directors who are independent. Together, these attributes may represent committee effectiveness more accurately than membership count alone and explain why the simple size measure produced its observed association.

Third, subsequent research should estimate accounting practices separately from real earnings management. Because both forms are implemented through different managerial choices and actions, each may respond differently to auditor characteristics. Such distinction is not reflected in the combined measure used in this study.

Fourth, research should examine additional governance and audit attributes, including audit fees, auditor specialization, board independence, ownership structure, and auditor tenure measured by years. Considering these variables could provide a more complete account of what determines earnings management within Iraq's market and its institutional environment.

Fifth, it would be helpful to conduct comparative studies across some emerging or neighboring markets to examine whether the patterns found here are specific to the Iraqi institutional context or a wider feature of emerging markets, which would strengthen the external validity of the findings.

Sixth, subsequent studies could adopt a mixed-methods design. Quantitative evidence could be joined with surveys or interviews involving regulators, auditors, and audit committee members. The resulting evidence could explain why formal audit arrangements appear unable to restrict earnings management and identify improvements to their practical effectiveness..

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