Journal of Finance and Accounting
2023; 11(1): 1-11
http://www.sciencepublishinggroup.com/j/jfa
doi: 10.11648/j.jfa.20231101.11
ISSN: 2330-7331 (Print); ISSN: 2330-7323 (Online)

An Investigation of the Effect of Audit Partner's Disclosure on Earnings Management for Egyptian Companies

Mohamed Khamis Zaytoun[1, 2], Mohamed Mahmoud Elhousy[1, 2]

[1]Accounting Department, Arab East Colleges, Riyadh, Saudi Arabia
[2]Accounting Department, Faculty of Commerce, Damanhur University, Damanhour, Egypt

Email address:
Mohzaytoun@com.dmu.edu.eg (Mohamed Khamis Zaytoun), mmhoushy@arabeast.edu.sa (Mohamed Mahmoud Elhousy)

To cite this article:
Mohamed Khamis Zaytoun, Mohamed Mahmoud Elhousy. An Investigation of the Effect of Audit Partner's Disclosure on Earnings Management for Egyptian Companies. *Journal of Finance and Accounting*. Vol. 11, No. 1, 2023, pp. 1-11. doi: 10.11648/j.jfa.20231101.11

Received: December 8, 2022; **Accepted**: December 29, 2022; **Published**: January 10, 2023

Abstract: International Auditing and Assurance Standards Board (IAASB), Public Company Accounting Oversight Board (PCAOB) and European Union (EU) have made significant efforts to restore the credibility, information, accuracy, and independence of the audit report by requiring disclosure of the audit partner's name and/or the audit partner's signature on the audit report. This research aims to study and examine the relationship between the audit partner's voluntary disclosure and earnings management. In precise, examine whether the audit partner's disclosure leads to lower level of earnings management. The research has also aimed for examining the impact of the audit partner quality on the aforementioned relationship, using a sample from the companies listed in the Egyptian Stock Exchange for the period starting from 2014 to 2018. The results indicated that: (1) there is a statistically significant negative effect for the audit partner disclosure on the absolute value of earnings management proxied by Miller Ratio; which in turn means that the audit partner disclosure increases the earnings quality. (2) There is no effect for the audit partner quality proxied by his industrial specialization on the relationship between audit partner disclosure and the earnings quality. The findings of this research have important consequences for regulators in determining whether the actual effects of a disclosure requirement are as expected, for investors in reducing costs of obtaining information, and for audit committees in making better decisions when hiring auditors.

Keywords: Audit Partner Disclosure, Earnings Management, Audit Partner Quality

1. Introduction

International Auditing and Assurance Standards Board (IAASB), Public Company Accounting Oversight Board (PCAOB) and European Union (EU) emphasize on the importance of meeting the information needs of stakeholders [41, 30]. Revised International Standard on Auditing ISA (2015) 700 required auditing firm to disclose the name of audit partner in the audit report for listed companies [29]. PCAOB requires that the audit partner don't sign the audit report only but also to disclose his name in the auditor's report about those involved in the audit process. With regard to the Egyptian environment, Egyptian Auditing Standard No. (700) requires that the audit report is signed in the personal name of the auditor, or in the name of the auditing firm. Therefore, it can be argued that the Egyptian Auditing Standards left the disclosure of the audit partner optional to the auditor.

From the point of view of IAASB and PCAOB, disclosure of the audit partner can improve earnings management in two ways. First; increasing the auditor's awareness of his accountability to the financial statements' users, which may prompt him to exercise greater professional care when performing the audit process. Second; increased transparency about who is responsible for performing the audit process, which can communicate useful information to investors, which in turn provides an additional incentive for auditing firms to improve the quality of all their audit partners [41, 30].

Consistent with what has been done by regulatory and legislative bodies, accounting research [1, 9, 17, 19, 21, 24, 34] has focused on the personal aspect of audit partner disclosure requirements, and its impact on earnings management. However, they have not identified consistent effects of disclosure on earnings management. On the contrary, they have provided mixed results. Bell [7]; Brown et al. [10]; Blay et al. [9] and Dao et al. [19] concluded that audit partner disclosure affects positively on audit quality, through significant reduction in discretionary Accruals, significant decline in the management's tendencies to achieve targeted profits, higher rate of issuance of conservative reports, increase in profit information, and possibility of discovering material weaknesses in internal control. On the other hand, Abbott et al. [1] and Lee and Levine [35] concluded that audit partner disclosure affects negatively on audit quality, and that an audit partner provides more aggressive, opportunistic, and less conservative judgments after their name is disclosed. Furthermore, Blay et al. [8]; Doxey et al. [24] and Cunningham et al. [17] found no significant effect of audit partner disclosure on audit quality.

Based on the previous; It can be said that regulatory and legislative bodies believe that audit partner disclosure improves the accountability of auditor, improves the transparency of the audit process, and this in turn leads to an increase in audit quality. However, the accounting research provides unclear results regarding the relationship between the audit partner disclosure and the audit quality.

The above raises many questions about the costs and benefits of disclosing the audit partner, and answering them represents the core of the problem of this research, which is: Does disclosing the audit partner affect the earnings management? Does the quality of the audit partner affect the significant and direction of the relationship between audit partner disclosure and earnings management?

This research aims to find empirical evidence of the extent to which there is a relationship between the disclosure of audit partner and the earnings management in the Egyptian professional practice and business environment, and the impact of the audit partner's quality, on the strength and direction of this relationship. By using a sample of companies listed on the Egyptian Stock Exchange for the period from 2014 to 2018.

This research derives its importance both academically and practically through its quest to study the relationship between disclosure of audit partner and earnings management. This is an area worthy of investigation in the Egyptian professional practice environment for two reasons: First; low of litigation risk in the Egyptian environment compared to other countries, therefore; the impact of the disclosure of the audit partner on earnings management in the Egyptian environment is expected to increase further. Second, PCAOB has shown that within the same auditing firm and with quality control systems in place, the quality of each individual audit engagement varies with different audit partner [40]. Gul et al. [28] and Knechel et al. [32] have also concluded that there is a systematic relationship between the quality of audit reports and the characteristics of individual auditors. Therefore, the question of whether audit quality differs during audits with disclosure of the audit partner is an important and worthy consideration.

One of the most important motives of the research is that verifying the effects of audit partner disclosure is beneficial to both; Regulatory and legislative bodies, where they can see if the actual effects of a disclosure requirement are as expected. As well as investors, because it may reduce the costs of obtaining information to make decisions. Finally, audit committees with a view to making better decisions when hiring auditors.

It is outside the scope of this research to study and test the impact of the audit partner's characteristics, such as his age, education, and incentives, on earnings management. The research also focused on measuring earnings management on the measurements used by the majority of accounting research in the field of linking them with the disclosure of the audit partner, and thus the rest of the other usable measurement models are out of the scope of the research.

To achieve the goal of the research, and in light of its limitations, the remainder of it will be organized as follows: first, theoretical framework and hypothesis development. Second, research methodology. Lastly, discussion and conclusion.

2. Theoretical Framework and Hypothesis Development

Disclosure of an audit partner is a relatively recent requirement, therefore; the accounting research that deals with the measurement or analysis of the effects of this disclosure is limited. According to the archival research approach, researchers [2, 7, 10, 11, 13, 14, 19, 36] Verify the effect of disclosure of the audit partner, if any, on the audit output, and increase the accuracy of the audit report. Carcello and Li [12] used a sample of companies in the United Kingdom, and concluded that there was a significant decrease in each of the extraordinary accruals and the tendency to achieve targeted profits, and a significant increase in both the issuance of conservative and informational audit reports. Which means that the review quality has increased.

Consistent with Carcello and Li [12], Chi et al. [14] concluded that disclosure of an audit partner can provide useful information to stakeholders about audit quality, and that an individual audit partner is critical to audit quality along with the reputation of the accounting and auditing firm. This was agreed by Aobdia et al. [2], who found a positive relationship between the quality of the audit partner and the earnings response coefficient of the audit client, and that firms audited by a quality audit partner were able to obtain acceptable debt contract terms. Therefore, it can be said that both the debt market and the equity market interact with the performance characteristics of the audit partner.

Complementing previous accounting research, Liu [36] found that in the post-disclosure period, financial analysts' follow-up of companies increased, and financial analysts' prediction errors and dispersion decreased compared to the pre-disclosure period. In addition, that this disclosure leads to an improvement in the information environment of financial analysts in general, because of an improvement in audit quality. Brown et al. [10] found that partners allow less aggressive reporting techniques when the audit partner is disclosed, and expend more effort during the audit process. Because of the increased level of transparency. on the other hand, when they do not disclose, they accept more vulnerable clients. Similarly, Burke et al. [11] concluded that audit partner disclosure requirements result in higher audit quality and lower audit report issuance delay. The study added that review partner characteristics, including gender, auditor preoccupation, education, and social ties, were not associated with review quality.

Bell [7] concluded that there is a significant decrease in the management's use of extraordinary accruals, and in the management's tendency to achieve or exceed financial analysts' earnings expectations in the period after the disclosure of the audit partner. It did not find a significant change in audit quality, as measured by management's tendency to increase the low earnings figure, or as measured by the correlation between reported earnings and stock returns. The results also showed a decrease in the percentage of shareholders who abstain from voting, or vote against endorsing management's choice of auditor, after disclosure of the audit partner. This was agreed with by Dao et al. [19]. They concluded that disclosure of an audit partner is associated with a lower level of abnormal accruals, and a higher probability that the accounting and auditing firm will detect material weaknesses in internal control.

According to the experimental research approach, academic efforts have been made [9, 10, 20, 22, 33, 43] to identify effects of audit partner disclosure. DeZoort et al. [22] have found that auditors under higher levels of accountability pressures (justification or feedback) make more conservative materiality judgments, and have less judgmental volatility, compared to auditors in under low levels of stress (examination or anonymity). Furthermore, Lambert et al. [33] have concluded that investors are less likely to invest in companies that have been audited by an audit partner whose name is related to the reporting firm and that, given mandatory disclosure of the audit partner, perform customer is closely associated with the partner and his reputation, which may affect the partner's accountability, motivation and independence. In the same context, Brown et al. [10] performed an experiment on mandatory disclosure of the audit partner, and concluded that disclosure of the audit partner is associated with higher audit quality (measured by increased audit efforts and decreased opportunistic behavior of financial reports).

In line with the source credibility theory, Schlueter and Ratzinger-Sakel [43] and Demek et al. [20] agreed that non-professional investors already understand the value significance of disclosure of the audit partner and incorporate it into their assessments of the credibility of the auditor's opinion, and that they evaluate the credibility of the auditor's opinion on It is much higher in the case of disclosure of the audit partner than in the case of non-disclosure (this applies to unmodified, conservative and adverse audit opinions especially when the audit client is in poor financial condition). This was supported by Blay et al. [9], who concluded that disclosure of the audit partner reduces the likelihood of incorrect reporting in the audit report compared to non-disclosur.

According to the analytical research approach, Carcello and Santore [13] studied the effect of the requirement to disclose the audit partner, and developed an analytical model for the auditor's reservation and the behavior of his report in the case of both disclosure and non-disclosure of the audit partner. They explained that if the audit partner is disclosed, the burden of reputation is transferred from the accounting and auditing firm to the audit partner. Therefore; 1) the audit partner will increase the resources used in the audit, and therefore; the accuracy of the audit report should increase, but the total rewards for all partners will decrease. and 2) the audit partner may issue a more conservative report than the accounting and auditing firm would prefer and 3) the effect of disclosure of the audit partner may be more pronounced in particularly large accounting and auditing firms.

In contrast to the results of previous archival, experimental and analytical accounting research, the results of some accounting research [9, 28, 24, 17] did not find a significant effect of disclosure of the audit partner on earnings management. Blay et al. [8] used several accrual quality measures to explain the requirements for audit partner signature on earnings management in the Netherlands, and found no significant relationship between audit partner disclosure and earnings management. Blay et al. [8] assumed that accountability and audit quality in the Netherlands were already sufficient, and at high levels, and therefore the earnings management did not differ in the post-disclosure period from the pre-disclosure period. In this regard, Jiang et al. [31] that was applied to the audit market in China, where the law requires the adoption of the audit report by two audit partners with disclosure of their names, failed to obtain evidence of improved audit quality, but obtained evidence that audit quality is significantly affected by the economic incentives of the audit partner.

This was supported by Doxey et al. [24], who concluded that there was no evidence of investor response to disclosure of the audit partner or to disclosure of other participants in the audit process. in the same context, Cunningham et al. [18] showed that both audit quality and audit fees did not change after the disclosure of the audit partner, given that the accountability of the audit partner was already high in the United States, and because the disclosure of the audit partner in the audit report was unclear and was not timely as intended by the PCAOB.

In addition, accounting research [3, 12, 7, 1, 21, 34] revealed some negative effects associated with disclosure requirements. compared to the audit partner, including lower audit efficiency [3], and higher audit fees [12, 7, 21, 35] agreed that audit fees significantly increased in the post-disclosure period, and these results indicate that the audit partner increases the audit fees due to the liability risks associated with disclosure (such as insurance costs and reputational costs, and not because of the increase in time or effort). and more conservative auditing processes. Carcello and Santore [13] noted that because of inconsistent incentives between the partner and the accounting and auditing firm, partners have a higher likelihood of reporting more conservatively compared to the accounting and auditing firm's preferences. In addition, more opportunistic judgments. Abbott et al. [1] agreed that there was a significant increase in the propensity to issue a modified audit report on going concern after disclosure of the audit partner, because disclosure increased perceived litigation risk, causing a shift in audit reporting philosophy.

In an experiment, Cianci et al. [16] tested the effect of the partner disclosure requirement on its judgments. The results showed that the audit partners use more aggressive and opportunistic accounting methods in light of the disclosure of the audit partner. In the same context, Deng et al. [21] concluded that in the event of disclosure of the audit partner, the accounting and auditing firm may distort the image of the audit partner - at the expense of low audit quality - in order to curb the partner's career advancement and retain the clients involved, in the first year After disclosure, partners aggressively reduce audit fees to maximize their career advancement, but after more than a year, the net effect of disclosure on audit fees is positive.

Through a mathematical model, Lee and Levine [35] found that while disclosure of an audit partner increases the incentives of individual partners to provide high-quality audits, it might simultaneously reduce the accounting and auditing firm's incentives to maintain good systems of internal quality control, which leads to a decrease in the audit quality. They explained that the level of external oversight over the audit is critical in determining whether the disclosure of the audit partner enhances the audit quality or not.

In the same context, Abbott et al. [1] concluded that there was a statistically significant increase in the real earnings management activity after the disclosure of the audit partner, justifying this by the fact that disclosure led to an increase in audit quality, and that this effect led to the management using management activities real profits. Conversely, Liu [36] did not find a significant change in the tendency to use more accrual earnings management and/or real earnings management, and these results allay concerns that managers may resort to more real earnings management after disclosure of the audit partner.

The researchers believe that most of the accounting research that dealt with the measurement and analysis of the disclosure of the audit partner was interested in studying its relationship to earnings management, however, the results of the accounting research did not agree with regard to the nature of this relationship. Based on the foregoing, the researcher cannot anticipate the nature and direction of this relationship in the Egyptian business environment and professional practice. Accordingly, the first hypothesis of the research can be derived in its alternative form as follows:

The first hypothesis: audit partner disclosure affects earnings management of companies listed on the Egyptian Stock Exchange.

On the other hand, the accounting research [6, 26, 27] takes the analysis point of view at the firm-level perspective or the office-level perspective when verifying from the relationship between auditor characteristics and earnings management. Accounting research implicitly assumes that through unified quality control systems within the organization and knowledge sharing systems, audit quality remains regular [46], and recognizing the possibility of the audit partner's characteristics affecting the level of engagement quality other than, or besides, quality control systems, accounting research began [44, 45, 14] in driving quality analysis at the audit partner level, and suggests that the impact of audit partner disclosure on audit quality depends on individual audit partners.

In this context, Balsam et al. [4] concluded that companies that are audited by specialized industry auditors have higher profit response coefficients compared to companies that are reviewed by non-industrial auditors. Wang et al. [44] concluded that the quality of the audit partner affects the earnings management, and that the past performance of the audit partner determines the probability of reissue of the audit client's future financial statements. Moreover, Chi et al. [14] found a positive relationship between the audit partner's prior experience with the client and audit quality in the early years of the audit process, but not in later years, and between experience and creditors' perception of audit quality. Wilson et al. [45] also concluded that the relationship between review partner disclosure and perception of auditor negligence is explained by trust in the partner.

The researchers believe that the relationship between the disclosure of the audit partner and the earnings management can be affected by the quality of the audit partner itself, as measured by its industrial specialization. Each audit partner has a unique impact on earnings management that can be explained by some of its characteristics. Therefore, the second hypothesis of the research can be derived in its alternative form as follows:

The second hypothesis: The effect of audit partner disclosure on earnings management of the companies listed on the Egyptian Stock Exchange varies according to the quality of audit partner himself.

3. Research Methodology

To test the research hypotheses, an empirical study was conducted on a sample of 67 non-financial stock companies listed in the Egyptian Stock Exchange, provided that the Central Auditing Organization is not audit firm that audited the financial statements individually, that the company belongs to an economic sector that includes a number of companies greater than or equal to 10 companies at least, and the availability of independent annual financial reports for the company over a period of five years from 2014 to 2018[1]. Table 1 shows the study population and sample. Table 2 also shows the number and percentage of the study sample companies according to the sectors to which they belong.

Table 1. *The study population and sample.*

Statement	Number
The study population is all joint stock companies listed on the stock exchange	223
(-)Companies of the banking sector and the financial services sector	(51)
(-)Companies belonging to sectors with less than 10 companies	(44)
(-)Companies belonging to sectors for which information is not available for 10 companies	(32)
Initial sample size	96
(-)Companies for which the necessary information for the study is not available	(17)
(-)Companies that prepare their financial statements in a currency other than the Egyptian pound	(1)
(-)Companies whose financial statements are reviewed by the Central Auditing Organization individually	(9)
(-) Companies that changed the beginning of their fiscal year during the study period	(2)
final sample size	67 firm

Table 2. *The number and percentage of the study sample companies according to the sectors.*

Sector	Sector population	Sample	Ratio within the sample
Real estate sector	29	22	32.84%
Construction and building materials sector	23	18	26.87%
Food and beverage sector	28	16	23.88%
Services sector, industrial products and cars	16	11	16.42%
Total number of companies	96	67	100%

Research model:

Multiple linear regression will be used to test the research hypotheses, which are concerned with the relationship between disclosure of the audit partner and earnings management, in addition to the effect of the quality of the audit partner on this relationship, as follows:

First: The model for testing the relationship between disclosure of the audit partner and earnings management through the following regression model, based on [15, 19, 36, 1]:

$$|EM_{it}| = \beta_0 + \beta_1 DIS_{it} + \beta_2 SIZE_{it} + \beta_3 LVRG_{it} + \beta_4 GROWTH_{it} + \beta_5 EARNVOL_{it} + \beta_6 CFO_{it} + \beta_7 CFOVOL_{it} + \beta_8 LOSS_{it} + \beta_9 ROA_{it} + \beta_{10} TENURE_{it} + INDUSRTY\_INDICATORS + YEAR\_INDICATORS + €$$

Second: A model for testing the impact of audit partner quality on the relationship between audit partner disclosure and earnings management, based on [15, 19, 36, 1]:

$$|EM_{it}| = \beta_0 + \beta_1 DIS_{it} + \beta_2 EXPERT_{it} + \beta_3 DISEXPERT_{it} + \beta_4 SIZE_{it} + \beta_5 LVRG_{it} + \beta_6 GROWTH_{it} + \beta_7 EARNVOL_{it} + \beta_8 CFO_{it} + \beta_9 CFOVOL_{it} + \beta_{10} LOSS_{it} + \beta_{11} ROA_{it} + \beta_{12} TENURE_{it} + INDUSRTY\_INDICATORS + YEAR\_INDICATORS + €$$

whereas:

Dependent Variable: Earnings Management (EM)

According to [19, 36, 1], The researcher relied in the absolute value of earnings management in terms of Miller's ratio, Miller [38] has created a ratio for the relationship between the change in working capital and cash flow from operating activities, where its value is zero in the absence of manipulation, but if its value differs from zero, then this it is an indication of earnings manipulation.

$$\text{Miller Ratio} = \Delta(\Delta WC/CFO)$$

Where: ΔWC indicates the change in working capital, and CFO indicates cash flow from operating activities.

Independent Variable: Audit Partner's Disclosure (DIS):

According to [19, 36, 1], It is measured by an indicator variable equal to (1) if the auditor's name is disclosed in the audit report of the company at the end of the period (t) and takes a value of (zero) otherwise.

Moderating variable: quality of audit partner:

The quality of the audit partner was measured in terms of his industrial specialization. In line with [39], it used to measure the market share of the audit partner within the audit services market in a particular sector, and it was calculated as the total number of clients of the partner in the sector to the total number of clients of all audit partners in the sector. It takes the value (1) if the partner achieves the highest market share in the sector, and takes the value zero otherwise. While the sensitivity analysis depends on measuring it in terms of the size of the auditing firm. It was measured through an indicator variable equal to (1) if the company's financial statements were audited by one of the auditing firms partnering with one of the four major auditing firms, and equal to (zero) otherwise.

Control variables:

Accounting research [5, 15, 19, 23], a set of control variables are included as follows:

1) Firm size: measured by the natural logarithm of the book value of total assets at the end of the period.
2) Financial leverage: measured by the ratio of total liabilities to the book value of total assets at the end of the period.
3) Sales growth rate: measured by the change in sales between the previous period and the current period.
4) Earnings volatility: measured by the standard deviation of the rate of return on assets over the previous three years.
5) Operating cash flows: measured by dividing the cash flows from operating activities by the book value of total assets at the end of the period.

6) Return on assets: measured by dividing the net earnings by the average assets during the year.
7) Operating cash flow volatility: measured by the standard deviation of operating cash flows over the previous three years.
8) Loss: measured by an indicator variable equal to (1) if the company achieved net negative income before the exceptional items at the end of the period (t) and equal to (zero) otherwise.
9) length of period between auditor and company: two binary variables were used to measure this variable, so that the first variable takes the value (1) if the audit partner has been with audited company for a period of less than, or equal to two years, and takes the value (zero) otherwise. The second variable takes the value (1) if the audit partner continues with audited company for a period less than, or equal to, five years, and takes the value (zero) otherwise.

Descriptive statistics:

Table 3 presents the descriptive statistics for all study variables used in testing the relationship between disclosure of the audit partner and earnings management, and the impact of the quality of the audit partner on this relationship:

Table 3. *Some descriptive statistics of the study variables for the combined period*.*

Variable	Mean	Standard deviation	Minimum	Maximum
|EM|	5.889	12.5963	0.00294	158.54
DIS	0.4239	0.4949	0	1
EXPERT	0.2746	0.565	0	5
SIZE (m)	20853.78	4446.35	31.057	36225.75
LVRG	0.4463	0.4606	0.0008	1.2894
GROWTH	0.4073	2.683	-1	46.703
EARNVOL	0.0383	0.0398	0.0001	0.2768
CFO	0.02873	0.1453	-1.427	1.1914
ROA	0.0533	0.0805	-0.4039	0.5419
CFOVOL	0.0797	0.1112	0.0012	0.945
LOSS	0.173	0.3789	0	1
TENURE1	0.2537	0.4358	0	1
TENURE2	0.5104	0.5006	0	1

*The number of views for the five years combined is 335 views.

Table 3 shows that the mean absolute value of earnings management (the dependent variable in the analysis), measured in terms of Miller's ratio, amounted to (5.88) with a standard deviation of (12.59). These percentages are consistent with the results of accounting research, which found the prevalence of earnings management practices in developing countries and emerging markets as a result of weak laws that protect the rights of investors [42, 37, 25]. In addition, 42.39% of the views the audit partner was disclosed in the audit report with a standard deviation (49%). As for the industrial specialization of the audit partner, the mean (0.27) swallowed an audit client with a standard deviation of (0.56). With regard to the control variables, the mean size of the companies under study amounted to (20853.78) million pounds, with a standard deviation of (4446.35) million pounds, and the mean degree of financial leverage for companies was (44.6%), with a standard deviation of (46.6%). The descriptive statistics for the other control variables are largely consistent with the accounting research.

Table 4. *Matrix of correlation between some study variables for the combined period*.*

Variable	|MEM|	DIS	EXPERT
|EM|	1	-0.1*** (0.067)	-0.3 (0.585
DIS	-0.038 (0.486)	1	0.30* (0.000)
EXPERT	0.085 (0.12)	0.328* (0.000)	1

*The number of views for the five years combined is 335 views.

The numbers marked with an asterisk indicate that the correlation is significant at a level less than 1%, 5%, or 10%, and the numbers in brackets indicate the level of significant correlation.

The numbers on the left side from above represent the Pearson Correlation coefficient, while the numbers on the right side from the bottom represent the Spearman's rho coefficient

Table 4 shows the correlation matrix between some of the study variables. The results of the correlation analysis indicate that the absolute value of earnings management, in terms of the Miller ratio, is insignificantly inversely (Pearson's and not significantly Spearman's) associated with disclosure of the audit partner, and non-significantly inversely (Pearson's and positively Spearman's) with the industry specialization of the audit partner. Finally, the disclosure of the audit partner is significantly correlated with its industrial specialization.

The results of the research hypothesis test:

To achieve the objective of the research and test its hypothesis, multiple linear regression analysis models were relied upon using Robust Regression in estimating the parameters of the regression model, using the statistical analysis program Stata Version 14.2, and the P value was used to judge the significance of the test statistic at a confidence level of 95%, and a significant level of 5%. The following is a presentation of the results of the research hypothesis test:

Results of the first hypothesis test of the research:

The first hypothesis aims to test the relationship between the disclosure of the audit partner and the earnings management. Table 5 shows the results of the statistical analysis of the regression of the earnings management, measured in calculated using the Miller ratio on the disclosure of the audit partner, in addition to the control variables.

Table 5. *Results of regression analysis to test the first research hypothesis.*

Variable	Expected signal	Regression coefficient	t-test value	P. Value	Variation inflation factor
constant		3.312	0.28	0.777	
DIS	-	-4.335	-2.02	0.044	1.837
SIZE	-	0.2539	0.45	0.656	1.407
LVRG	+	8.145	1.49	0.137	1.408
GROWTH	+	-0.0371	-0.019	0.853	1.063
EARNVOL	+	65.19	2.09	0.037	1.121
CFO	-	-11.153	-2.44	0.015	1.3158
ROA	-	-6.798	-0.54	0.592	1.317
CFOVOL	-	-29.425	-2.1	0.037	1.173
LOSS	+	-0.661	-0.22	0.827	1.244
TENURE1	+	2.85	1.79	0.074	1.426
TENURE2	-	-5.484	-1.91	0.057	1.801
INDUSRTY	taken into account				
YEAR	taken into account				
model statistics					
F= 1.89			P. Value = 0.0396		
Adj R^2= 0.0418			Durbin-Watson = 1.935		

The results of the statistical analysis in Table 5 indicate the significance of the model in explaining earnings management practices using Miller's ratio (the dependent variable); where the statistical value (F) is 1.89 with a significant level (P. Value) less than 5%. The value of the Durbin-Watson statistic is 1.935, which is very close to the value (2); this supports the independence of the residuals in the regression model, that is, there is no autocorrelation between the residuals. On the other hand, we find that the values of the VIF for all independent or control variables are less than (10); and therefore; There is no multicollinearity between the independent or control variables. The Adj R^2 coefficient is (4.18%), which means that (4.18%) of changes in earnings management practices using Miller's ratio are explained by changes in the independent and control variables; These are: the audit partner disclosure, company size, financial leverage, sales growth rate, earnings volatility, operating cash flows, return on assets, operating cash flow volatility, loss, the audit firm size, and the length of the association period between the auditor and the company. It is noted that the explanatory power of the model is low, which is consistent with the results of accounting research [15, 35, 19, 1] in the field of disclosure of the audit partner and earnings management, which calls for more researches to discover more independent variables that can explain changes in earnings management practices.

Consistent with the first hypothesis, the results of the statistical analysis show that there is a significant negative effect of the audit partner disclosure on the absolute value of earnings management measured using Miller's ratio, compared to not disclosing the audit partner using the (t) test, where the regression coefficient for the disclosure variable was -4.335, the value of t-test (t) -2.02, and P. Value 0.044; This indicates that companies achieve a lower level of earnings management practices under voluntary disclosure of the audit partner. This means accepting the first alternative hypothesis that the audit partner disclosure affects the earnings management of companies listed on the Egyptian Stock Exchange.

The results of this hypothesis are consistent with several studies [12, 11, 7, 19] that concluded that there is a significant decrease in earnings management and the tendency to achieve the target earnings level in the post period of the audit partner disclosure compared to the pre-disclosure period, which indicates an increase in the earnings quality. On the other hand, the results of this hypothesis were different with many studies [8, 18, 21] that did not find a significant effect of disclosure of the audit partner on the earnings quality. The researchers believe that the disclosure of the audit partner gives the audit partner a strong incentive to protect his reputation from the losses of the audit failure, which in turn leads to an increase in the audit partner's awareness of being accountable for his opinion, and this is reflected in the form of a positive impact on the behavior of the audit partner, and changing the behavior of the audit partner may lead to the effectiveness of the nature, extent and timing of audit procedures and, consequently, better audit quality. This is consistent with the view of the IAASB, the PCAOB and the EU.

Regarding control variables, the results are consistent with the pervious accounting research. The results of the statistical analysis indicate that there is a significant negative effect (P. Value < 0.05) for each of the operating cash flows and the volatility of operating cash flows on the absolute value of earnings management measured using the Miller ratio; This is because companies with higher operating cash flows have less incentive to implement earnings management practices, a finding consistent with accounting research [19]. And there is a significant positive effect (P. Value < 0.05) of earnings volatility on the absolute value of earnings management measured using Miller's ratio. And there is a significant positive effect (P. Value < 0.01) for the length of the association period between the auditor and the company (when the association period was no more than two years), and there is a significant negative effect (P. Value < 0.01) for the length of the association period between the auditor and the company (when the association period was not more than five years), on the absolute value of earnings management measured using the Miller ratio, and this is consistent with accounting research [32] that argues that audit partner rotation may be a more effective way to improve audit quality when the engagement period is two to five years. Surprisingly, there is an insignificant positive relationship between company size and the absolute value of earnings management measured using the Miller ratio, which is consistent with Liu [36], and Fouda [25] studies, where they indicated that large companies use earnings management practices to avoid government interference and political costs.

Results of the second research hypothesis test:

The second hypothesis aims to test the extent to which the audit partner quality affects the relationship between disclosure of the audit partner and earnings management. To test this, the researchers retested the regression model after including the audit partner quality variable measured by his industry specialization (EXPERT), in addition to including a variable representing the interaction between the audit partner disclosure variable and the audit partner quality (DISEXPERT). In order to verify whether the quality of the audit partner had an impact on the previous relationship, the regression coefficient is relied upon for the variable that represents the interaction between the audit partner disclosure and his industry specialization, so that if the coefficient is significant, this indicates that there is an effect of the audit partner quality on the previous relationship.

Table 6 shows the value of the Adj R^2 coefficient, the explanatory power of the model as a whole, and the values and level of significance of the regression model coefficients for the second hypothesis test.

Table 6. *Results of regression analysis to test the second research hypothesis.*

variable	expected signal	β	t-test	P. Value	VIF
constant		-2.576	-0.2083	0.594	
DIS	-	-5.819	-2.17	0.031	2.33
EXPERT	-	-6.958	-1.43	0.153	5.506
DISEXPERT	+	7.0359	1.51	0.133	6.066
SIZE	-	0.5943	0.99	0.321	1.515
LVRG	+	8.259	1.49	0.138	1.41
GROWTH	+	-0.053	-0.24	0.808	1.064
EARNVOL	+	71.783	2.01	0.045	1.179
CFO	-	0.9357	0.14	0.89	1.339
ROA	-	-9.88	-0.68	0.495	1.344
CFOVOL	-	-30.375	-2.07	0.039	1.18
LOSS	+	-0.8846	-0.27	0.784	1.25
TENURE1	+	2.752	1.67	0.095	1.43
TENURE2	-	-5.119	-1.88	0.06	1.817
INDUSRTY			taken into account		
YEAR			taken into account		
model statistics					
F = 1.53			P. Value 0.050		
Adj R^2 =0.0453			Durbin-Watson 1.92		

The results of the statistical analysis in Table 6 indicate the significance of the model in explaining earnings management practices using Miller's ratio (the dependent variable); where the statistical value (F) is 1.53 with a significant level (P. Value) less than 5%. The value of the Durbin-Watson statistic is 1.921, which is very close to the value (2); this supports the independence of the residuals in the regression model, that is, there is no autocorrelation between the residuals. On the other hand, we find that the values of the VIF for all independent or control variables are less than (10); and therefore; There is no multicollinearity between the independent or control variables. The coefficient of Adj R^2 is (4.53%), which means that (4.53%) of changes in earnings management practices using Miller's ratio are explained by changes in the independent and control variables. It is noted that the explanatory power of the model is low, which calls for further research to discover more independent variables that can explain changes in earnings management practices.

Consistent with the results of the first hypothesis test, the results of the statistical analysis show that there is a significant negative effect of the audit partner disclosure on the absolute value of earnings management measured using Miller's ratio, compared to not disclosing the audit partner. Where the regression coefficient for the disclosure variable was -5.8196, t-test value was -2.17, and P. Value 0.031; This indicates that companies achieve a lower level of earnings management practices under voluntary disclosure of the audit partner. This supports the acceptance of the first alternative hypothesis that there is a relationship between the audit partner disclosure and earnings management.

The results of the statistical analysis in Table 6 indicate that there is an insignificant negative relationship between the audit partner quality and the absolute value of earnings management measured using the Miller ratio, using the (t) test, where the regression coefficient for the disclosure variable was -6.958, the value of the (t) test -1.43, and the P. value 0.153; This finding indicates that the audit partner quality (measured in terms of number of clients) does not influence earnings management practices; Which in turn means that the earnings quality is not affected.

As for the moderating effect of the audit partner quality on the relationship between the audit partner disclosure and the audit quality, the results of the statistical analysis in Table 6 indicate that there is an insignificant positive relationship between the interactive variable of the audit partner disclosure with its quality and the absolute value variable of earnings management measured using the Miller ratio, The regression coefficient for the interactive variable was 7.0359, the t-test value was 1.51, and the P. Value was 0.133; This result indicates that there is an insignificant effect of the audit partner quality on the relationship between the audit partner disclosure and earnings management. This means the inability to reject nullity, and thus the second alternative hypothesis of the research is rejected, which states that the impact of the auditing partner disclosure on earnings management for companies listed on the Egyptian Stock Exchange varies according to the quality of the auditing partner.

The results of this hypothesis were different with many studies [4, 44, 14] that concluded that the audit partner’s quality affects the quality of the audit assignment as a whole, and that there is a positive relationship between the previous experience of a partner with the client and earnings quality. The researchers believe that the low level of transparency about the audit partner’s quality in the Egyptian professional practice environment leads to the absence of an impact of their quality on earnings management practices. This can also be attributed to the method of measuring the industry specialization in research by the market share of the number of clients of the partner in the sector to the total number of clients in the sector, which calls for the use of the market share of the partner’s clients revenues to the total revenues of the sector, or the natural logarithm of the total assets at the end of the period as alternative measures to measure the industry specialization, or other measures in future research to discover the effect of audit partner quality in accounting research.

4. Discussion and Conclusion

This research aimed to study and test whether the audit partner’s disclosure affects earnings management, specifically; testing whether the audit partner’s disclosure leads to lower earnings management in terms of the Miller ratio. The research also aimed to test the impact of the audit partner's quality in terms of his industrial specialization on the previous relationship. This is done by using a sample of non-financial joint-stock companies listed on the Egyptian Stock Exchange for the five-year period 2014-2018.

The researchers concluded that there is an agreement between the regulatory and legislative bodies regarding the importance of the audit partner’s disclosure. International auditing standards required of the audit partner's name to be disclosed in the audit report, while American auditing standards required the auditor to prepare an independent report on the audit participants for listed companies, and this report should be submitted to PCAOB no later than 35 days from the date of issuance of the audit report. As for the Egyptian auditing standards, it left the audit partner’s disclosure an optional matter for the auditor in contrast to the global trend towards this matter.

The results of the study showed that there is a significant negative effect of the audit partner’s disclosure on the absolute value of earnings management in terms of Miller ratio; Which in turn means that disclosure of the audit partner increases the quality of earnings. On the other hand, the results of the study showed that there was no effect of the audit partner's quality, measured by its industry specialization in a specific sector, on the relationship between the audit partner’s disclosure and the audit quality.

Based on the findings of the research, both theoretical and practical, the following recommendations can be made:

1) The need for the regulators of the accounting and auditing profession in Egypt to issue auditing standards that keep pace with developments in international standards, which require mandatory disclosure of the audit partner in the audit report, or developments in the American standards that require the auditor to issue a report on the participants in the audit. And if the researchers believe that this form will isolate the United States of America from the global consensus on the method audit partner’s disclosure, then it is not a matter of opinion, but it has become a documented fact that it is necessary to disclose the audit partner in the audit report.
2) The need for the audit committee to take into account when appointing the auditor whether the audit partner discloses himself in the audit report or not, so that it rewards the partner who discloses himself, because of its impact on increasing the audit process transparency.
3) Users of the audit report should ask the audit committee and management to verify whether the audit partner who performed the audit actually signed the audit report.
4) As for the proposed research areas, the researchers believe in the importance of future research in some related fields, the most important of which are the following:
5) The effect of the audit partner’s disclosure on audit fees, information asymmetry, real earnings management, the type of the auditor's opinion, or the extent of the delay in issuing the audit report.
6) The impact of the audit client's operational characteristics of the voluntary disclosure of the audit partner.
7) Studying and testing the relationship between the characteristics of the audit committee and the disclosure of the audit partner.

8) The impact of audit partner's disclosure on the investment decision- an experimental study.

References

[1] Abbott, L., Buslepp, W. L., Gunny, K., and Mandell, A. 2019. The Effect of US Audit Partner Identification on Real Earnings Management. *Available at SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3448800*

[2] Aobdia, D., Lin, C. J., and Petacchi, R. 2015. Capital Market Consequences of Audit Partner Quality. *The Accounting Review*, 90 (6): 2143-2176.

[3] Bailey, R. L., Dickins, D., and Reisch, J. T. 2010. A Discussion of Public Identification of US Audit Engagement Partners: Who Benefits? Who Pays? *International Journal of Disclosure and Governance*, *7* (4): 334-343.

[4] Balsam, S., Krishnan, J., and Yang, J. S. 2003. Auditor Industry Specialization and Earnings Quality. *Auditing: A Journal of Practice & Theory*, 22 (2): 71-97.

[5] Becker, C. L., DeFond, M. L., Jiambalvo, J., and Subramanyam, K. R. 1998. The Effect of Audit Quality on Earnings Management. *Contemporary Accounting Research*, 15 (1): 1-24.

[6] Behn, B. K., Choi, J. H., and Kang, T. 2008. Audit Quality and Properties of Analyst Earnings Forecasts. *The Accounting Review*, 83 (2): 327-349.

[7] Bell, J. A. 2019. The Impact of Audit Engagement Partner Disclosure on Audit Outcomes in the United States. *PhD in Business Administration Dissertations. https://digitalcommons.kennesaw.edu/phdba_etd/2*

[8] Blay, A. D., Notbohm, M., Schelleman, C., and Valencia, A. 2014. Audit Quality Effects of an Individual Audit Engagement Partner Signature Mandate. *International Journal of Auditing*, 18 (3): 172-192.

[9] Blay, A. D., Gooden, E. S., Mellon, M. J., and Stevens, D. E. 2019. The Effect of an Auditor Identity Disclosure Requirement on Audit Quality: An Experimental Examination Incorporating the Incremental Effect of a Signature Requirement. *Auditing: A Journal of Practice and Theory*. In-Press.

[10] Brown, V. L., Gissel, J. L., and Vitalis, A. 2019. Mandatory Disclosure of Audit Engagement Partners: Insights from Practice. *Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2831730*

[11] Burke, J. J., Hoitash, R., and Hoitash, U. 2019. Audit Partner Identification and Characteristics: Evidence from US Form AP Filings. *Auditing: A Journal of Practice and Theory,* 38 (3): 71-94.

[12] Carcello, J. V., and Li, C. 2013. Costs and Benefits of Requiring an Engagement Partner Signature: Recent Experience in the United Kingdom. *The Accounting Review*, 88 (5): 1511-1546.

[13] Carcello, J. V., and Santore, R. 2015. Engagement Partner Identification: A Theoretical Analysis. *Accounting Horizons*, 29 (2): 297-311.

[14] Chi, W., Lisic, L. L., Myers, L. A., Pevzner, M., and Seidel, T. A. 2019. The Consequences of Providing Lower Quality Audits at the Engagement Partner Level. *Journal of International Accounting Research*. In-Press.

[15] Choi, J. H., Kim, S., and Raman, K. K. 2017. Did the 1998 Merger of Price Waterhouse and Coopers & Lybrand increase audit quality?. *Contemporary Accounting Research*, 34 (2): 1071-1102.

[16] Cianci, A. M., Houston, R. W., Montague, N. R., and Vogel, R. 2017. Audit Partner Identification: Unintended Consequences on Audit Judgment. *Auditing: A Journal of Practice & Theory*, 36 (4): 135-149.

[17] Cunningham, L. M., Li, C., Stein, S. E., and Wright, N. S. 2019a. What's in a Name? Initial Evidence of US Audit Partner Identification Using Difference-in-Differences Analyses. *The Accounting Review*, In-Press.

[18] Cunningham, L. M., Stein, S. E., and Wright, N. S. 2019b. Practitioner Summary Initial Evidence of US Audit Partner Identification in Form AP Shows Limited Impact on Audit Quality. *Current Issues in Auditing*. In-Press.

[19] Dao, M., Xu, H., and Liu, L. 2019. Impact of the Disclosure of Audit Engagement Partners on Audit Quality: Evidence from the USA. *International Journal of Auditing*, 23 (1): 112 124.

[20] Demek, K. C., Kaplan, S. E., and Winn, A. 2019. Who Really Performs the Audit? Examining the Effects of Voluntary Disclosure of the Use of Other Auditors on Investors' Perceptions of Audit Quality. *Auditing: A Journal of Practice and Theory*. In-Press.

[21] Deng, M., Kim, E., and Ye, M. 2019. Audit Partner Identification, Assignment, and the Market for Audit Talent. In *2019 Conference on the Convergence of Financial and Managerial Accounting Research*.

[22] DeZoort, T., Harrison, P., and Taylor, M. 2006. Accountability and Auditors' Materiality Judgments: The Effects of Differential Pressure Strength on Conservatism, Variability, and Effort. *Accounting, Organizations and Society.* 31 (4-5): 373-390.

[23] Dhole, S., Manchiraju, H., and Suk, I. 2016. CEO Inside Debt and Earnings Management. *Journal of Accounting, Auditing & Finance*, 31 (4): 515-550.

[24] Doxey, M., Lawson, J., Lopez, T. J., and Swanquist, Q. T. 2019. Do Investors Care Who Did the Audit? Early Evidence on the Informativeness of Form AP. *Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3221383*

[25] Fouda, E. A. 2017. The Relationship between Share Liquidity and Earnings Management: An Empirical Study on Companies Listed on the Egyptian Stock Exchange. *Accounting Research Journal, Accounting Department, Faculty of Commerce - Tanta University*, 2, 339-262.

[26] Francis, J. R., and Michas, P. N. 2013a. The Contagion Effect of Low-Quality Audits. *The Accounting Review*, 88 (2): 521-552.

[27] Francis, J. R., Michas, P. N., and Yu, M. D. 2013b. Office Size of Big 4 Auditors and Client Restatements. *Contemporary Accounting Research*, 30 (4): 1626-1661.

[28] Gul, F. A., Wu, D., and Yang, Z. 2013. Do Individual Auditors Affect Audit Quality? Evidence from Archival Data. *The Accounting Review*, 88 (6): 1993-2023.

[29] International Auditing and Assurance Standards Board (IAASB). 2015. *Forming an Opinion and Reporting on Financial Statements. International Standard on Auditing (ISA) 700.* New York, NY: International Federation of Accountants.

[30] International Auditing and Assurance Standards Board (IAASB). 2012. *Improving the Auditor's Report*. New York, NY: International Federation of Accountants.

[31] Jiang, H., Habib, A., and Zhou, D. (2015). Accounting restatements and audit quality in China. *Advances in Accounting*, 31 (1), 125-135.

[32] Knechel, W. R., and Vanstraelen, A., and Zerni, M. 2015. Does the Identity of Engagement Partners Matter? An analysis of Audit Partner Reporting Decisions. *Contemporary Accounting Research*, 32 (4): 1443-1478.

[33] Lambert, T. A., B. L. Luippold, and C. M. Stefaniak. 2013. Audit Partner Disclosure: Potential Implication for Investor Reaction and Auditor Independence. *Working Paper. University of Massachusetts Amherst.*

[34] Lee, H. S., Nagy, A. L., and Zimmerman, A. B. 2019. Audit Partner Assignments and Audit Quality in the United States. *The Accounting Review*. 94 (2): 297-323.

[35] Lee, K., and Levine, C. 2019. Audit Partner Identification and Audit Quality. *Available at*: *https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3450746*.

[36] Liu, S. 2017. Does the Requirement of an Engagement Partner Signature Improve Financial Analysts' Information Environment in the United Kingdom? *Review of Quantitative Finance and Accounting*, 49 (1): 263-281.

[37] Mandour, M. M. 2016. The Impact of Voluntary Activation of the Joint Auditing Approach on Earnings Management Practices: An Empirical Study on Companies Listed on the Egyptian Stock Exchange. *Journal of Accounting Thought, Accounting Department, Faculty of Commerce - Ain Shams University*, 20 (2), 1119-1172.

[38] Miller, James E. 2007. Detecting Earnings Management: A Tool for Practitioners and Regulators. *Published Doctoral Dissertation: Anderson University.*

[39] Nomir, A. R. 2017. The Effect of Managing the Level of the Auditor's Business Risk on the Relationship of the Level of this Risk to the Extent of Delay in Issuing the Audit Report: An Empirical Study on Companies Listed on the Egyptian Stock Exchange. *Accounting Research Journal, Accounting Department, Faculty of Commerce - Tanta University*, 1, 338-392.

[40] Public Company Accounting Oversight Board (PCAOB). 2011. *Improving the Transparency of Audits: Proposed Amendments to PCAOB Auditing Standards and form 2. Concept release no. 2011–2007. Available at: https://pcaobus.org//Rulemaking/Docket029/PCAOB_Release_2011-007.pdf*

[41] Public Company Accounting Oversight Board (PCAOB). 2008. *Signing the Auditor's Report.* Standing Advisory Group Meeting, Panel Discussion. *Available at: https://pcaobus.org/Rulemaking/Docket029/10232008_SAG_Tran script.pdf*

[42] Rusmin, R. 2010. Auditor Quality and Earnings Management: Singaporean Evidence. *Managerial Auditing Journal*, *25* (7): 618-638.

[43] Schlueter, J. K., and Ratzinger-Sakel, N. V. 2019. Audit Partner Signature Disclosure Effects on Non-Professional Investors' Credibility Assessments and Liability Perceptions. *Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3442568*

[44] Wang, Y., Yu, L., and Zhao, Y. 2015. The Association between Audit-Partner Quality and Engagement Quality: Evidence from Financial Report Misstatements. *Auditing: A Journal of Practice & Theory*. 34 (3): 81-111.

[45] Wilson, A. B., Chapman, M., and Stott, D. M. 2019. The Effect of Audit Opinion Signature on a Jury's Perception of Negligence. *International Journal of Auditing*, 23 (1): 45-56.

[46] Zerni, M. 2012. Audit Partner Specialization and Audit Fees: Some Evidence from Sweden. *Contemporary Accounting Research,* 29 (1): 312-340.

1 The data used in the study covers a period of seven years from 2012 to 2018. This is due to the fact that calculating some variables requires data on previous years