

The Impact of Auditor Industry Specialization, Type of Auditor and Audit Opinion on ARL: The Case of Egypt

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Abstract

This paper aims to analyze the impact of auditor industry specialization, type of audit opinion, type of auditor (private versus state auditor), and number of remarks from one side and Audit report lag (hereafter ARL) on the other side using a sample of non-financial companies listed in the Egyptian Stock Exchange (hereafter EGX) in 2015 and 2016. The sample consists of 296 firm-year observations of non-financial companies listed in the EGX. The authors developed a multivariate regression model to examine the relationship between audit report lag and auditor specialization, type of audit opinion, type of auditor (private versus state auditor), and the number of remarks associated with the qualified audit opinion. We find a negative association between ARL and auditor industry specialization. Also, ARL is positively and significantly associated with non-state auditor. In addition, ARL shows to be longer when the number of remarks associated with the qualified audit opinion increases. This paper extends the audit report lag literature and adds an important party; the state auditor, which is the Accountability State Authority (ASA). The state auditor in Egypt (ASA) is being ignored in prior literature, although it plays an important role in auditing companies that are owned totally or partially (more than 25%) by the government or public figures.

Keywords Auditor Related Attributes; Accountability State Authority (ASA); ARL; Egypt

Introduction

Timeliness of financial reporting is one of the most important characteristics of financial reporting. It affects the relevance of financial information and has a great impact on the usefulness of decision making. As a result, the timeliness of financial reports and the factors affecting it have attracted the attention of both academics and practitioners. The financial reports are not published to the public unless the audit process is completed and the audit report is issued. The auditor report is issued to add value to financial reports and is required for financial statements to be published to the public. The audit report determines the timeliness of the financial reports.

ARL is considered to be the most important determinant of financial reporting timeliness [1]. Extensive prior research focused on the determinants of ARL due to its importance for investors, managers and regulators, auditors and standard setters, as these parties can benefit from such research by understanding the reasons of ARL, its implications on various aspects, and market reactions to accounting releases in order to improve financial reporting timeliness and market efficiency [2,3].

In emerging markets, users tend to depend mainly on the financial reports issued by the companies because the information available beyond the financial statements are quite limited [4].

In Egypt, no comprehensive professional body exists for the accounting profession. It is also worth noting that Egypt is characterized by weak legal enforcement [5], where litigation risk is not in effect, and this in turn creates the demand for opinion shopping.

The role of the Accountability State Authority (ASA); the state auditor, can't be ignored. The ASA depends in its auditing on the documentary auditing approach, and so doesn't suffer from the problem of opinion shopping. Also, ASA as a governmental agency follows a conservative approach in financial reporting, and most of the time issues a qualified audit report that includes a lot of remarks [5]. The role of ASA in auditing complete governmental firms and partially owned governmental firms in Egypt is being ignored in the prior literature.

The main objective of this paper is to focus on certain auditor related determinants of ARL in an emerging economy; Egypt. These auditor related determinants include: auditor industry specialization, type of auditor, auditor opinion and number of remarks. Accordingly, the main research question is: Do these auditor related determinants of ARL affect the ARL of non-financial listed companies in Egypt?

To answer this question, a multiple regression model is formulated to analyze the relationship between the aforementioned auditor related attributes and ARL. In addition, some control variables are added to the regression model. These control variables include: audit firm size, audit complexity, type of auditor report, profitability, year-end, risk and the losses of the companies.

Although the effect of audit related attributes have been studied in developing countries, such as Egypt, but the effect of certain auditor related attributes such as the type of auditor (private audit firms Vs the ASA), the number of remarks mentioned in qualified audit reports and auditor industry specialization were not investigated in this emerging country. By doing so, our paper will be different from Afifi that examined the corporate governance characteristics and their impact on ARL, and Khlif and Samaha that examined the relationship between the ICQ and the audit component in the ARL, and Samaha and Khlif that examined some of the audit related attributes; which are auditor

type (audit firm size), audit opinion type, extraordinary items, reporting risk and number of reporting segments [5,7,8]. The last paper focused on some audit related attributes and ignored other audit related attributes, which are important specifically in the Egyptian environment; which are those related to having the ASA as an auditor or one of the auditors in the dual audit system. The ASA plays a very important role in the auditing of companies that are totally or partially (more than 25%) owned by the government or a public party. In addition, our paper focused on audit related variables ignored by Samaha and Khlif that can affect ARL; such as audit complexity (proxied by industry type), auditor specialization, audit report, auditor type, and number of remarks [8].

Our findings indicate that the number of remarks associated with the qualified audit opinion is the most important determinant of ARL and leads to longer ARL. In addition, the level of auditor industry specialization is crucial in determining ARL, as it is proven to be significantly and negatively associated with ARL. Since ARL is the most important determinant of financial statements timeliness, this result is important for managers, financial statement users and standard setters. In addition, the findings show that ARL is significantly longer for modified audit reports, and it implies that even for unqualified audit opinion, still ARL may be longer because of the efforts and time spent to add additional paragraphs. What was not expected is that ARL was longer for companies audited by one of the big auditors affiliated with the big 4 (Vs non-big audit firms).

Our study contributes to the literature linking audit attributes and audit delay in two ways: first, our paper focus on certain auditor determinants not investigated in Egypt, such as the type of auditor (non-state or private Vs state auditor), the type of audit opinion, where the ASA is known for its qualified audit opinion and the number of remarks, which is quite common in the audit reports issued by the ASA. Investigating the association between the role of ASA as an auditor of totally or partially owned by the government or a public party in ARL is also not examined in Egypt before. Second, auditor industry specialization can play an important role in shortening ARL in Egypt, where most of the market share is for the Big 4 or the ASA, where the later has several departments that differ in their specialization. This issue that was not examined before in Egypt. In addition, the paper discriminates between the auditor opinion (unqualified Vs qualified) (independent variable) and the auditor report (modified Vs unmodified) (control variable) and uses both variables in the same model, which is not examined in other studies before.

The rest of the paper is organized as follows: the next section reviews the literature on ARL; concept, measures and determinants and is followed by the development of research hypotheses. Section three outlines the data and research methodology. Section four present the descriptive statistics and correlations, multivariate analysis results. The final section concludes the research findings and identifies the limitations of the research and suggestions for future research.

Literature Review

ARL; concept and its importance

ARL is defined in prior literature as the number of days that elapse between the fiscal year end and the audit report date [9]. This period of time might be divided into two components, which are, Management ARL (M-ARL), which is the time taken by management to complete

the financial statements and it represents the time between the fiscal year end and the management's submission of the financial statements to the auditor and the starting of the audit process, and the Audit ARL (A-ARL) which is the time taken to complete the audit process and it represents the time between the management's submission of the financial statement to the auditor and the starting of the audit process and the issuance of the audit report [5,7]

Prior research has focused on the issue of ARL and its determinants due to its importance. Timely information and financial reports are crucial for key stakeholders and it has been argued that there is an opposite relationship between the value of information and the time taken to be released, as longer time to publish financial statements and audit reports might give indication that there are negative issues found during the audit process [10].

Determinants of ARL

Prior research examined three different categories of determinates of ARL. The first group is related to company characteristics, such as company size, risk, age, growth, performance or financial condition, type of industry and complexity of operations [11,12]. The second group focused on corporate governance characteristics [5,7,10,13] such as internal control quality, size and effectiveness of the audit committee, size, independence and effectiveness of the BOD, ownership structure. The last group examined audit related attributes, such as audit tenure [14], audit firm size [4,9,15-18] auditor industry specialization [14,16,19] type of audit opinion [20-22] auditor changes [23], non-audit fees [15], internal audit assistance [1], type of auditor [24] and number of remarks in auditors' reports [4].

Hypotheses Development

Prior research investigated the impact of several audit attributes on audit report lag. Such attributes include audit firm size, auditor industry specialization, auditor combinations, audit processes and resources and audit opinion characteristics. In examining the impact of auditor type or audit firm size, prior research was conducted in different countries; developed and developing, and reached mixed results.

In Egypt, Afifi examined the impact of corporate governance characteristics on ARL. Based on a sample of 85 listed companies in Cairo and Alexandria stock Exchange in 2007, the study concluded that CEO duality has a positive and significant impact on ARL, and board independence and the existence of audit committee have negative and significant impact on ARL. However, ownership concentration doesn't have significant effect on ARL [7]. In the same time, the study found that financial companies have shorter ARL in comparison with nonfinancial companies, and company size and profitability have negative and significant impact on ARL, However audit firm type doesn't have significant impact on ARL.

Khlif and Samaha divided ARL into two components: the first one is the management ARL, which starts with the fiscal year end and lasts until the auditor starts the audit process, and the other one is the auditor ARL, which starts when the auditor starts the audit process and lasts until the auditor issues the audit report. The author investigated the impact of ICQ on ARL using a sample of 344 firm year observations related to firms listed in the Egyptian Stock Exchange during the period from 2007 to 2010. The authors found that ICQ has a great impact on A-ARL, as it helps to shorten ARL significantly. In addition, the authors found that the adoption of Egyptian Standards of

Auditing have improved audit practices and strengthen the association between ICQ and ARL, whether M-ARL or A-ARL [5].

Auditor industry specialization

It is assumed that auditor industry specialists are more competent in discovering opportunistic behavior by management and will strive to maintain their reputation and this will be reflected on the quality of financial reporting [25]. Prior research found negative relationship between auditor industry specialization and ARL. Based on a sample of 105 companies registered in New Zealand Stock Exchange during the period from 2004 to 2008, Habib and Bhuiyan found that industry specialist auditors develop more specific industry knowledge and they become familiar with the companies' operations faster and this enables them to issue their audit report earlier. Even when adopting IFRS which increase audit report lag, this was not the case when the auditor is industry specialist. Whitworth and Lambert confirmed Habib and Bhuiyan results and found negative association between industry expertise and audit delay [16,19]. In USA, Dao and Pham investigated the impact of audit firm tenure on ARL and the effect of having a specialized auditor on this impact. Based on 7291 firm-year observations from 2008 to 2010, the authors found that auditors spend more time to understand their clients and the industry they work in during their first years of engagement and this result in longer ARL. Accordingly, the authors provided evidence of a positive impact of short audit tenure on ARL, however, this positive impact is reduced when the auditor is industry specialist.

Because auditor industry specialization is related to auditor expertise, in china, Chan et al. investigated the impact of audit risk or complexity and auditor expertise on ARL [26]. The study hypothesized that higher audit risk or complexity will increase ARL and higher level of audit expertise will reduce ARL. Based on 4025 firm-year observation related to companies listed in Shanghai and Shenzhen Stock Exchanges during the period from 2004 to 2010, the study found significant impact to both, audit risk and expertise on ARL. In addition, the study found that firms with longer ARL are more likely to make restatements and receive non-standard audit report in subsequent years. In addition, even with the convergence from the international financial reporting standards to the Malaysian financial reporting standards, Ahmad et al. provided evidence that specialist auditor have a positive impact on the financial reporting timeliness and reduces ARL.

In Egypt, there are specialist audit firms and the state auditor (ASA) which is divided into several departments according to industry specialization. It is expected that auditor industry specialization will reduce ARL to a great extent whether by private or state auditors in Egypt. Accordingly, we can find from prior literature that auditor industry expertise and specialization have a negative association with ARL, which is quite noticeable and stronger and so we predict a negative association between audit firm specialization and audit report lag. This leads to our first research hypothesis.

H1: Auditor industry specialization is negatively associated with ARL.

Type of audit opinion

Qualified audit opinion is considered to be bad news for companies receiving it and leads to longer audit report lag [28]. Prior research [20-22,29] investigated the association between the type of audit opinion and ARL. Whittred examined 245 companies listed on the

Sydney Stock Exchange during the period from 1965 to 1974, and found that companies receiving qualified audit reports experience longer audit report lag, which might be because of the time spent in auditor-client negotiations. In addition, auditors try to avoid qualified opinions so they may spend more time in order to avoid resulting uncertainties and disagreements [20]. Furthermore, management may strive to avoid qualification and so may negotiate or exert pressure on the auditor which will delay the issuance of audit report (NG and Tai 1994). In the USA, Bamber, et al. provided a comprehensive model of ARL. Based on a sample of 972 companies in 7 industries during the fiscal years from 1983-1985, the study found three factors affecting the extent of audit work and have a significant and positive impact on ARL [29]. These three factors are auditor business risk, audit complexity, and other work related factors; which are the existence of extraordinary items, net losses and qualified audit opinions. In addition, the study for larger firms or those reporting profits, ARL decreases. Finally, the study found that the ARL of clients of structured audit firms in longer in comparison with that of unstructured audit firms.

In the same context, Soltani examined audit opinion and audit delay, and based on a sample of 5801 company-year observations related to companies listed in Paris Stock Exchange during the period from 1986 to 1995; the author found that ARL is longer for companies receiving qualified audit opinions [21]. To examine whether this result will hold whether the company announces bad or good news, Haw et al. examined the association between audit opinion and earnings surprises and reporting lag. Based on a sample of 858 A-share companies registered on Chinese exchanges during the period from 1995 to 1999, the authors found positive association between qualified opinions and reporting delays, whether the company announces positive or negative earnings. Lee and Jahng (2008) in Korea and Pourali et al. and Mukhtaruddin et al. in Indonesia confirmed prior results and found significant association between audit opinion and ARL [30,31,32].

In Egypt, the state auditor, ASA is known for its qualified audit opinion that is full of qualifications and remarks. And if this is the case in Egypt, we can expect a negative relationship between issuing clean unqualified audit opinion and audit delay whether this opinion is issued by private audit firms or the state auditor (ASA). Accordingly, we can formulate our second research hypothesis as follows:

H2: Unqualified audit opinion is negatively associated with ARL.

Number of remarks associated with qualified audit opinion

If we investigate the association between qualified audit opinion and ARL and assume that this opinion will have a positive impact on audit delay. It is important to investigate one of the features related to this type of audit opinion, which is the number of remarks associated with qualified audit opinion. The number of qualifications or remarks can delay these reports, as they are indications of problems facing the companies and accordingly can be an indicator of auditor efforts. Leventis et al. investigated the impact of number of remarks in qualified reports on ARL [4]. And based on a sample of 171 non-financial companies listed in Athens Stock Exchange, the authors found positive association between number of remarks and ARL. In the same context, Owusu-Ansah and Leventis provided additional evidence regarding the positive association between the number of remarks in the audit report and ARL due to the time spent on the auditor-client negotiations [33]. Accordingly, we expect a positive

association between the number of remarks and audit report lag. This leads to our third research hypothesis:

H3: The number of remarks associated with the qualified audit opinion is positively associated with ARL.

Type of auditor

Prior studies investigated the association between the type of auditor and ARL. In Iran, Mohammad Rezai and Mohd-Saleh examined the impact of auditor type (private vs state auditors) and audit competition as a result of liberalization of audit market on ARL [24]. The authors noted that for private audit firms, the audit market is very competitive, while state auditors are monopolistic in their market share. The authors expected that the high level of competition among private audit firms will force them to be more efficient and issue their audit reports earlier, in comparison with state auditors. Based on a sample of 2705 firm year observations (264 firms) during the period from 1999 to 2010, the study provided evidence that private auditors tend to have shorter ARL than state auditors and in the post liberalization period (from 2002 to 2010), audit competition tends to shorten ARL than in the pre-liberalization period (from 1999 to 2001).

In Egypt, we have two types of auditors: private audit firms, which include audit firms affiliated with the Big 4 auditors and other non-big 4 audit firms and a state auditor, which is the Accountability State Authority (ASA). The first type of auditors is subject to inspection and experience high level of competition, while the state auditor; ASA, is not subject to inspection, and is obliged by law to audit specific type of companies; those that are totally or partially (more than 25%) owned by the government or a public figure. We can expect that in comparison with the ASA, private audit firms will issue their audit reports earlier. This leads to our fourth research hypothesis:

H4: Private audit firms issue their audit reports earlier than that of the ASA.

Study Design and Methodology

The sample is drawn from all listed companies in the Egyptian Stock Exchange in 2015-2016. The initial sample consists of 229 companies. After excluding banks and other financial companies due to their different nature [34], there were 186 and 178 non-financial companies in 2015 and 2016 respectively. After eliminating non-financial companies with no available information on ARL, there were 139 and 157 observations (firm-year) of non-financial companies registered in the Egyptian stock exchange in 2015 and 2016 respectively. Data were extracted and calculated from the companies' financial statements and related footnotes that are available on the website of the Egyptian Stock Exchange and bought from EGID.

ARL is the dependent variable and is being measured as the number of days between the fiscal year end and the audit report date.

We used the following multiple regression model to test the impact of research variables on ARL

$$ARL = \beta_0 + \beta_1 SPEC + \beta_2 AUDOPINION + \beta_3 REMARKS + \beta_4 AUDTYPE + \beta_5 AUDSIZE + \beta_6 AUDREPORT + \beta_7 BASIC + \beta_8 REALESTATE + \beta_9 SERVICES + \beta_{10} PROFIT + \beta_{11} LOSS + \beta_{12} RISK + \beta_{13} YEAR$$

Research variables were defined and measured as shown in tables 1 and 2.

Variable		Expected sign	Measurement
Dependent variable			
ARL	Audit report lag		Number of days that elapse between the fiscal year end and the audit report date [1,2,7,27,31,33]
Independent variables			
SPEC	Auditor Specialization	-	1= for the auditor with the largest market share in the respective sector; 0=otherwise [19]
AUDOPINION	Audit Opinion	-	1= if the company received an unqualified audit opinion; 0=otherwise [15,31]
REMARKS	Remarks	+	Number of remarks in the qualified audit report [4]
AUDTYPE	Auditor Type	-	1=if the auditor is a non-state auditor (Big 4 or Non-Big 4); 0=otherwise [24]

Table 1: Dependent and Independent Variables definitions and expected signs.

Control variable		sign	Measurement
AUDSIZE	Audit Firm Size	-	1=if the auditor is a Big 4 or the ASA; 0=otherwise [31]
AUDREPORT	Audit Report	+	1=if the company received a modified audit report; 0=otherwise
BASIC	Audit Complexity	?	1=if the firm belongs to the basic resources sector; 0=otherwise
REALESTATE	Audit Complexity	?	1=if the firm belongs to the real estate sector; 0=otherwise
SERVICES	Audit Complexity	+	1=if the firm belongs to the services sector; 0=otherwise
PROFIT	Firm Profitability	-	Net income divided by total assets (ROA) of the firm [5]
LOSS	Firm Losses	+	1=if the firm reported negative earnings; 0=otherwise [1]
RISK	Leverage	+	Total liabilities divided by total assets [1,37]
YEAR	Year End	+	1=if the firm year end month is December; 0=otherwise [15]

Table 2: Control Variables definitions and expected signs.

Note: although the non-financial companies listed on the EGX fall into 15 group, but for statistical reasons, these companies are grouped into four categories (Basic resources, industrial, real estate and services) and to avoid the "dummy variable trap", the industrial sector is removed to serve as a base and the coefficients of the other three sectors (basic, real estate and services sectors) measure the extent to which they deviate from this base [33].

Empirical Results

Descriptive statistics and correlations

Table 3 outlines the descriptive statistics of the continuous variables used in the study; ARL, REMARKS, PROFIT, and RISK. The table shows that ARL of the firms in the sample ranges from 17 to 179 days with a mean of 76.33 days. This result clarifies high variation among the firms of the sample. The average number of remarks is 4.29, with a minimum and maximum of zero and 69 remarks respectively. It is also clear from the table that the average profitability (ROA) of the firms of the sample is 3.86% (with a minimum -79.96% and a maximum 81.66%), and the average risk level (Leverage) is 0.4353 (with a minimum -8.3602 and a maximum 2.3915).

Variable	Mean	Standard deviation	Minimum	Maximum
ARL	76.33	23.354	17	179
REMARKS	4.29	10.613	0	69
PROFIT	0.038626	0.1297357	-0.7996	0.8166
RISK	0.435314	0.5979887	-8.3602	2.3915

Table 3: Descriptive statistics of continuous variables.

Table 4 presents the descriptive statistics of the discrete variable of the study, SPEC, AUDSIZE, AUDGOV, AUDOPINION, AUDREPORT, INDUSTRIAL, REALESTATE, BASIC, SERVICES industries, and LOSS. With respect to auditor industry specialization SPEC, the table shows that 18.6% of the firms are audited by industry specialists. It is obvious from the table that 54.1% of the firms (160 firms) are audited by one of the big 4 audit firms or the ASA AUDSIZE. Regarding AUDTYPE, it is clear that 84.1% of the firms are audited by private audit firms (whether audit firms affiliated with one of the big 4 or non-big audit firms) and 15.9% of the firms are audited by the ASA. Additionally, table 3 shows that 64.9% receive unqualified audit opinion AUDOPINION and 54.7% receive modified audit report AUDREPORT. As for the LOSS variable, we find that 24% of the firms reported negative earnings.

Variable		Frequency	%	Cumulative
SPEC	1	55	18.6	18.6
	0	241	81.4	100
AUDSIZE	1	160	54.1	54.1
	0	136	45.9	100
AUDTYPE	1	249	84.1	84.1
	0	47	15.9	100
AUDOPINION	1	192	64.9	64.9
	0	104	35.1	100
AUDREPORT	1	162	54.7	54.7
	0	134	45.3	100
INDUSTRIAL	1	121	40.9	40.9
	0	175	59.1	100

REALESTATE	1	96	32.4	32.4
	0	200	67.6	100
BASIC	1	20	6.8	6.8
	0	276	93.2	100
SERVICES	1	59	19.9	19.9
	0	237	80.1	100
LOSS	1	71	24.0	24.0
	0	225	76.0	100
YEAR	1	224	75.7	75.7
	0	72	24.3	100

Table 4: Descriptive statistics of discrete variables.

Finally, focusing on the industry type, the descriptive statistics clarifies that the firms in the sample are divided into four sectors; INDUSTRIAL (40.9%), REALESTATE (32.4%), BASIC (6.8%), and SERVICES (19.9%)

Bivariate correlation analysis

Pearson correlation is used to identify the direction and strength of the relationship between all the variables in the study.

The correlation analysis shows that ARL is shorter for firms audited by an auditor who is industry specialist SPEC. Moreover, ARL is lower for firms receiving unqualified audit opinion AUDOPINION and for firms experiencing profits PROFIT or working in the Real estate sector REALESTATE or issuing their financial statements at the end of December YEAR. Consistently, correlation analysis shows that ARL is longer for firms working in the services sector, experiencing losses LOSS, having higher risk (leverage) level RISK and those receiving modified audit reports AUDREPORT or having many remarks or qualifications in their audit reports REMARKS.

Multivariate analysis results

The adj. R² is 15.9%, which means that our variables explain only 15.9% of the dependent variable; ARL. Although this percentage is small, but is shown in several previous studies [7].

It is clear from table 5 that multicollinearity between the independent variables is not a serious problem, as the maximum correlation is that between audit opinion and audit report and it is 66.9% and the maximum VIF factor is 4.449 which is lower than 10 [35].

The regression analysis reveals that the most important variable that affects ARL is the number of remarks associated with the qualified audit opinion REMARKS. The result shows a positive and significant association between the number of remarks and ARL.

Variables	B	Standard error	B	T	Sig. T	VIF
Intercept	65.051	8.381		7.761	0.000	
SPEC	-10.338	4.144	-0.172	-2.495	0.013**	1.677

AUDSIZE	6.975	3.499	0.149	1.994	0.047**	1.962
AUDTYPE	14.673	5.746	0.230	2.554	0.011**	2.847
REMARKS	0.601	0.170	0.273	3.542	0.000***	2.085
AUDOPINION	-3.460	4.238	-0.071	-0.817	0.415	2.642
AUDREPORT	5.093	3.469	0.109	1.468	0.143	1.925
BASIC	7.645	5.340	0.082	1.432	0.153	1.160
REALESTATE	-3.847	3.130	-0.077	-1.229	0.220	1.386
SERVICES	6.592	3.552	0.113	1.856	0.065*	1.300
Control variables						
PROFIT	-27.188	13.982	-0.151	-1.945	0.053*	2.117
LOSS	6.394	3.706	0.117	1.725	0.086*	1.617
RISK	-1.932	2.526	-0.049	-0.765	0.445	1.469
YEAR	1.834	4.228	0.034	0.434	0.665	2.124
R ²	0.196					
Adj.R ²	0.159					
F	5.300					
Sig.	0.000					

Table 5: Regression results.

Note: *, **, and *** significant at 0.1, 0.05 and 0.01 respectively.

This means that the third hypothesis (H3) which predicts that ARL will be longer for firms receiving qualified audit opinion with several remarks is supported. This is expected, as the remarks associated reflect extra efforts by the auditors that require more time. This result is consistent with Leventis et al. and Owusu-Ansah and Leventis results which denoted that remarks means a company is facing problems and this will delay the issuance of audit reports [4,33].

With respect to the impact of auditor type *AUDTYPE* on ARL, it was expected in the fourth hypothesis (H4) that the competition in the audit market will force private audit firms to be committed and strives to issue their audit reports earlier and that the ASA, which with its monopolistic market will delay the issuance of ARL. However, the regression result in table 5 reveals the opposite and shows positive and significant impact of auditor type on ARL. This doesn't confirm prior literature results [24] and means that H4 is not supported but on the contrary, private audit firms issue their audit report later in comparison with the ASA.

Another important variable that impacts ARL of non-financial listed companies in the Egyptian Stock Exchange is auditor industry specialization *SPEC*. The results of the regression analysis show negative and significant impact of specialization on ARL. This also supports the first hypothesis (H1) predicting negative and significant association between auditor industry speciation and ARL. This is also expected as auditors specialized in a certain industry will be more familiar with the clients' operations and the environment they work in and in turn will issue their audit reports earlier. This result confirm prior literature [14,16,19] and adds an additional evidence regarding

the impact of industry specialization on ARL in a developing and emerging country; Egypt.

Regarding the impact of our control variables. Concerning the impact of audit firm size, we find positive and significant impact of the big auditors *AUDSIZE* on AR which is questionable and contradict with prior literature. Although this result was reached by prior literature in a developed country; USA Whitworth and Lambert [16] and in a developing country; Palestine Hassan and also in Egypt Afifi and is not expected but this results needs more attention as to how big auditors that represent audit quality delay in issuing their audit reports. May be this is due to the monopoly of the big 4 audit firms to the audit market in Egypt. Another possible reason is the absence of the litigation risk and the weak legal enforcement environment.

With respect to the impact of the type of audit opinion *AUDOPINION* on ARL, the results in table 5 shows negative but insignificant impact of the unqualified audit opinion on ARL. Again, the second hypothesis (H2) which expects that ARL is shorter for firms receiving unqualified audit opinion is not supported. However, we examined the impact of modified audit reports *AUDREPORT* on ARL, the regression results reveals positive but insignificant association between modified audit reports and ARL. This result is not consistent with the results of [18].

Moreover, the impacts of industry type, which represent audit complexity, on ARL, reveal mixed results. It is clear from table 5 that only firms working in the service sector *SERVICE* can impact ARL positively and significantly in comparison with the industrial sector, as those firms in such sector face more risk in comparison with other industries. In addition, such sector is considered to be less stable and more complex in comparison with the industrial sector. It is also clear that ARL doesn't differ significantly between the real estate sector and the industrial sector. This result is inconsistent with the results of Owusu-Ansah and Leventis which reveals that firms operating in the construction sector release their audit report later in comparison with the manufacturing sector [33]. On the other side, the results show that ARL is negatively but insignificantly associated with the real estate sector and positively but insignificantly associated with the service sector in comparison with the industrial sector.

Additionally, we find that profitability level *PROFIT*, measured by ROA is negatively and significantly associated with ARL, which indicates that ARL decreases significantly with the increase in profitability. Consistently, losses *LOSS* are positively and significantly associated with ARL, which implies that ARL is longer for firms reporting negative earnings. This is consistent with prior research, as audit firms are more cautious in their audit work when the firm profitability is low as a result of business risk [36-38]. On the other side, we find no significant impact to the risk level *RISK*, measured by leverage, or issuing financial statements in December *YEAR* on ARL.

Conclusion

ARL is considered the most important determinant of final statements timeliness. The objective of this study is to analyze the relationship between audit attributes; auditor industry specialization, audit opinion, number of remarks and the type of auditor (private versus state auditors) on ARL on a sample of the non-financial companies listed in the Egyptian Stock Exchange in 2015 and 2016. We relied on a sample of 296 observations and developed a multivariate regression model.

Among all the investigated audit related attributes, we find that the most important variables are the auditor industry specialization and the number of remarks associated with the qualified audit opinion. The regression results provide evidence that ARL is shorter for firms audited by industry specialists and is associated positively with the number of qualifications or remarks in qualified audit opinion. Findings also show that ARL is longer for firms audited by the audit firms affiliated with the big 4 and the ASA as opposed to the non-big audit firms and for firms audited by private audit firms in comparison with the ASA. This result reveals that ARL is positively and strongly associated with audit firm size and the big 4 audit firms. This might be due to the weak legal enforcement environment and the absence of litigation risk enactment. Regarding the impact of industry type (as a proxy for audit complexity), regression results show that ARL is longer for firms operating in the services sector in comparison with the industrial sector. Additionally, findings show that ARL is longer for firms announcing negative earnings and is shorter and negatively associated with the profitability levels of the clients.

This study contributes to existing literature on ARL by providing evidence of the association between certain audit attributes; auditor industry specialization, audit opinion, number of remarks type of auditor (private versus state auditors) and ARL in an emerging economy; Egypt.

Future research can include other company specific characteristics and corporate governance variables to improve the adj. R^2 of the multivariate regression model. In addition, more research can focus on analyzing and testing the effect of actual versus perceived audit quality on ARL. We recommend future research to test the effect of inspection reports of audit firms in Egypt on ARL. Finally, we recommend other researchers to replicate this research paper in the financial sector in Egypt.

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