The Association Between Audit Report Lag And Audit Quality, And Audit Committee In The Saudi Arabia Context

Amr nazieh Ezat\textsuperscript{a}, Mohamed Nazmy Bekheet\textsuperscript{b}, Maher Diab Abulaila\textsuperscript{c}, Abdallah Ammar Hendausi\textsuperscript{d}, Fathi abdelrahman ahmed faramaw\textsuperscript{e}, Hadeel Fouad Aljuwaie\textsuperscript{f}.

\textsuperscript{a,b,c} AssistantProfessor in accounting, Faculty of Applied Studies & Community Service, ImamAbdulrahman Bin Faisal University, Dammam, Saudi Arabia,

\textsuperscript{d,e,f} Lecturer in accounting, Faculty of Applied Studies & Community Service, ImamAbdulrahman Bin Faisal University, Dammam, Saudi Arabia.

E-mails: \textsuperscript{a}anezat@iau.edu.sa, \textsuperscript{b}mnbekheet@iau.edu.sa, \textsuperscript{c}mdabulaila@iau.edu.sa, \textsuperscript{d}aahendaouii@iau.edu.sa, \textsuperscript{e}fafaramauie@iau.edu.sa, \textsuperscript{f}Hfaljuwaie@iau.edu.sa

\section*{Abstract}
This study aims to investigate the association between audit report lag and audit quality for the Saudi listed non-financial firms in 2018. By measuring audit quality with audit reputation and audit firm specialization, the findings indicate that Saudi listed firms take on average, 74 days to issue their audit report from the end of balance sheet date to the signed audit report date. Moreover, the empirical findings illustrate that audit reputation, audit firm specialization, and Audit committee financial expertise are associated negatively at different significant levels. Based on the limited literature examined audit reputation, audit firm specialization and audit committee in the Saudi environment, the current study would add a contribution by exploring the impact of such factors on audit report lag in one of the Gulf countries, namely Saudi Arabia.

\section*{1. Introduction}
Financial reports are the effective way to communicate between companies and stakeholders, through which it is possible to access accounting information that reflects the economic events that took place during the company’s accounting period. In addition, these reports present the management’s plans and expectations for the future of the company, as it is a good indication of the future of the company and the extent of its success and continuity or the possibility of its failure in the future. These reports considered a communication tool or means by which the stakeholders in the company can get acquainted with the conditions of the company, and an important mechanism for monitoring the performance of those in charge of managing the company.
Because of the importance of the information provided through the financial reports in influencing the decisions of the users of those reports, and the importance of the timing of their delivery, the International Accounting Standards Board (IASB) and the American Financial Accounting Standards Board (FASB) have emphasized that the main objective of the financial report is to provide users of financial reports with information which helps them in making rational economic decisions. The Board also stressed the need for these reports to be published in a timely manner before they lose their importance in decision-making and in order to achieve the desired benefit from them.

Since the information provided by the companies lacks credibility as a result of the inability of their users to verify it personally, which requires work to enhance the credibility of that information through a verification and examination process carried out by an independent and qualified external party, and this in turn contributed to the increase in demand for the services provided by the external auditor. In order to help obtain reliable and timely financial information, and consequently pressure has increased on external auditors to reduce the time spent on completing their work and issuing their reports.

The appropriate timing of issuing financial reports is affected by the period that the review process takes, which ends with the issuance of the audit report, as it is not possible to disclose the financial reports until after the external auditor expresses his neutral technical opinion on the extent of the sincerity and fairness of the financial statements, as the report issued by the external auditor adds more of confidence in the financial statements, with what stakeholders can rely on in making rational decisions, but the delay in issuing a report is considered a negative indicator of the low quality of financial reports.

The delay in the issuance of the Audit Report Lag (ARL) - the time period between the end of the fiscal year and the date of issuance of the audit report, contributes to the failure to provide information in a timely manner, thus losing the characteristics of the audit committees and their impact on the period of issuing the auditor's report which in turn has an impact on disclosed information and on the property of convenience, and hence negatively affects the decisions of users of financial statements. The delay in presenting the financial results of shareholding companies leads to a slow flow of information from the companies and opens the door for leaking information about the profits or losses of the company, which is reflected in the performance of the stock in the financial markets, so that some people benefit from it more than others. The timeliness of financial reports is also considered an important and necessary matter because it is one of the basic characteristics of the adequacy of accounting information.

The determinants of ARL are discussed widely in the prior studies. Many researchers examined the association between ARL and many variables such firm characteristics (e.g. size, leverage profitability, firm age, operational complexity, and industry type), corporate governance (e.g. board size, board independence, role duality, board meetings, audit committee attributes) (Afify, 2009); and audit related variables (e.g. auditor reputation, audit tenure, Audit firm industry specialization, audit report type, audit fees). Most of these studies are applied in the western countries. However, few studies are applied in the Gulf countries, namely Saudi Arabia. This study fill the gab in this area by investigating the
relationship between ARL and audit quality which not received more attention in its relationship with ARL by the prior studies. Audit quality are measured by two main variables; audit reputation and audit firm specialization. In addition, this study examines the impact of audit committee activities on the ARL in the Saudi context.

The importance of the research lies in the increasing interest at the international and local levels in the timeliness of issuing financial reports, as this has an impact on the efficiency of financial markets and encouraging investment. Through this research, researchers try to find the effect of the factors related to the review on the period of delay of the audit report, to provide practical recommendations that will reduce ARL and, by extension, to make the financial reports available in a timely manner. Also, the audit offices are useful in encouraging them to cooperate and coordinate among themselves in order to provide high quality services, and it benefits the audit profession expanding the base of competition and limiting the phenomenon of auditing market concentration.

Thus, it is important to recognize and determine the causes of ARL in order to manage this lag so that companies can achieve their objectives on the one hand, and the creditability of the audited financial statements can be ensured on the other. Therefore, the current study mainly examines “audit-related factors” (because they are the most important factors in determining ARL), which have not been investigated widely in the Saudi context. This represents the main contribution of this study.

2. Literature review

Prior studies explored the timeliness reporting in various countries and discussed various aspects related to the timeliness dimension. For instance, some prior studies used the concepts of management lag and total lag. The current study concentrates mainly on ARL. In addition, many determinants are examined in terms of ARL such as: company characteristics, audit-related factors, and corporate governance factors, which demonstrates the concerns about the effects of this lag. However, few studies in the Saudi context have examined this topic. The prior studies related to ARL are classified and discussed in the subsequent sections.

2.1 Saudi context Studies:

A few prior studies examined ARL and its determinants in the Saudi context. One of the studies on ARL was conducted by Zureigat (2014) who investigate the effect of firm-related factors and auditor-related factors on the kinds of audit reports in Saudi Arabia, which is considered one of the biggest markets in the MENA region. The results indicate that the auditor’s size, firm size, and leverage significantly affect audit report with large auditors tending to issue modified audit reports more than smaller auditors, and small companies and leveraged companies being more likely to receive modified audit reports. Neither profitability nor the age of the company affects audit reports.

In addition, Aljaaidi et al. (2019) examined whether audit committee activity is associated with audit report lag. A pooled OLS regression analysis shows that, an active
audit committee (more independent members with frequent meetings) is associated with shorter audit report lag.

To investigate whether the combination of risk management and audit committee functions are associated with audit report lag, Omer et al., (2020) applied a pooled OLS regression analysis to test such relationship. The findings indicated that a combination of risk management and audit committee functions in a stand-alone committee named “audit committee” is associated with longer audit report lag.

Moreover, Omer et al., (2020) examined the relationships of corporate social responsibility, management characteristics, namely, board size and meetings, and audit characteristics, namely, audit quality and audit report lag with corporate performance among the manufactured companies in Saudi Arabia. The study finds that corporate social responsibility, board size, board meetings and audit quality are positively associated with corporate performance. Additionally, this study reports an inverse association of the audit report lag with corporate performance.

Recently, Aldoseri et al., (2021) demonstrated the effect of audit committee characteristics on audit report lag and explores whether this effect will vary between before and after mandatory adoption of IFRS in Saudi listed companies, the results show that among audit committee characteristics, only audit committee financial experience significantly influences the timing of financial reporting. The result indicates a weak influence of audit committees on timeliness of financial reporting.

2.2 Globally context Studies:

Many studies are applied to investigate the association between ARL and various aspects.

Sultana et al., (2015) examined whether audit committee compositional features are associated with the timeliness of financial reporting by Australian firms. Results indicate that audit committee members with financial expertise, prior audit committee experience and those who are independent are associated with shorter audit report lag.

Further, Baldacchino et al., (2016) investigated the audit report lag (ARL) in statutory audits. The ARL is found to be shorter in large companies, when profit figures are positive, in financial service companies, and when the audit firms are large. A longer ARL is found when the audit report is qualified and in the absence of an extraordinary item.

In Palestine, Hassan (2016) employed agency theory to identify the determinants of the audit delay among Palestinian companies listed on Palestine Stock Exchange (PSE). The result of the analysis demonstrated that the audit reporting delay is influenced by the board size, corporate size, status of audit firm, company complexity, existence of audit committee, and ownership dispersion.

Rusmin (2017) examined empirically the relation between two dimensions of auditor quality, namely, auditor industry specialization and auditor reputation and the audit report lag. This study finds a negative and significant association between industry-specialist auditors and audit report timeliness. Companies audited by industry-specialist auditors have shorter audit delays, also find evidence that Big 4 auditors perform significantly faster.
audit work than their non-Big 4 counterparts. The results show that firms with many subsidiaries and firms experiencing poorer financial performance are found to be associated with longer reporting delays. Moreover, audit report timeliness is found to be faster for companies in the low-profile industry sector and owned by family members. This study provides further empirical evidence on the relation between auditor’s quality and audit report lag using data from a different domestic setting.

In addition, Durand (2019) explored the main determinants of audit report lag. The study finds that several variables relating to client profitability and financial condition, client complexity and audit opinion modifications increase audit report lag. In addition, audit report lag decreases with client size, when clients have positive earnings news to report and when the auditor has long tenure and provides non-audit services. Several variables, such as those relating to corporate governance and various auditor characteristics, have been little explored and would benefit from future research.

Moreover, Lai (2019) demonstrated whether the clients of a merged audit firm have shortened report lag, increased audit fees, or reduced audit quality following the merger. This paper reports that clients of the merged firm have shorter audit report lag post-merger in the property industry in which the merged firm subsequently obtained more than one-half of the market share. Simultaneously, the evidence does not suggest that clients of the merged firm are charged higher audit fees or provided with lower quality audits after the merger.

Sari et al., (2019) investigated the correlation between corporate governance mechanisms, reflected independent commissioners, audit committee and audit tenure to audit report lag, and the audit complexity has been able to moderate the relationship between corporate governance mechanisms to audit report lag. The results of this study indicate that the audit committee and audit tenure have a negative effect on audit report lag, but the independent commissioner has an insignificant effect on audit report lag. Audit complexity is proven to increase audit report lag as an increase in audit committee.

To indicate the main determinants of audit report lag, Habib et al., (2019) applied a meta-analysis to test these determinants. The findings presented that audit opinion and audit season variables increase audit report lag, whereas Big 4 affiliation, non-audit services, and auditor tenure decrease audit report lag. Among the corporate governance determinants, the existence of a financial expert member on an audit committee, and ownership concentration, reduce audit report lag. Finally, an examination of firm-level characteristics reveals that firm complexity increases audit report lag, whereas profitability reduces it.

Abdullah et al., (2019) analyzed the factors that affect an auditor’s efficiency in completing the audit process proxied by audit report lag. The results showed that partially variables of the audit committee effectiveness and profitability had a significant negative effect on audit report lag while the variable financial condition had a significant positive effect on audit report lag. Meanwhile, variables of the accounting complexity, auditor reputation, audit tenure and auditors’ industry specialization did not show significant influence on audit report lag.
Bhuiyan & D’Costa (2020) examined whether audit committee ownership affects audit report lag. The results show that audit committee ownership increases audit report lag. The results are robust to endogeneity concerns emanating from firms’ deliberate decisions to grant shares to the audit committee members.

Recently, Juwita et al., (2020) This study aims to examine the effect of the audit committee and internal audit on the audit report lag and examine the relationship between the audit committee and the internal audit moderated by the size of a public accounting firm. The results show that the audit committee influences the audit report lag while the internal audit has no effect. The size of a public accounting firm successfully moderated the relationship between the audit committee and audit report lag but failed to moderate the relationship between the internal audit and audit report lag.

Accordingly, few studies are conducted in the Saudi context which explain the need to extend the studying of ARL and its determinants in such area. In addition, audit quality and audit committee variables are not investigated on a large extent in the prior studies which add more importance for the current study.

3. Hypotheses Formulation

3.1 Audit quality

Audited financial statements are one of the most reliable sources for stakeholders to obtain the required information. Therefore, audit firms provide the assurance on the audited information on the client’s financial statements which provide more confidence to the various stakeholders. Accordingly, audit firms should perform their audit work efficiently. In other word, audit firms should maintain the highest level of quality when auditing the various financial statements.

Audit quality is a concept that has different definitions for different people (Al-Ajmi, 2009). DeAngelo (1981) provides two dimensions to define audit quality. First, the performance of audit work in detecting any misstatements, second, the reporting of these misstatements thorough audit reports. Most prior studies define audit quality as the ability of auditor to detect any material misstatements in the financial statements and eliminate these misstatements (Palmrose, 1988; Davidson and Neu, 1993). However, audit quality is a multidimensional and inherently unobservable, therefore, no single proxy is determined to measure it. This study follows (Rusmin and Evans, 2017) and measure audit quality by two main proxies: audit reputation and auditor industry specialization.

3.1.1 Audit Type

Audit type refers to the type of company that audits the financial reports of the firms (Ezat, 2015). Prior studies argued that high quality audit can be achieved by big 4 audit firm (DeAngelo, 1981; Becker et al., 1998; Francis et al., 1999; Caneghem, 2004; Rusmin and Evans, 2017). Based on signaling theory, firms that audited by big 4 audit firm provide good signal to the market about their audit quality. Big 4 firms acquired more qualified staff, more flexibility in completing their work, and more resources required to perform
audit work (Chan et al., 1993; Caneghem, 2004; Chung et al., 2005). Therefore, they have more incentives to finalize their audit work rapidly in order to maintain their reputation (Carslaw and Kplan, 1991; Hossain and Taylor, 1998).

Prior studies indicated that big 4 audit firms are associated positively with audit quality (e.g. Becker et al., 1998; Francis et al., 1999; Krishnan, 2003). In addition, many studies illustrated that big 4 audit firms are more likely to finalize their audit work in short time to keep their reputation in the market (Hossain and Taylor, 1998; Afify, 2009; Cohen and Leventis, 2013). Accordingly, the first hypothesis is formulated as follows:

**H1: There is a significant relationship between audit type and ARL**

### 3.1.2 Audit firm industry specialization

Nowadays, the audit market characterized by various changes that have an impact on the quality of audit such as the increased acceleration of technology, and the vast level of competition. These changes increase the incentives of audit firms to become more specialist in their industry. Habib and Bhuiyan (2011, p.33) reported that “industry-focused audit firms’ investment in technologies, physical facilities, personnel, and organization control systems improves the quality of audits for the firms’ focal industries.”. Industry specialist auditors possess more knowledge, more experience and more confident than non-specialist auditors, and hence require less time to deal with the complicated accounting issues when auditing the client’s financial statements. Therefore, based on signalling theory, firms that audited by industry specialist auditors are more motivated to provide good signal about the quality of audit firm to the market by shorter the time of audit. Prior studies demonstrated that there is a negative association between auditor industry specialization and ARL (Che-Ahmed and Abidin, 2008; Habib and Bhuiyan, 2011). Accordingly, the second hypothesis is:

**H2: There is a significant relationship between audit firm industry specialization and ARL.**

### 3.2 Audit committee characteristics

Audit committee represents one of the main characteristics of good corporate governance required to obtain high quality of financial reports. Audit committee can facilitate the audit work through its unique characteristics and independency, and therefore increase the motivation to examine the relationship between audit committee characteristics and audit report lag. This study examine three characteristics of audit committee as follows:

#### 3.2.1 Audit committee size

Audit committee size refers to the number of both inside and outside who formulated audit committee members. The advocate of agency theory (e.g. Collier & Gregory, 1999; Hillman & Dalziel, 2003) proposed that increasing the number of audit committee numbers can enhance the agency problem because increasing such numbers can impaired the control and monitoring function. Therefore, audit committee size lead to a free-member
problem (Jensen and Tang, 1993; Sultana, 2015) and shrinking the role of audit committee in performing its control and monitoring role which may increase the time of audit report.

On the other hand, resource dependency theory assumed that increasing the number of audit committee members can increase the number of qualified and expertise members with high knowledge which enables those members to better evaluate the work performed by the auditor and make more control on this work which in turn may decrease the time span of audit report.

Prior studies indicated mixed findings. While Apadore and Noor (2013) found that Audit committee size is significantly associated with audit report lag, Akinleye and Aduwo (2019); Sultana et al.; and 2015; Aldoseri et al., 2021) demonstrated that this relationship is insignificant.

Based on the previous arguments and the mixed results, the third hypothesis is:

**H3:** There is a significant relationship between audit committee size and ARL.

### 3.2.2 Audit committee meeting

Audit committee meetings refer to the diligence of audit committee members in performing their responsibilities and duties through the number of meetings held during the year (Ezat, 2019). One of these responsibilities is discussing the process of monitoring financial reporting occurs and the timely provision of the audit report (Sultana et al., 2015). Krishnan et al., (2003) postulated that firms with a more diligent audit committee are less likely to issue misstatements in their financial statements. Accordingly, more diligent audit committee will enhance the level of discussion about the various changes that face firms and the financial complexities which aid audit in their work and hence may shorten the audit report period.

While, Hashim and Abdul Rahman (2011), Mohamad-Nor et al. (2010), and Ika and Ghazali (2012) report a negative association between audit committee meetings and ARL, Sultana et al., (2015) and Aldoseri et al., (2021) did not provide empirical evidence for such association. Accordingly, the fourth hypothesis is:

**H4:** There is a significant relationship between audit committee meeting and ARL.

### 3.2.3 Audit committee financial expertise

Audit committee financial expertise refers to the number of members who have financial and accounting experience in the committee. The importance of existing financial expertise members attributed to the number of complicated and sophisticated accounting and auditing issues that require technical solutions. Increasing the number of such members can enhance the possibility to deal with these complex issues and hence decrease the time and effort required to prepare audit report. Many prior studies indicated the need for subcommittee members who have experience in financial reporting and auditing (DeZoort, 1998; Beasley and Salterio, 2001). Based on agency theory, firms with financial experts in their audit committee are more likely to ensure the auditor works because the existence of financial experts increase the ability of audit committee to evaluate the competence of
auditor work effectively and increase the valuable discussion with auditors about the technical issues in their report which may in the end reduce the audit report lag (Sultana et al., 2015).

Krishnan (2005), Zhang, et al. (2007), and Sultana et al. (2015) find a negative association between audit committee financial experts and ARL. The fifth hypothesis can be formulated as follows:

H5: There is a significant relationship between audit committee financial experts and ARL.

4. Sample and Variable Measurement

4.1 Sample

The sample of this study contains all the listed Saudi firms in 2018. Data are collected from the annual reports of listed firms which downloaded from TADAWUL website. The listed firms belong to 16 sectors. Following the approach used in prior studies (e.g., Leventis et al., 2005; Mohamed-Nor et al., 2010, Ezat, 2015), financial companies and banks are excluded due to their different characteristics. In addition, three firms with missing data are excluded. Accordingly, 126 firm-year observations are yielded.

4.2 Measurement of the variables

ARL i.e., the dependent variable in this study, is measured by the number of days from the fiscal year end to the date of the signed auditor’s report. Five main variables are explored in this study i.e., audit type, auditor industry specialization (which denote to audit quality), audit committee size, audit committee meeting, and audit committee financial expertise which denote audit committee characteristics. In addition, five control variables are included in the tested model, namely, board size, board of director meeting, firm size, leverage, and profitability. The measurement of these variables presented in table 1.

Table 1: Measurement of the explanatory variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Acronym</th>
<th>Proxy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit-related factors</td>
<td></td>
<td></td>
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<tr>
<td>Audit report lag</td>
<td>ALR</td>
<td>the number of days from the fiscal year end to the date of the signed auditor's report</td>
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<tr>
<td>Auditor Type</td>
<td>Aud</td>
<td>1= if the auditor engaged with the client for more than or equal three years. 0= if not</td>
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<td>Auditor Industry specialist</td>
<td>Spc</td>
<td>the percentage of the total assets for the companies audited by the same auditor in one industry to the total</td>
</tr>
<tr>
<td>Variable Description</td>
<td>Formula</td>
<td>Notes</td>
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<td>---------------------------------------------------------------</td>
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<tr>
<td>Audit committee size</td>
<td>AC Size</td>
<td>The total number of the audit committee members</td>
</tr>
<tr>
<td>Audit committee meeting</td>
<td>AC Meet</td>
<td>The actual number of audit committee meeting</td>
</tr>
<tr>
<td>Audit committee financial experts</td>
<td>AC Fin</td>
<td>The actual number of members who have financial and accounting experience in audit committee</td>
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<tr>
<td>Control Variables</td>
<td></td>
<td></td>
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<tr>
<td>Board size</td>
<td>BS</td>
<td>The total number of the members on the board</td>
</tr>
<tr>
<td>Boards Meeting</td>
<td>Meet</td>
<td>The actual number of board meetings</td>
</tr>
<tr>
<td>Company size</td>
<td>Size</td>
<td>Total assets</td>
</tr>
<tr>
<td>Leverage</td>
<td>Lev</td>
<td>Total liabilities/Total owners equity</td>
</tr>
<tr>
<td>Profitability</td>
<td>Prof</td>
<td>ROA = net income divided to total assets</td>
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### 4.3 Research model

To test the main hypothesis of this study, ordinary least squares (OLS) regression model are employed as follows:

$$ARL = \beta_0 + \beta_1 Aud + \beta_2 Spc + \beta_3 AC Size + \beta_4 AC Meet + \beta_5 AC Fin + \beta_6 BS + \beta_7 Meet + \beta_8 Size + \beta_9 Lev + \beta_{10} Prof + \epsilon$$

Where:

- **ARL** = Audit report lag (the number of days elapsed form the end of the balance sheet date to the signed audit report date).
- **β0** = the intercept. **Aud** = Audit Type.
- **Spc** = Auditor Industry specialist. **Ac Size** = Audit committee size
- **Ac Meet** = Audit committee meeting. **Audit Fin** = Audit committee financial expertise.
- **BS** = Board size. **Meet** = Board meeting
- **Size** = company size. **Lev** = leverage.
- **Prof** = Profitability. **ε** : The residual value.

### 5. Data Analysis and Results
5.1 Descriptive results

Table 2 presents the descriptive statistics of all study's variables. On average, the listed Saudi firms take 74 days to publish their signed audited reports with a minimum of 16 days and a maximum of 241 days, which implied that most listed Saudi firms are issued their audit reports within the regulatory deadline. These results are comparable to (Bonson-Ponte et al., 2008; Afify, 2009; Banimahd et al., 2012; Ezat, 2015).

Table 2: Descriptive analysis of study's variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Panel A: Dependent V.</th>
<th>Panel B: Independent and Control V.</th>
<th>Panel C: Dummy Independent V.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Min.</td>
<td>Max.</td>
</tr>
<tr>
<td>ARL</td>
<td>72.59</td>
<td>16</td>
<td>241</td>
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<td></td>
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</table>

Note: ARL= Audit report lag, Aud = Audit Type, Spc = AuditorIndustry specialist, AC size = Audit committee size type, AC Meet = Audit committee meeting, AC Fin = Audit committee financial expertise, BS= Board size, Meet = Board meeting, Size =Firm size, Lev = leverage, Prof= profitability.

Moreover, most of the listed Saudi firms are audited by non-big 4 audit companies (59%) and about 25% audited by industry-specialist auditors. Regarding the characteristics of audit committee, listed Saudi firms held on average 5 meetings in 2018 and have on average 4 members on their audit committee of whom 2 are financial expertise. In addition, the board size of the listed Saudi firms includes on average 8 members and held 5 meetings in 2018.

5.2 Univariate analysis results

Table3 shows the correlation matrix of the study's variables. Five variables are only correlated with ARL. Leverage is correlated positively, while audit type, auditor industry specialization, board size and profitability are correlated negatively.
Table 3: Correlation matrix of study's variables

<table>
<thead>
<tr>
<th></th>
<th>(A)</th>
<th>(B)</th>
<th>(C)</th>
<th>(D)</th>
<th>(E)</th>
<th>(F)</th>
<th>(G)</th>
<th>(H)</th>
<th>(I)</th>
<th>(J)</th>
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<tbody>
<tr>
<td>(B)</td>
<td>-0.11</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>(C)</td>
<td>-0.09*</td>
<td>0.29*</td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td>-0.15*</td>
<td>0.06</td>
<td>0.28***</td>
<td></td>
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<tr>
<td>(E)</td>
<td>-0.06</td>
<td>0.05</td>
<td>0.16*</td>
<td>0.07</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>(F)</td>
<td>-0.01</td>
<td>-0.02</td>
<td>0.13</td>
<td>0.41*</td>
<td>0.12</td>
<td></td>
<td></td>
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<tr>
<td>(G)</td>
<td>-0.16*</td>
<td>0.13</td>
<td>0.19**</td>
<td>0.30*</td>
<td>0.20*</td>
<td></td>
<td></td>
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<tr>
<td>(H)</td>
<td>-0.05</td>
<td>0.08</td>
<td>0.18**</td>
<td>0.39*</td>
<td>0.35*</td>
<td>0.17*</td>
<td></td>
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<tr>
<td>(I)</td>
<td>-0.07</td>
<td>0.22*</td>
<td>0.47***</td>
<td>0.06</td>
<td>-0.02</td>
<td>-0.25*</td>
<td>0.17*</td>
<td>-0.07</td>
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<tr>
<td>(J)</td>
<td>0.19*</td>
<td>0.20*</td>
<td>0.16*</td>
<td>0.08</td>
<td>0.02</td>
<td>0.12</td>
<td>0.18*</td>
<td>0.09</td>
<td>-0.06</td>
<td></td>
</tr>
<tr>
<td>(K)</td>
<td>-0.19*</td>
<td>0.11</td>
<td>0.04</td>
<td>0.01</td>
<td>-0.10</td>
<td>-0.03</td>
<td>0.07</td>
<td>-0.15*</td>
<td>-0.01</td>
<td>-0.20*</td>
</tr>
</tbody>
</table>


Moreover, the multicollinearity problem was checked using a correlation matrix with the variance inflation factors (VIF) and tolerance values from the regression results. Tables 3 and 4 summarize these results.

Table 3 shows that there is no serious multicollinearity among the independent variables. The rule of thumb for checking multicollinearity is whether the correlation coefficient exceeds 0.80, (Gajarati, 2003, p.359). In addition, Table 4 indicates that all the VIF values are below 10, and the tolerance values are greater than 0.1; these results indicate that there is no multicollinearity among the independent variables (Field, 2009).

Table 4: VIF and Tolerance values for the independent variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aud</td>
<td>0.771</td>
<td>1.297</td>
</tr>
<tr>
<td>Spc</td>
<td>0.523</td>
<td>1.913</td>
</tr>
<tr>
<td>AC Size</td>
<td>0.522</td>
<td>1.917</td>
</tr>
<tr>
<td>AC Meet</td>
<td>0.730</td>
<td>1.370</td>
</tr>
</tbody>
</table>
5.3 Multivariate analysis results

To examine the association between audit quality variables and audit committee variables and ARL, this study run a regression model after controlling for industry type. The model is significant at p< .0001, which indicates that the model explains the variation in the dependent variable (ARL). Table 5 summarizes the results of this model. The adjusted \( R^2 \) is 15.5 per cent, which implies that the variation in the independent variables of the study explained 15.5 per cent of the variation in the ARL of the listed Saudi firms. The adjusted \( R^2 \) of the current study is comparable with (Jaggi and Tsui, 1999; Abdullah, 2006; Mohamad Naimi et al., 2010; Tanyi et al. 2010; Nelson and Shukeri, 2011; Rusmin and Evans, 2017; Kaaroud et al., 2020).

<table>
<thead>
<tr>
<th>Model</th>
<th>Coef.</th>
<th>T Statistic</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSTANT</td>
<td>83.083</td>
<td>2.528</td>
<td>0.013**</td>
</tr>
<tr>
<td>Aud</td>
<td>-12.297</td>
<td>-2.376</td>
<td>0.019**</td>
</tr>
<tr>
<td>Spc</td>
<td>-21.856</td>
<td>-1.838</td>
<td>0.069*</td>
</tr>
<tr>
<td>AC size</td>
<td>-1.516</td>
<td>-0.529</td>
<td>0.598</td>
</tr>
<tr>
<td>AC Meet</td>
<td>0.394</td>
<td>0.330</td>
<td>0.742</td>
</tr>
<tr>
<td>AC Fin</td>
<td>-1.516</td>
<td>-3.955</td>
<td>0.000***</td>
</tr>
<tr>
<td>B Size</td>
<td>-3.520*</td>
<td>-1.762</td>
<td>0.081</td>
</tr>
<tr>
<td>Meet</td>
<td>-1.111</td>
<td>-0.651</td>
<td>0.540</td>
</tr>
<tr>
<td>Size</td>
<td>1.532</td>
<td>0.478</td>
<td>0.634</td>
</tr>
<tr>
<td>Lev</td>
<td>10.098</td>
<td>0.828</td>
<td>0.409</td>
</tr>
<tr>
<td>Prof</td>
<td>-44.401*</td>
<td>-1.836</td>
<td>0.069</td>
</tr>
<tr>
<td>P value</td>
<td></td>
<td>0.010</td>
<td></td>
</tr>
<tr>
<td>F-Ratio</td>
<td></td>
<td>1.950</td>
<td></td>
</tr>
<tr>
<td>Adj. ( R^2 )</td>
<td></td>
<td>0.155</td>
<td></td>
</tr>
</tbody>
</table>

Note: *, ** and *** indicate significant at 10per cent, 5per cent and 1per cent, respectively.

5.4 Discussion of the results

The empirical findings provide support for hypotheses \( H_1 \), \( H_2 \), and \( H_5 \). According to hypothesis \( H_1 \), the results indicated that there is negative association between auditor
industry specialist and ARL with a coefficient of -21.856 for the auditor industry specialist at a statistical level of 10 per cent. This result indicates that listed Saudi firms that are audited with industry specialist auditors can complete their audit report faster than those non-specialist peer due to the experience and the knowledge obtained by those industry specialists. This result is consistence with the results reported by (Che-Ahmed and Abidin, 2008; Habib and Bhuiyan, 2011; Ezat, 2015; Al Bhoor et al., 2016) who found that the relationship between ARL and auditors industry specialist is significantly negative. Therefore, hypothesis H1 is accepted.

Regarding hypothesis H2, the results indicate the negative impact of audit type on ARL at significant level of 5 percent which implied that listed Saudi firms that audited by big 4 firms are enjoy shorter ARL. Big 4 audit firms have more resources required to use high technology in the audit process and hire high quality staff and provide more training program that enhanced their qualifications and skills which increase the audit quality (Owunsu and Leventis, 2006; Rusmin and Evans 2017). Accordingly, big 4 audit firms are more likely with these high resources to perform the audit work faster and hence shorten the time elapsed to issue audit report. This finding is consistent with (Leventis et al., 2005; Owunsu and Leventis, 2006; Rusmin and Evans 2017; Habib et al., 2019). Therefore, hypothesis H2 is accepted.

Regarding hypothesis H5, the findings illustrated that audit committee financial experts associated negatively with ARL at significant level 1 percent which implied that Saudi firms with high financial expertise in their audit committee will reduce the time needed to published audited financial reports due to the reduction in ARL. Based on agency theory, The existence of financial / accounting expertise increases the efficiency of monitoring activities on various financial issues in the Saudi firms and reduce the time needed to conduct a valuable discussion with auditors which aid auditors to complete their tasks on time and reduce the effort performed and hence reduce ARL (Habib et al., 2019; Kaaroud et al., 2020). This result is consistent with (Hashim & Abdul Rahman, 2011; Ika and Ghazali, 2012; Sultana et al., 2015; Habib et al., 2019; Kaaroud et al., 2020; Aldoseri et al., 2021). Therefore, hypothesis H5 is accepted.

The multivariate analysis fails to provide empirical evidence for the impact of the other audit committee variables (i.e. audit committee size and audit committee meetings) on ARL in the Saudi context. These findings are consistent with (Bédard & Gendron, 2010; Apadore and Noor, 2013; Sultana et al., 2015; Omer et al., 2020; Kaaroud et al., 2020; Aldoseri et al., 2021). Therefore, hypothesis H3 and H4 are rejected.

Regarding the control variables, the regression analysis results illustrate that the ARL is associated negatively with board size and profitability. This results consistence with (Laitinen and Laitinen, 1998; Masyitoh and Seak, 2010; Habib, 2013; Al Bhoor et al., 2016; Omer et al., 2020).

6. Conclusion

ARL provides good indication for the quality of audit process and assure for introducing useful information in a timely manner. Many previous studies investigate the association
between audit report lag and various variables in different context. However, few studies examine such association in the Gulf countries. This study extends the prior research on ARL by exploring the impact of audit quality on ARL in the Saudi context. Audit quality can be measured by two main variables; audit reputation and audit firm specialization. Further, audit committee can enhance the creditability of issuing audit report in timely manner. Therefore, this study examines the possible impact of audit committee variables on ARL using a sample of Saudi listed non-financial firms in 2018.

The descriptive findings demonstrate that on average, most of the listed Saudi firms issued their audit report within the regulatory deadline. They take 74 days to publish their signed audited reports with a minimum of 16 days and a maximum of 241 days. By using OLS model, the results provide empirical support for hypotheses $H_1$, $H_2$, and $H_5$. All the three variables are significantly associated negatively with ARL. Listed Saudi firms that are audited by big 4 firms and industry specialist auditors and have high financial expertise in their audit committee are characterized with shorter ARL.

7. References


Gajarati, D. N. (2003), Basic Econometrics, New York, Mc Grow Hill.


