

UNIVERSITY OF CAPE COAST

AUDIT REPORT LAG AND EARNINGS QUALITY OF LISTED FIRMS
IN GHANA

OTI BENJAMIN DUAH

2022

©2022

Oti Benjamin Duah
University of Cape Coast

UNIVERSITY OF CAPE COAST

AUDIT REPORT LAG AND EARNINGS QUALITY OF LISTED FIRMS
IN GHANA

BY

OTI BENJAMIN DUAH

Thesis submitted to the Department of Accounting of the School of Business,
College of Humanities and Legal Studies, University of Cape Coast, in partial
fulfillment of the requirements for the award of Master of Commerce degree
in Accounting

AUGUST, 2022

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature: Date:

Name: Oti Benjamin Duah

Supervisor's Declaration

I hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Supervisor's Signature: Date:

Name: Dr. Mohammed Zangina M. Isshaq

ABSTRACT

The purpose of the study was to investigate the relationship between Audit Report Lag (ARL) and earnings quality of listed firms in Ghana. Audit Report Lag (ARL) was measured as the number of calendar days from year-end to the date of the auditor's report while earnings quality was measured base on the relations among income, cash, and accruals. Hence, the study adopted Earnings Smoothness (SM), Earnings Surprise (ES), Closeness to Cash (CC), and Accrual Quality (AQ) measures for earnings quality. The study collected data on 33 firms listed on the Ghana Stock Exchange (GSE) between the period of 2009 to 2019 and employed a Systems Generalized Method of Moments estimator to analyze the data. It was revealed that ES, CC, and AQ have a positive significant relationship with ARL whiles SM has a negative significant relationship with ARL. Hence, the study concluded that a longer ARL improves the quality of the earnings in terms of reducing unexpected discrepancies between anticipated earnings and actual earnings, producing earnings that can easily be approximated to operating cashflows and producing earnings that have less deceptive manipulative variation in working capital which will cause operating cashflows volatility but provide management an opportunity to engage in irregular earnings variation or volatility by shifting revenues and expenses from one fiscal period to another. Therefore, auditors are expected to put in place measures by ensuring or advising owners not structure management's compensations and incentive against their financial performance in other to reduce these irregularities.

KEYWORDS

Accrual Quality

Audit Report Lag

Closeness to Cash

Earnings Quality

Earnings Smoothness

Earnings Surprise

ACKNOWLEDGMENTS

I would like to express my profound appreciation to My Supervisor, Mohammed Zangina M. Isshaq (PhD) of the Finance Department, for his time, expertise, support, submission, critiques and guidance throughout this work. I am very thankful. I am also very grateful to all other lecturers and staffs of the department of Accounting for their diverse help and support.

Again, I appreciate the unflinching support and contributions from my colleagues; Nathaniel Kwapong Obuobi and Awaafu Zakari Halidu towards this project. I also wish to thank all my friends and individuals who kept me high spirited during my work on this project, especially, Mavis Gyasi and Phylis Owusu-Bempah for their support and sacrifice during my postgraduate study at the University of Cape Coast.

Finally, to my parents; Mr. Kwaku Duah and Mrs. Lucy Duah, and Siblings; Emmanuel Kwaku Duah, Christian Danso Duah and Princess Ago Duah, I say thank you for your moral support and prayers throughout my academic journey. All your encouragement and support will forever persist in my heart.

DEDICATION

To my friends and entire family

TABLE OF CONTENTS

| | Page |
|--------------------------------|------|
| DECLARATION | ii |
| ABSTRACT | iii |
| KEYWORDS | iv |
| ACKNOWLEDGMENTS | v |
| DEDICATION | vi |
| TABLE OF CONTENTS | vii |
| LIST OF TABLES | xi |
| LIST OF FIGURE | xii |
| LIST OF ABBREVIATIONS | xiii |
| CHAPTER ONE: INTRODUCTION | |
| Background to the Study | 1 |
| Statement of the Problem | 6 |
| Purpose of the Study | 9 |
| Research Objectives | 9 |
| Research Questions | 9 |
| Significance of the Study | 10 |
| Limitations of the Study | 10 |
| Delimitation of the Study | 10 |
| Organization of the Study | 11 |
| CHAPTER TWO: LITERATURE REVIEW | |
| Introduction | 12 |

| | |
|---|----|
| Conceptual Review | 13 |
| Audit Report Lag (ARL) | 13 |
| Definition of ARL | 14 |
| Effect ARL on audited financial statement timeliness | 16 |
| Effect of audited financial report timeliness on stakeholder's decision | 17 |
| ARL Determinants | 19 |
| Earnings Quality | 27 |
| Definition of earnings quality | 28 |
| Earnings quality as a measure of financial reporting quality | 29 |
| Earnings quality measures | 31 |
| Theoretical Framework | 38 |
| Agency theory | 38 |
| Signaling theory | 41 |
| Application of Theories to the Study | 43 |
| Empirical Review | 45 |
| Conceptual Framework | 51 |
| Chapter Summary | 52 |
| CHAPTER THREE: RESEARCH METHODS | |
| Introduction | 53 |
| Research Approach | 53 |
| Research Design | 54 |
| Population of the study | 55 |
| Research sample | 55 |
| Data source | 56 |
| Model Specification | 57 |

| | |
|--|----|
| Data Processing Tool and Estimation Strategy | 57 |
| Diagnostic Tests | 61 |
| Measurement of Variables | 61 |
| Variables, Measurements, and Sources | 62 |
| Ethical Consideration | 63 |
| Chapter Summary | 64 |
| CHAPTER FOUR: RESULTS AND DISCUSSION | |
| Introduction | 65 |
| Descriptive Statistics | 65 |
| Correlation Analysis | 68 |
| Regression Results | 70 |
| Audit Report Lag and Earnings Smoothness | 71 |
| Audit Report Lag and Earnings Surprise | 73 |
| Audit Report Lag and Closeness to Cash | 76 |
| Audit Report Lag and Accrual Quality | 77 |
| Chapter Summary | 80 |
| CHAPTER FIVE: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS | |
| Introduction | 81 |
| Summary of Research | 81 |
| Key Findings of the Study | 82 |
| Conclusions | 83 |
| Recommendations | 84 |
| Suggestions for Further Research | 85 |

| | |
|------------|-----|
| REFERENCES | 86 |
| APPENDICES | 121 |

LIST OF TABLES

| Table | Page |
|---------------------------------------|------|
| 1 Apriority Expectations of Variables | 57 |
| 2 Independent Variable | 62 |
| 3 Dependent Variables | 62 |
| 4 Control variables | 63 |
| 5 Descriptive Statistics | 66 |
| 6 Correlation Analysis | 69 |
| 7 SGMM Regression Models Results | 70 |

LIST OF FIGURE

| Figure | | Page |
|--------|----------------------|------|
| 1 | Conceptual Framework | 52 |

LIST OF ABBREVIATIONS

| | |
|-------|--|
| AQ | Accrual Quality |
| AR | Auditor's Reputation |
| ARL | Audit Report Lag |
| CC | Closeness to Cash |
| EQ | Earnings Quality |
| ES | Earnings Surprise |
| FS | Firm Size |
| GSE | Ghana Stock Exchange |
| IASB | International Accounting Standards Board |
| PCAOB | Public Accounting Oversight Board |
| PR | Profitability |
| SEC | Securities and Exchange Commission |
| SM | Earnings Smoothness |
| SO | Solvency |

CHAPTER ONE

INTRODUCTION

Firms need to publish their audited financial statement on time. The financial statement has been a major source of financial information that has been serving as a reference and a basis for every investor and any other stakeholders' decision. Stakeholders need this information on time to an informed decision. However, a financial statement cannot be published without been audited by an independent party. This is to provide high-quality financial information that projects the true nature and financial position of the firm and also improves its usefulness for economic decision-making. Hence, this has created the need to balance the relative benefits of timely reporting of information provided in the financial statement with its reliability. Therefore, this study sought to examine the effect of Audit Report Lag (ARL) and earnings quality of listed firms in Ghana.

Background to the Study

In Ghana firms are considered separate legal entities by statute as indicated in the Companies Act of Ghana 2019 (Act 992) Section 24 hence; it does not function as an individual. However, owners assign or engage agents under certain contracts to serve as management to oversee the operations of the firm. This has created dispersed ownership under which owners are not primarily involved in the decisions of the firm, however, management serves as the agents in charge of decision-making. Owing to their direct participation in the firm's regular activities, management typically has an information advantage resulting in information asymmetry (Jensen & Meckling, 1976). In

an attempt to resolve this problem, owners are entitled to obtain information on the firm's financial condition and the results of the operations through the publication of the financial statement. The purposes of financial reports are to provide information on the cashflow, financial position, and financial performance of a firm (Anggraini, 2017). This information is used by owners to evaluate the performance of the management and assess whether their investment is yielding results or not (Savitri & Andreas, 2019). Therefore, a financial report serves as a form of management accountability for resources entrusted to them by Shareholders and also a means of communication between them (Oktyawati & Fajri, 2019).

However, the financial statements are produced and monitored by management without the involvement of the owners. Hence, there is the possibility that managers may misreport the financial information and exploit it in their favor (Zaman, Hudaib & Haniffa, 2011). Manipulation by management, for example, could occur by increasing the firm's net sales to gain more incentives (Bala, Amran & Shaari, 2019). This has created the need to hire extra officials, such as an independent qualified external auditor, to assess the reliability and credibility of the financial report produced, management performance, the implementation and efficiency of the internal controls and also assist in the development of policies and procedures (Baldacchino, Caruana, Grima & Bezzina, 2017). In Ghana, auditing of the annual financial statement of firms are mandatory thus, the Companies Act of Ghana 2019 (Act 992) requires that the annual financial statement of firms be audited by duly qualified external auditors before the issue, publishing, or

circulation of the same and non-compliance shall attract sanctions under the law.

The external auditors are supposed to provide independent assurance to owners and other stakeholders that management prepared the financial statements in accordance with generally accepted accounting standards and are not materially misstated (Segbefia, 2016). With this, the financial report gains legitimacy, and public confidence in its accuracy and validity increases. The audit process takes time so that it will have an impact on the timeliness of the presentation of the financial statement. The time it takes auditors to complete an audit is known as audit report lag (ARL), and it is typically measured as the number of days from the end of the fiscal year to the date of the signature of the audit opinion (Lestari & Nuryatno, 2018; Ahmed & Che-Ahmad, 2016; Dao & Pham, 2014; Lee & Jahng, 2011). The time required by the auditor to produce audit reports on the performance of a firm's operation is one of the major factors influencing the timeliness of financial reports (Puspitasari, 2014).

As stated in the Financial Accounting Standards Board (FASB, 2010) and Project Update between the International Accounting Standard Board, timeliness is regarded as an enhancing characteristic of the relevance qualitative characteristic of financial reporting. Timeliness is the presentation of financial information for its users when they need it (Lestari *et al.*, 2018). Disclosing information on time enables stakeholders to make an economic decision efficiently and improves the mobility of capital and facilities. Financial reports must be made available to decision-makers before they lose their ability to influence economic decisions (Erer & Comert, 2014). The late

release of financial information reduces its relevance, which means that the information may lose its relevance if there is an undue delay in it being published. In other words, if reporting is postponed until all facts are known, users may be unable to make valid decisions (Turel & Tuncay, 2016). The information usefulness of annual reports is affected by timely reporting, which means that there is a high information content in more valuable information. (Suryanto & Thalassinou, 2017).

According to the International Accounting Standards Board (IASB, 2008), a financial statement should provide high-quality information regarding the primarily financial nature of economic entities that is very useful for economic decision-making. Quality financial information certainly has accurate information to produce a decision that is right for its users (Ahmad, Mohamed & Nelson, 2016). The qualitative characteristics of financial information consist of both fundamental qualitative characteristics and qualitative characteristics of enhancers. With the fundamental qualitative characteristics, the information must be relevant and represent exactly what will be represented. Financial information is considered useful if the information is understandable, verifiable, timely, and comparable (Darmawan, 2021). As a result, if the financial information is not delivered on time, then the information may become irrelevant for its intended purpose (Dang, Pham & Vu, 2018).

The late release of financial information reduces its relevance, meaning that the information may become obsolete if it is not published on time (Akhori & Oseghale, 2017). To put it another way, if reporting is delayed until all facts are available, users may be unable to make informed decisions. The

information's content and relevance are reduced as a result of the delay. Entities must weigh the proportional benefits of timely reporting against the accuracy of the financial statement information (Alcaide Muñoz, Rodríguez Bolívar & López Hernández, 2017; Hassan, 2016; Mechelli & Cimini, 2014). To provide information on a timely basis, it may often be necessary to report before all features and aspects of a transaction or other events are known, thus compromising reliability. In contrast, if reporting is delayed until all aspects are known, the information may be highly reliable but of little use to users who have had to make decisions in the interim (Doyle & Magilke, 2013). Timeliness has long been recognized as one of the qualitative attributes of general-purpose financial reports (Zandi & Abdullah, 2019; Rusmin & Evans, 2017; Ismail, Mustapha & Cho, 2012).

Timely reporting of financial information enhances its usefulness. Thus, the content in the financial statement is more useful when published on time (Rahmawati, 2018). Financial reports are intended to meet the needs of decision-makers. For instance, the timeliness of the publication of annual financial statements is important in the capital market (McGee & Yuan, 2012). This is because the investors and potential investors need financial information of firms as quickly as possible to assess the performance, potential benefits, and the risk associated with the firm (Okpala, 2012). Also, the timely report helps reduce the spread of asymmetric financial information and increase investment (Jayanimitta, Ratnadi, Widanaputra & Ariyanto, 2020). A delay in financial reporting leads to greater market inefficiency. This is because, late delivery of financial information increases the uncertainty surrounding investment decisions and this may encourage investors to seek alternative

sources of information that may be assessing the firm poorly (Mawardi, 2017). Especially in this part of our world, the provision of timely information has assumed more importance since other alternative sources of information such as media releases, news conferences, and financial analysts' forecasts are not well developed and regulated as effective as in developed countries (Kamalluarifin, 2016).

To achieve this objective, financial reports must be accessible on time to inform decision-making (Uwuigbe, Felix, Uwuigbe, Teddy & Falola, 2018). Hence, financial reports should be published as soon as possible after the end of the accounting period (Bhandari & Iyer, 2013). The usefulness of financial statements is blighted if they are not made accessible to users within a reasonable period after the reporting date. A firm should be in a position to issue its financial statements timely (Do & Pham, 2020).

Statement of the Problem

The most reliable source and reference of accounting information available to stakeholders is a financial statement (Alkhatib & Marji, 2012). The financial statement has been a major source of financial information that has been served as a reference and a basis for every investor and any other stakeholders' decision (Jayanimitta *et al.*, 2020). As stated by FASB, concept statement 2, financial information must be useful by being both relevant and reliable. Relevant financial statements must have the quality to influence users' economic decisions (Hamed-Sidhom & Loukil, 2021). Thus, a financial statement is considered to be relevant and to be of economic value when it is disclosed on time and delivered to users as soon as practicable after the fiscal year-end (Al-Ajmi & Hussain, 2011).

However, a financial statement cannot be published without been audited by an independent party. The main objective of the audit is to provide high-quality financial information that projects the true nature and financial position of the firm and also improves its usefulness for economic decision-making (Ahmed *et al.*, 2016). Earnings quality of a firm may be measured in terms of its persistence, predictability, variability, the relations among income, cash and accruals that is the smoothness of the earnings, the closeness of earnings to cash, earnings surprise, and accrual quality, implementation decisions, and selected qualitative characteristics in the FASB's Conceptual Framework (Schipper & Vincent, 2003).

A high-quality financial statement is considered reliable which is one of the most essential qualitative attributes of accounting practice. Financial information reliability is achieved when the information about the economic phenomenon is neutral, complete, and free from material error (Darmawan, 2018). Hence, auditors will need adequate time to perform the audit process and publish their audit reports. Hence, the timeliness of the audit report has become an important issue as the timing and delivery of the report will determine the timeliness of the financial statement.

Publication of the audited financial statement depends on the time the audit process is completed thus ARL (Abdillah, Mardijuwono & Habiburrochman, 2019). Even though a longer ARL may represent a greater level of effort and time in audit procedures according to Bae and Woo (2015), several studies have shown that a delay in publishing the financial report as a result of audit report lag usually signal either negative indication concerning either the firm, the auditor or both to stakeholders (Rusmin & Evans, 2017;

Alkhatib *et al.*, 2012). That is, a longer ARL may be interpreted as an indication of a higher level of audit risk as weak internal controls and implications, poor management performance, and/or firm's complexity (Abernathy, Barnes, Stefaniak & Weisbarth, 2017) or represent inefficient audit planning, poor human resources and inadequate audit expertise on the part of the auditor (Luo, 2012).

This has created the need to balance the relative benefits of timely reporting with the reliability of the information provided in the financial statements (Alcaide Muñoz *et al.*, 2017; Hassan, 2016; Mechelli *et al.*, 2014). As much as it is necessary to release financial statements on time, it is also very important for auditors to spend adequate time in assessing the reliability of all aspects of transactions and events included in the financial statement. Conversely, if a report is delayed until all transactions and events are assessed, the information becomes highly reliable but of little use to users who have had to make decisions in the interim (Doyle *et al.*, 2013).

As a result, firms and auditors are under tremendous pressure to complete the audit process in the shortest possible time. These have created the need to assess the effect of audit report lag on the quality of the financial statement specifically with the reported earnings. Also, there have been various studies on the persistence, predictability, and variability but there are no comprehensive studies on the relations among income, cash and accruals that are the smoothness of the earnings, the closeness of earnings to cash, earnings surprise, and accrual quality specifically in Ghana.

Purpose of the Study

The main objective of the study is to examine the effect of Audit Report Lag (ARL) on the earnings quality of listed firms in Ghana. The study sought to analyze the effect of ARL on earnings quality by adopting four measures based on the relations among income, cash, and accrual.

Research Objectives

1. Assess the relationship between audit report lag and earnings smoothness of listed firms in Ghana.
2. Evaluate the relationship between audit report lag and earnings surprise of listed firms in Ghana.
3. Examine the relationship between audit report lag and earnings closeness to cash of listed firms in Ghana.
4. Evaluate the relationship between audit report lag and accrual quality of listed firms in Ghana.

Research Questions

1. What is the relationship between audit report lag and earnings smoothness of listed firms in Ghana?
2. What is the relationship between audit report lag and earnings surprise of listed firms in Ghana?
3. What is the relationship between audit report lag and earnings closeness to cash of listed firms in Ghana?
4. What is the relationship between audit report lag and accrual quality of listed firms in Ghana?

Significance of the Study

The study contributed to the research perspective, auditing firms, their clients, and stakeholders. The study will add to existing knowledge and serve as a basis for further research. Though there are several studies on Audit Report Lag (ARL), there are no comprehensive studies on its effects on earnings quality in terms of the relations among income, cash, and accrual of listed firms in Ghana. To a certain extent, this study will intend to fill this gap, hence, this study will serve as reference material for further research on a similar segment of ARL and earnings quality. Again, this study will inform investors and other stakeholders of the effect of ARL on the relationship among income, cash, and accrual and assist them in decisions.

Limitations of the Study

The results of the study depend largely on secondary information analyses. Hence, the results of the study are subjected to the limitations of financial statements of listed firms in Ghana as reported to the general public through the Ghana Stock Exchange (GSE) and individual firms' websites. The data used data between the period 2009 to 2019. The study had the limitation of not having access to all financial statements as targeted as a result of some firms failing to publish their audited financial statements for a certain period or period.

Delimitation of the Study

There are various constructs and measures adopted by various studies to assess earnings quality. Each construct or measure assess different aspect, characteristics and/or properties of earning quality of firms. This study, however, focused on the relationship among income, cash, and accruals by

adopting measures to assess the earnings smoothness, earnings surprise, closeness to cash, and accrual quality of firms listed on GSE using panel data between the period of 2009 and 2019.

Organization of the Study

The study has been divided into five chapters. Chapter One deals with the introduction of the study. Thus, it spells out the background to the study, statement of the problem, the purpose of the study, objectives of the study, research question, significance of the study, delimitation, and limitations. Chapter Two presents various definitions, the theories underpinning, and the basic review of relevant literature related to the study, including empirical review and the conceptual framework that form the basis of the study.

Chapter Three deals with the methodology of the study. It covers the research design, study area, the population, sample and sampling procedures, data collection instruments, data analysis, and a chapter summary of the methodology. Chapter Four presents the results and discussion on the study findings, while Chapter Five gives the summary, conclusions, and recommendations based on the findings of the study.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter presents a critical review of the literature and the theoretical basis for the study, as well as issues advanced in prior empirical studies. The review is aimed at providing the intellectual context for the study, acknowledging and examining prior knowledge on the topic, and appreciating modes of presentation and discussions on research findings. This chapter reviews existing literature related to the objectives of the study. Given this, this session is discussed along with the following themes: audit report lag (ARL), earnings quality, theoretical framework, review of prior studies relating to the subject matter, and the conceptual framework of the study. The chapter begins with various definitions of ARL, the effect of ARL on audited financial report timeliness, the effect of audited financial reports on stakeholders' decisions, and the determinants of ARL. The study then proceeds to discuss earnings quality. With this session, the study defines earnings quality, assesses earnings quality as a measure of financial reporting quality and earnings quality measures. Finally, the chapter concludes with the theoretical, empirical work on ARL and earnings quality and the conceptual framework of the study.

Conceptual Review

Audit Report Lag (ARL)

Managers are entitled to make financial conditions and result on operations about their firm available to the public (Jayanimitta *et al.*, 2020). This information helps stakeholders to evaluate the performance of the firm, assist them in decision making, and inform them of the happens and conditions in the firm (Alkhatib *et al.*, 2012). Thus, the financial information serves as a form of management accountability for managing resources entrusted to them by the owners (shareholders) of the entity. The financial information can influence the decision of its users and this has created the need for an external party which is an auditor to evaluate the reliability of the financial information before it is made public (Hamed-Sidhom *et al.*, 2021). Stakeholder usually accepts audited financial statement because it contains the auditor's opinion concerning the credibility and reliability of the information produced in the financial statement. For this reason, at every year-end, the financial information is given to an external audit to assess the credibility of the information before it is been published (Al-Ajmi *et al.*, 2011). Therefore, the period between the time financial information is sent for external assessment and the period the audited financial statement is published, there is a gap which is known as ARL (Puspitasari, 2014).

ARL is not a new phenomenon. In the past several researchers (Al-Ghanem & Hegazy, 2011; Ashton & Newton, 1989; Ashton, Willingham & Elliott, 1987; Courtis, 1976; Davies & Whittred, 1980; Dyer & McHugh, 1975; Iman, Ahmed & Khan, 2001; Gilling, 1977) have investigated the relationship between ARL and several characteristics. Currently, researchers,

academics, and other institutional bodies have developed a keen interest in the impact of ARL on financial information quality, capital market, and investors or stakeholder's decisions (Lee *et al.*, 2011; Dao *et al.*, 2014; Habib, 2015; Sultana *et al.*, 2015).

Definition of ARL

The annual report of a firm contains an audited financial statement which serves as a credible source of information for users of financial information in their decisions (Durand, 2019). This information is seen to be credible and reliable because it has been audited and authenticated by an external party after the financial period. The period or gap between the end of the financial period and the span within which the auditor's opinion is issued refers to ARL (Abernathy *et al.*, 2017).

ARL was described by Garsombke (1981) as the difference between the end of a firm's accounting year and the date on which the auditor's opinion is made accessible. Again, Knechel and Payne (2001) ARL is the length of the period from a firm's financial year-end to the date where the auditor's report is signed. Currently, works of literature by researchers such as Hsu and Khan (2019), Abdillah *et al.* (2019), and Shofiyah and Suryani (2020) also define ARL as the number of days from a firm's fiscal year-end to the date of auditor's opinion or the date the auditor's report is signed.

Some literature on ARL often refers to it as an auditor's signature or audit delay. Al-Ajmi (2008) describes the auditor's signature lag as the number of days from the closing date of the firm's financial year to the auditor's signature date in the audit report after the auditor has assessed the reported

information and has generated an opinion regarding the firm's financial statements.

Again, Bamber, Bamber and Schoderbek (1993) defined ARL as the period between a firm's fiscal year-end and the audit report date. According to the study, ARL is one of the few externally observable audit output indicators that stakeholders can use to evaluate audit efficiency. The auditor's opinion regarding the credibility of the financial statements included the audit report is very instrumental in stakeholders' decisions, hence, a shorter reporting lag is generally preferred. The length of the ARL is likely to provide insights into audit efficiency.

ARL is comprised of three elements, according to Knechel *et al.* (2001). That is scheduling lag, fieldwork lag, and reporting lag. Scheduling lag is the time from the end of the firm's financial year to the beginning of the fieldwork audit, fieldwork lag is the period spent on conducting the fieldwork, and reporting lag is the period from the end of fieldwork to the date on which the audit report is made available.

In several studies, ARL has been a variable of interest since the length of time to complete an audit of a financial statement significantly affects the timing of the release of firms' financial reports, and the delay in publishing the financial reports can increase the asymmetry of information on the market and can affect the relevance of the financial statement (Pizzini, Lin & Ziegenfuss, 2015; Whitworth & Lambert, 2014).

Effect ARL on audited financial statement timeliness

To publish financial information on time, one of the interesting factors that need to be considered is the determination of the period required to complete an audit. High-quality audit work requires adequate time to complete. However, it's difficult to determine how long high-quality audit work should take and at what point in time the audit engagement tends to threaten the timeliness of the financial information (Dao *et al.*, 2014). This ambiguity regarding the determination of an appropriate time frame is particularly acute in a task as complex as an audit as the timeliness of publishing financial information tends to mostly depend on the time of completion of the audit processes (Yendrawati, Putra, & Asmara, 2021). This is due to the fact that the financial statements cannot be released before the audit is completed (Cohen, & Leventis, 2013).

The timeliness of the firm in delivering its financial information can be measured using ARL, which is the number of days between the year-end date of the financial period and the date the audit report is published (Lestari *et al.*, 2018). This period is often seen as one of the most important determinants of financial reporting timeliness. ARL, thus, the gap between the end of the financial period and the date of publication is required to ensure the quality of information been produce but this period may also impact the usefulness and relevance of the information (Eghliaow, 2013).

Academics and practitioners have been interested in the influence of ARL on the timeliness of financial information and the market's sensitivity to the disclosure of such information. The degree of uncertainty in decision-making may be influenced by the timeliness of financial information

published. The market's behavior around the release of financial information will be affected as a result of this (Hirshleifer, Hsu & Li, 2013; Miller, 2010). For instance, Hirshleifer *et al.* (2013) discovered that investors see late reporting as a sign of bad news, and that firms who publish their financial reports later than expected anticipate abnormal negative returns.

Any delays in reporting financial information impact the relevance of information. The timeliness of audit reports has become a matter of great concern since the timing of the delivery of the reports can affect the relevance of financial statements (Rusmin & Evans, 2017; Pizzini, Lin & Ziegenfuss, 2015; DeFond & Zhang, 2014). Timeliness is identified as one of the fundamental attributes and a measure used in determining the value and relevance of financial information, that is, the usefulness of financial information. Therefore, receiving an auditor's opinion on time is very useful and important in improving the relevance and reliability of the financial statement to its users (Prabasari & Merkusiwati, 2017).

Effect of audited financial report timeliness on stakeholder's decision

The International Accounting Standards Board (IASB) Framework identified timeliness as a key constraint to the relevancy of financial information to its users. The Accounting Standards Steering Committee, (1975) insisted on the fact that a few days after the year-end, firms are supposed to publish their annual financial report for the year. This increases the usefulness of the financial information because of the timely communication to its users.

Again, timeliness is classified as a non-formal standard of accounting information by the United Kingdom (UK) accounting framework. The

framework acknowledges, however, that the relevance and usefulness of financial information are related to the timeliness of the information provided and its ability to influence one's decision. Therefore, the longer it takes for information to reach its intended audience, the less relevant and reliable it becomes (Aschauer & Quick, 2018). Leuz and Wysocki (2016) suggested that the issue of audited financial information and other complementary information promptly are of paramount concern to its users.

Dao *et al.* (2014) proposed that the timeliness of the financial information published can clarify the decision-making uncertainty. According to Eghliaow (2013), timeliness is not only a universal criterion of the efficacy of financial information but timely financial information is important in the determination of a firm's performance and assists in undertaking business decisions such as investing in the stock market. Again, publishing financial information promptly impacts stakeholders' behavior and perceptions towards the firm positively (Hirshleifer *et al.*, 2013; Miller, 2010).

For instance, Hirshleifer *et al.* (2013) found empirical evidence that suggests that users of accounting information perceive firms that do not report on time are not performing well or as a sign of bad news and firms that publish their accounting information within the expected period signal firms that are performing well. The period within which the financial information is published has various or different impacts on the decision of its users. For example, investors in the United State (US) market postpone their purchases and securities sales until the financial report for the year is published (Altman, 2013).

Furthermore, Salehi and Azary (2008) concluded that the publication of a timely financial report reduces the uncertainty surrounding the firm. In the situation where a firm fails to produce its financial report on time, users tend to rely on hearsays and other unsolicited information circulating in their decision. This has created the need for firms to publish their financial report on time as the information in the report published by the management of the firm depicts the actual state of the firm.

Literature again identified that timeliness of financial report positive relationship with the price of firm's share. Studies conducted have indicated that stock prices increased when firms issue their financial report earlier than anticipated and deteriorate when the financial report is issued later than anticipated (Iqbal & Farooqi, 2011). Similarly, Hirshleifer *et al.* (2013) established a positive correlation between abnormal returns and the issue of financial reports earlier than anticipated and a negative correlation when issued later than anticipated.

ARL Determinants

ARL is expected to vary from firm to firm and also from year to year even for a particular firm because of firm characteristics and auditor characteristics (Alkhatib & Marji, 2012). This is because each firm has different characteristics and complexities, therefore they face different factors and circumstances affecting their ARL. This requires auditors to adopt different procedures in performing their engagements. Again, on the side of the auditors, each one of them has different skills and expertise in conducting an audit engagement (Habib, 2015).

Identifying the factors that are affecting the ARL is likely to provide an in-depth understanding of how to promote efficiency in audit engagement (Habib & Bhuiyan, 2011). The variables that affect ARL have been studied by many researched. They considered variables that influence ARL both from the side of the firms and that of their auditors, thus, a firm's characteristics (Hossain *et al.*, 1998; Habib, 2015) and their auditor's characteristics. Studies by Hirshleifer *et al.* (2013) and Pizzini *et al.* (2015) concluded that the main factor causing the length of ARL comes from within the two entities which are the firms and their auditors. However, the interrelated nature of these characteristics makes it quite complex to explicitly categorize them into their various classes. Therefore, this study focused on firm size, their auditor's reputation, profitability, and solvency.

Firm size

Some studies have identified a significant correlation between the size of the firm and the ARL (Cahyadi, 2019; Dini, 2019; Prabasari *et al.*, 2017; Diandi, 2016). These works of literature view size as a determinant of a firm's audit report as two opposing points of view. The first point believes that large firms will require more time in examining the various aspects by the auditor and thus more lag. Larger firms being more diversified may have more work to be done by the auditor. Following this augment, one may expect a positive relationship between the size of the firm and ARL. The second view is that there is lesser information asymmetry with larger firms. As they have the resources to engage big audit firms with a running contract which can affect the timing of the release of the final report at the year-end.

Various studies have identified both negative and positive significant relationships between firm size and audit delay. Hirshleifer *et al.* (2013) has suggested various justifications why firm size could be negatively correlated to the ARL. This includes the fact that larger firms may be theorized to complete their financial report audit earlier than smaller firms. Sultana, Singh and Van der Zahn (2015) concluded large firms are considered to have put in place a strong internal control system hence, it is not likely for them to commit substantial errors in the financial report as compared to smaller firms. Therefore, external auditors are more likely to trust the financial information from firms that are perceived to have strong internal controls than information generated from a smaller firm with weak internal controls. In effect, substantive audits are likely to be conducted on smaller firms by external auditors. Again, according to Hirshleifer *et al.* (2013), larger firms are likely to record high inventory levels which may delay the audit report in the event where external auditors suspect some level of misappropriation and want to minimize the audit risk.

Managers of large firms may have incentives to reduce both audit delay and report lag. This is because large firms are closely monitored and regulated by investors and other stakeholders hence; they are under tremendous pressure to publish their financial reports on time (Mashuri & Ermaya, 2022; Afify, 2009; Al-Ajmi, 2008; Ahmad & Kamarudin, 2003). This helps large firms to file their audited financial report more professionally and quickly (Mashuri *et al.*, 2022). Again, in line with the theory of compliance, larger firms are perceived to be more compliant to rules and regulations that have been established regarding the timeliness of financial reports than

relatively smaller firms (Prabasari *et al.*, 2017). This is because moving in line with these rules and regulation helps firms to develop and maintain a good image, hence, large firms have the drive to comply with these rules and regulations to make their ARL is short (Sugita & Dwirandra, 2017).

Auditor's reputation

Firms will engage the services of a well-known auditing firm with a good reputation to enhance the quality and reliability of their financial reports. The reputation of an audit firm is a trust the public has in the work of an audit firm (Abdillah *et al.*, 2019). Audit firms generally have been grouped into two major groups worldwide: The Big four auditing firms which are made of Deloitte & Touche, Ernst & Young (E&Y), PricewaterhouseCoopers (PwC), and KPMG and Non-Big four auditing firms which is also consist of the remaining auditing firms aside from the Big four.

An audit work done by any of the Big four firms is perceived to have the ability to influence the ARL of firms. Previous research suggests that the Big four firms have a lower ARL as compared to others (Habib, Bhuiyan, Huang & Miah, 2019). In addition, the Big four firms complete their audit engagement more efficiently and effectively as compared to smaller firms (Sultana, Singh & Van der Zahn, 2015). Firms associates themselves with reputable audit firms usually with any of the Big-four audit firms to enhance the reliability of their financial report (Zerni, 2012). This is because, such audit firms are known to have invested more resources and have trained their staff adequately for any audit engagements (Lennox, Francis & Wang, 2012). Hence, Client firms will be able to report quickly because audit delays are likely to be minimal.

The Big Four auditing firms have very good professionalism that increases the quality of their audit and makes the time spent in the audit process more effective (Sitorus & Ardiati, 2017). This helps to improve the efficiency of the audit procedure carried out by these auditing firms to shorten the ARL (Ibrahim & Suryaningsih, 2016). Firms always indicate the scope of the service they require from their auditor and any other issue agreed upon in the engagement letter (Dewi & Hadiprajitno, 2017).

Ika and Ghazali, (2012) claims that, since the Big-Four audit firms have invested and acquire adequate resources and technology that enable them to complete audit engagements faster than the others, hence, giving them a competitive edge over them. Habib *et al.*, (2019) also indicated that large audit firms normally have a larger customer base which serves as a source of expertise. Hence, they can resolve management disputes faster than smaller firms. Therefore, it can be argued that, unlike the smaller audit firms, large audit firms will use less time to audit their clients to protect their reputation and brand (Afify, 2009). Larger firms which are normally the Big-Four audit firms are considered resourceful, technically advanced, and more experienced than smaller audit firms, so it is expected that the ARL of a firm is lesser when audited by any of the Big-Four audit firms (Lee & Jahng, 2008).

Profitability

Profit refers to a firm's ability to generate positive net earnings from its day-to-day operations over a given period (Storey, Keasey, Watson & Wynarczyk, 2016). The earning generation involves using the available resources in such a way as to generate inflow that is higher than the outflow, thereby resulting in positive balances which meet an entity's goal (Smirat &

Yousef, 2016). Profitability is a good proxy used to measure the financial performance of a firm (Adebayo & Adebisi, 2016).

According to Syofiana, Suwarno and Haryono (2018), a firm's success is propelled by its interests and responses to making profits. Studies by Sultana *et al.* (2015), Fagbemi and Uadiale (2011) and Ettredge and Sun (2006) have identified profitability as an explanatory variable for ARL and most of this literature identified a negative association between audit delay and firms who recognize a profit. Thus, firms that record higher profits are expected to experience shorter ARL (Daoud, Ku Ismail & Lode, 2014; Listiana & Susilo, 2012; Afify, 2009; Ismail & Chandler, 2004).

According to Hirshleifer *et al.* (2013), a firm's profit level for the firm can be considered as an indication of whether the firm will communicate good news or bad news to its stakeholders. Firms that record profit especially higher than expected sense their financial reports they have produced contain good news hence, they tend to submit their reports for audit earlier (Pratama & Haryanto, 2014). That is, if a firm earns a higher profit in a given accounting year, management is inclined to publish their annual report quickly in order to take advantage of the convenience of conveying it, as it is good news and boosts stock values. Again, Pizzini *et al.* (2015) argued that, relative to firms reporting losses, firms that made a profit for the period are expected to reduce audit delays by inviting the auditor to complete the audit engagements as soon as possible to publish their audited financial reports.

On the other hand, firms that record losses are likely to postpone the release of their financial reports to prevent or minimize the discomfort of communicating the bad news to their stakeholders (Pramaharjan &

Cahyonowati, 2015; Habib, Bhuiyan, Huang & Miah, 2019). That is, a firm that experiences losses may ask its auditor to schedule its audit later than usual (Al-Matari, Al-Swidi, Fadzil & Al-Matari, 2012). In addition, during the audit exercise, an auditor may carry out their responsibilities more cautiously since they may presume the losses may result from management fraud or the likelihood of financial failure (Sultana *et al.*, 2015).

Firm's solvency

The solvency of a firm is characterized by its ability to fulfill its financial obligations in the short or long term (Rahardjo, 2005). Again, solvency was defined by Kasmir (2010) as the number of periods a firm's assets can be used to settle its debts. Accumulating a high amount of debt may hinder the going concern of the firm since the firm will be stuck with a high level of debt which may be difficult to pay off. Hence, a firm should be able to balance off the ratio of its equity and debt and also, identify other sources that could be used to guarantee the settlement of the debt incurred.

Owusu-Ansah (2000) argues that there is no significant correlation, either positive or negative, between financial reporting timeliness and the level at which a firm's assets are financed by debt capital. According to ARL literatures, there are two contrasting opinions on the correlation between debt financing or leverage and ARL. One school believes that highly leveraged firms report more promptly than low-leverage firms. In support of this school of thought, Jensen and Meckling (2019) contend that highly leveraged firms are motivated to invest sub-optimally since debt holders usually insert clauses in their contracts to restrict management activities. The regulations and requirements expecting management to report promptly and at a specific pace

to allow debt holders to re-evaluate the firm's long-term financial performance and position is a common example of these clauses included in these contracts. In addition, the cost theory offers another reason for the negative relationship between debt financing and financial reporting timelines. According to this theory, a firm's ownership structure may determine the level or standard of audit required. For instance, in a situation where a firm is financed mostly through debt, the management of such a firm may be required to engage an auditor who will provide high-quality service to enhance the credibility and integrity of the financial report.

Other schools of thought, on the other hand, holds that leverage is generally correlated positively with financial report timeliness on two grounds. First, the high proportion of debt would increase a firm's financial risk (Dewangga & Laksito, 2015). An increase in a firm's financial risk indicates that the firm is experiencing financial challenges which in turn increase the possibility of a firm's failure. Such firms may be tempted to reassess their financial risk, hence, delaying the submission of their financial report to their external auditors (Owusu-Ansah, 2000; Leventis, Weetman & Caramanis, 2005; Al-Ajmi, 2008; Al-Ghanem *et al.*, 2011). Again, this situation increases the possibility of using the external auditor hence, the auditors may want to perform further assessments to strengthen their defense against any potential suit and this may prolong the duration of the audit exercise (Carey & Simnett, 2006). Secondly, debt audit is comparatively more time-consuming than equity audit, especially when there is a huge number of debt holders (Sultana *et al.*, 2015). Debenture, secured bond, and notes payables are some notable long-term debts that are repaid which interest. This tends to increase the

workload of the audit firm since there are normally many accounts payable relating to the debt and the auditors are entitled to obtain appropriate pieces of evidence on interest payable, interest payment, premium, and bond discount. Again, the auditor must ensure that the firm adhered to the requirements and restrictions stated in the debt agreement and its disclosure.

Earnings Quality

Earnings are the net benefits of a firm's operation. They serve as a summary of a firm's performance during a particular period and a primary or basic source of information in financial reports that can use to assess the performance and position of a firm (Dechow, Ge & Schrand, 2010; Zang, 2012). Earnings are used in decision making, such as estimating future performance, forecasting future cashflows, assessing management performance and compensations, assessing the credit risk of the firm, etc. by most stakeholders. Decisions taken by stakeholders concerning a firm are mostly base on its earnings and the consequence of their decision whether good or bad depends on the credibility and reliability of the earnings.

Accounting standards that as the International Financial Reporting Standard (IFRS) and International Accounting Standard (IAS) allow management a wide scope of alternatives and options in treating the same transactions or events in their financial reports (Jacksonh & Pitman, 2001 and Mukhlasin, 2018). These discretions or opportunities can result in the possibility of the management of an organization manipulating its earnings (Hegazy, Sabagh & hamdy, 2015). Thus, they use accounting techniques to meet an organization's expected earnings and this may affect the credibility

and reliability of the earnings either positively and negatively. The level of credibility and reliability of the earnings determines its quality.

Definition of earnings quality

The definitions of earnings quality depend on the objective of the decision-maker and the role of earnings in the decision model (Dechow *et al.*, 2010). Earnings quality is generally associated with relevant characteristics such as earning persistence, conservatism, earnings predictability, accrual quality, earnings smoothness, and value relevance (Dechow *et al.*, 2010, Christensen *et al.*, 2005, Dechow & Schrand, 2004; Schipper & Vincent, 2003).

From an analyst's perspective, Penman and Zhang (2002), described earnings quality as earnings before extraordinary expenses reported in the income statement, which is a good determinant of future earnings. Analysts perceive that consistent use of accounting methods contributes to high-quality and sustainable reporting that can be used to estimate future potential earnings. Teets (2002), on the other hand, defined earnings quality as accounting earnings that reflect the firm's value.

In contrast to Teets (2002) and Penman *et al.* (2002), earnings quality was described by Schipper *et al.* (2003) as the tendency to which a firm's reported earnings truly represent the Hicksian income which is, the maximum amount which can be spent if a firm intends to maintain its already existing capital intact. Under this description, the quality of earnings is measured concerning Hicksian income, where high-quality earnings are implying the closeness of earnings to Hicksian income. Chan *et al.* (2006) subsequently described earnings quality as the tendency to which a firm reported earnings

reflects its fundamental operations. This measure is interested in the ability of the reported earnings to predict and estimates future cashflows and performance of the firm.

Again, earnings quality was described by Dechow *et al.* (2010) as the relevancy of reported earnings in its users' decisions. Similarly, Lyimo (2014) described earnings quality as the usefulness of the reported earnings to users' decisions. In this context, earnings quality is how earnings information is indispensable to market participants in their resource allocation process and decisions in the capital markets.

Srinidhi, Gul and Tsui (2011) defined earnings quality as the ability to use the recently reported earnings to determine future potential cashflows and earnings. Earnings quality in this sense refers to how best current reported earnings can be used to estimate a firm's future potential earnings and performance. Likewise, Gissel, Giacomino and Akers (2005), and Li (2011) described earnings quality as the ability of the current earnings to reflect and be consistent with the future potential earnings.

Earnings quality as a measure of financial reporting quality

The objective of a financial report has been explained in the statement of financial accounting concept No. 1 of FASB 4 as a mechanism by which financial information is disseminated for the decision-making of various stakeholders. According to Tasio and Bekiaris (2012), this information is supposed to be detailed and understandable for those who have a fair or reasonable understanding of business practices and activities and are prepared to review the information with due diligence.

Financial report quality, however, is not an indicator that can easily be quantifiable because it cannot be observed directly. A various number of studies have identified possible proxies such as Auditor's litigation, Standard and poor's transparency index, auditor's opinion, analyst reporting, and earnings quality that can be adapted to measure the financial reporting quality. These proxies were measured in various studies as follows.

Frost, Gordon and Pownall (2008) adopted Standard and poor's transparency and disclosure index score to measure financial reporting quality. The score is calculated as a percentage of disclosure items from a list of thirty-five (35) items in financial reports and if, for example, thirty (30) of the thirty-five (35) items appear, then the firm has a decile rank of nine (9).

Again, Perotti and Wagenhofer (2014) used an analyst's rating of disclosure to measure financial reporting quality. They identified that several items in the financial report such as high goodwill, lease obligation, debt level, and revenue from non-operating items serve as an inverse measure for financial reporting quality.

Pucheta-Martínez and García-Meca (2014), also considered the auditor's opinion as a proxy for assessing financial reporting quality. The auditor's report in their analysis is considered insightful for stock returns and was measured as a dummy variable. Thus, in the case of a qualified report, it is classified as one (1), otherwise classified as zero (0).

Again, earnings quality is another measure for financial reporting quality which is broadly used by most studies (Kim, Lee & Chung, 2015; Gaio & Raposo, 2014). According to No.2 of FASB 5, the qualitative characteristics that ensure the usefulness of financial information for users are relevance,

comparability, understandability, and reliability. However, individual users have varied perspectives and views of the usefulness of the information and their perception of quality can vary, so it is difficult to observe and assess the usefulness of the information directly (Braam & Beest, 2013). Hence, earnings quality was categorized into three objectives by Dechow, Ge and Schrand (2010). That is, the reported earnings should, represent the present performance of the firm, be a good indicator and reasonable predictor of the firm's future performance and annuitize the firm's intrinsic value. The quality of financial reporting has been assessed in various studies quantitatively by focusing on the reliability and relevancy of financial reporting (Khlif & Achek, 2016; Gray, Turner, Coram & Mock, 2011). On this basis, financial reports are considered useful and valuable in the decision-making process for stakeholders. Studies have examined the value relevancy, persistence, earnings surprise, predictability, smoothness, accrual quality, and closeness to cash of the reported earnings to assess the reliability and relevance of the financial reports (Dechow *et al.*, 2010; Gaio *et al.*, 2014). Lyimo (2014) argues that there is no complete consistency among the various measures of earnings quality, hence analysts, investors, and market participants should not depend on a single method of assessing the quality of reported earnings.

Earnings quality measures

Various studies and literatures on earnings quality indicators are still yet to identify a generally accepted definition and measure for earnings quality (Chan *et al.*, 2006; Bellovary *et al.*, 2005; Penman *et al.*, 2002). This has resulted in the development of many notable indicators such as, conservatism, smoothness, predictability, timeliness, persistency, earnings surprise, and

accrual quality which are widely used in measuring the quality of the reported earnings (Dechow *et al.*, 2010; Abdelghany, 2005; Francis, Lafond, Olsson & Schipper, 2004; Penman *et al.*, 2002). The lack of a generally accepted definition of the earnings quality, the influence of actors, and the influx of earnings quality indicators cast doubt on the ability of these indicators to measure consistently the quality of reported earnings (Teets, 2002; Dechow *et al.*, 2010).

According to Schipper *et al.* (2003), earnings quality indicators and measures are normally derived from four (4) classes: the time-series properties of earnings that is, persistence, predictability and variability, the relations among income, cash and accruals, implementation decisions, and selected qualitative characteristics in the FASB's Conceptual Framework. In this study, earnings quality was measured base on the relations among income, cash, and accruals. With this, the study focused on the smoothness of the earnings, the closeness of earnings to cash, earnings surprise, and accrual quality.

Earnings smoothness

Earnings smoothing is a type of earnings management that involves intertemporal smoothing of reported earnings relative to economic earnings which seek to make earnings look less volatile over time. This involves shifting various revenues and expenses of several reporting periods in an attempt to create a false impression that the firm has steady or stable earnings (Cormier, Houle & Ledoux, 2013). Again, it may be referred to as an attempt by a firm's management to minimize irregular earnings variation or a purposeful intervention and the use of certain accounting tools to reduce

earnings volatility by management (Tucker & Zarowin, 2006; DeFond *et al.*, 2014).

In most cases, earnings smoothing is sophisticated, friendly, and is rarely based on clear lies since it derives from various interpretations of generally accepted accounting principles and standards. For the movements in revenues and expenses, the earnings of one or certain financial periods are adjusted in earnings smoothing. It can be said that smoothing is a deliberate action by the management (Habib *et al.*, 2011). To raise earnings in times that would otherwise have exceptionally low earnings, management normally engages in earnings smoothing (Hejazi, Ansari, Sarikhani & Ebrahimi, 2011). In most cases where earnings are being smoothed, reported earnings are mostly higher than the actual earnings. Again, Tucker *et al.* (2006) disclosed that management mitigates earnings abnormalities as a way of informing interested stakeholders about their evaluation of future potential earnings to the extent permitted by the accounting standard. Smoothed earnings imply high earnings quality that users of accounting information require, according to Tucker *et al.* (2006) and Francis *et al.* (2004), while un-smoothed earnings indicate poor earnings quality.

Engaging in earnings smoothing activities is not always illegal. In certain cases, the accounting standard allows management to postpone or accelerate certain transactions or items. Provision for doubtful accounts, for instance, maybe manipulated to adjust the cost of bad debt from period to period. In other instances, accounting standards are evaded in an unethical manner to participate in earnings smoothing (DeFond *et al.*, 2014). It is mostly not hard to determine why management would choose to disclose inflated

reports (Tucker *et al.*, 2006). But rather, it is a lot harder to understand why management will report lower earnings. Nevertheless, several such cases have recently been addressed (Habib *et al.*, 2011).

Earnings smoothing may be either artificial or real (Ghaemi, Dorosti & Masoumi, 2012). Real smoothing includes decisions that influence cashflows and dissipate the value of the firm. For instance, adjusting the timing of an investment and supplying risky clients with promotional discounts or vendor funding to ramp up revenues at the end of the quarter. Unlike real smoothing, artificial smoothing often does not affect cashflows. This form of smoothing is done mainly through the flexibility of reporting offered by Generally Accepted Accounting Principles (GAAP). Real smoothing has costs to be incurred, whereas artificial smoothing has subtler costs, such as those associated with loss of credibility and management's time consume in under takin such activities.

Since the key emphasis of financial reporting on forecasting expected earnings and yields as a unit performance index, smoothed earnings as decision-making criteria have high credit and are regarded significantly in analysts' investigations and judgments. It is therefore very important to consider the effects of earning smoothness on the share yield (Ghaemi *et al.*, 2012).

Earnings surprise

An earnings surprise is the unexpected discrepancy between the actual earnings per share of a firm and the anticipated earnings per share of analysts or when profits reported by a firm are below or above the estimates or expectations of analysts (Jin, 2006). The indicator of earnings surprise is

provided by the value of net operating assets by total sales at beginning scaled (Barton & Simko, 2002; Abdelghany, 2005). Depending on the degree to which the earnings deviate from the analyst's expectations, earnings surprises can vary. Larger variations are those with substantial percentages that are considered material and are more relevant for firms and investors (Barron, Byard & Yu, 2017; Lundholm & Soliman, 2006; Jin, 2006). A large ratio of surprise earnings indicates a low quality of earnings and a small ratio indicates a high quality of earnings.

The forecasts of an analyst are critical for market efficiency as investors rely on these authoritative performance estimates to properly value the stock of a firm (Dechow *et al.*, 2010; Baik, Farber & Lee, 2011). Managers are also trying to promote and boost the valuations of their firms by preventing surprises in earnings and achieving analysts' consensus forecasts (Graham, Harvey & Rajgopal, 2005). Thus, meeting the earnings expectations of investors, either specifically or within a few potential ranges.

Surprises in earnings can have a major effect on the stock price of a firm. Several studies have indicated a positive and negative correlation of earnings surprise with firms' valuation because they are aberrations that interfere with the smooth and successful operation of markets (Tan, Libby & Hunton, 2002). Positive earnings surprises, according to these studies, not only lead to an immediate hike in the price of a stock, but also to a steady increase over time. Therefore, it's not shocking that certain firms are known to beat earning projections regularly. Also, negative earnings surprises usually would result in a fall in share price. However, as a result of numerous factors due to both the behavior of the firm and circumstances outside its control, such as

natural disasters, government policies, etc., negative earnings surprises occur (Shwiff, 2008).

Closeness to cash

Closeness to cash is the degree to which profits are often advanced as a valuable earnings asset to estimate operating cashflows. Among analysts, scholars, and policy-making bodies, closeness to cash is a desirable earnings attribute. This is because earnings that can be deposited directly at the bank are considered to be high-quality earnings (Ben-Nasr & Al-Dakheel, 2015). Earnings include accruals and cashflows, and earnings with a comparatively smaller proportion of accruals, that is earnings that are closer to cashflows are economically more substantial than those with a large proportion of accruals.

The quality of earnings with a significant difference between income and cashflows or those with considerable divergence from cashflows has been questioned by literature, analysts, and policy-making bodies (Fink, 2003). Research by Richardson, Tuna and Wu (2002) explores firms that were required between 1971 and 2000 to restate their financial performance. They concluded that considerably higher accruals had historically been announced by firms with poor quality earnings. Again, the accumulation of accounting earnings without commensurate accumulation of free cashflows is analyzed as a leading indicator of weak future potential earnings, according to Hirshleifer, Hou and Teoh (2009). They claim that the accumulation of earnings and cashflows are represented by net operating assets and are more likely to be comprehensive in prediction than actual accruals covering single-period net operating assets.

Accrual quality

In several studies, such as Dechow *et al.* (2010) and Dechow *et al.* (2005), the relevance of various functions in accrual accounting was addressed. Accountants apply accruals to operations cashflows and create a variable of earnings that is less volatile than operations cashflows. Most operating cashflow volatility emerges from deceptive manipulative variation in working capital products such as prepayments, inventory, and receivable accounts. Again, earnings are less noisy than cashflows from operations and investments. The reason is that the accounting of depreciation composes the uncertainty of investment outlays.

The accrual quality measure focuses primarily on the mapping of current accruals from the operation into previous, current, and next-period cashflows. This is based on the observation that accruals adjust or shift recognized cashflows over time, hence the firm performance is best measured by the modified earnings. According to Dechow and Dichev (2002), the mapping of current accruals into previous, current, and next period cashflows from operations is term as accrual quality. In other words, the earnings of firms with high accrual quality can be converted to cash quicker than firms with lower accrual quality.

Various methods of calculating accrual quality have been established by prior studies. The accrual quality was measured as a residual changeability by Ball and Shivakumar (2008) and Dopuch, Mashruwala, Seethamraju and Zach (2012). Again, Desai, Hogan and Wilkins (2006) and Richardson, Sloan, Soliman and Tuna (2001) assessed accrual quality as the distinction between operational cash and the firm's generated earnings reported. In addition,

Johnston (2009), Jing (2007), and Francis *et al.* (2004) have used errors in estimating accrual as a measure of accrual quality. From the above measures, Desai *et al.* (2006) and Richardson *et al.* (2001) method focuses on the magnitude of the accrual whiles, Johnston (2009), Jing (2007) and Francis *et al.* (2004) which is the commonly adopted measure for accrual quality, also focuses on error the estimated accrual. The large value obtained from each method represents a low quality of earnings whiles, high-quality earnings are suggesting a small value obtained from each method.

Theoretical Framework

This section outlined the theoretical justification for the study. Several theories underpin Audit Report Lag and Earnings Quality. Two of these theories which are closely related to this study, namely the Agency Theory and Signaling Theory are discussed in this section.

Agency theory

Although the firm is considered a separate legal entity by statute, it still does not function as an individual. Instead, under a certain contract, management serves as an agent for the corporation and is assigned to oversee the firm's daily operations. There is now dispersed ownership under which shareholders are not primarily involved in the decisions of the firm, however, management serves as the agents in charge of decision-making. This is how the agency relationship operates, represented by a contract, a firm's owners (principal) hire other individuals (agent) to conduct some service on their behalf, including delegating the decision-making authority to the agent (Jensen *et al.*, 1976). The theory of the agency assumes that the firm is a link between

the principals and their agents responsible for utilizing and managing the economic resources invested by the principals or owners (Adams, 1994).

Owing to their direct participation in the firm's regular activities, management typically has an information advantage (Jensen *et al.*, 1976). Therefore, the asymmetry of information is considered an important attribute of financial statements. Usually, the financial statements are produced and monitored by management without the involvement of the owners. To be able to assess and analyze the potential risks of their investment, owners need to have credible and reliable financial information. According to the theory of the agency, conflicts of interest may exist between management and the firm's owners where managers may misreport the financial information and exploit the information in their favor (Carcello *et al.*, 2002). Manipulation by management, for example, could occur by increasing the firm's net sales to gain more incentives (Watts *et al.*, 1983).

The agency theory indicates that the disparity between ownership (principals) and management (agents) decision-making causes agency problems between them (Watts *et al.*, 1983). According to Adams (1994), moral hazard and adverse selection are two key problems related to the agency relationship between the principal and the agent. Moral hazard is the tendency of an agent (management) to act against the interest of the principal (owner) and to use the contracting process to maximize their wealth (Jensen *et al.*, 1976), while Adverse selection is the tendency at which a principal (owner) may not fully access all the information that an agent (management) took into account during the decision-making process. This will hinder the principal's

(owner) ability to assess whether the decision was made in their best interest or not (Adams, 1994).

Monitoring the actions of the agent may help reduce the effect of the agency problem. This involves the hiring of extra officials, such as external auditors, to assess management performance, the efficiency and implementation of the internal controls, to assess the credibility and reliability of the financial report prepared, and to assist in the development of policies and procedures. The theory identifies external auditing as the most successful compliance activity used in minimizing information asymmetry and eliminate conflict of interests (Watts *et al*, 1983). Auditing demand is strongly related to the agency theory. Stakeholders demand audit services to, enhance the credibility and integrity of financial information, minimize both market risk and any firm-specific risks and increase the quality of the information provided for decision-making (Wallace, 1980).

Auditors provide independent, accurate, and timely assurance on the financial reports and valuation of assets to the management and other stakeholders. The independent auditor should be able to mitigate the risk of fraud or illegal reporting in the financial statements and therefore provides recommendations that can improve the internal control and operational efficiency of the firm (Wallace, 1980).

Therefore, the role of an external auditor is to mitigate agency problems between management (agents) and owners (principals) by assessing the credibility of the financial report produce by the agents (management) (Wallace, 1980). As the firm's size, risk, and complexity increase, information asymmetry increases due to the difficulty in valuing accounts. Hence further

audit checks are needed to be performed by the auditor to ensure the accuracy of these accounts. More audit effort and time would be required by any firm with high information asymmetry. Adequate audit effort and time increase the quality of financial reports by deterring management (agent) from any opportunistic behaviors and minimizing the risk of publishing inaccurate and fraudulent financial reports (Skinner & Srinivasan, 2012).

Though auditors in mitigating this agency problem will require adequate time to validate, authenticate and improve the quality of the financial report produce by the agents (management), stakeholders also expect auditors to provide them this quality audit service within the shortest time possible since the value and relevance depend on the timeliness of the report.

Signaling theory

Karasek and Bryant (2012) introduced the Signaling theory to explain why managers(agents) disclose financial information of their firm. The signaling theory discusses the information asymmetry arising from the separation of management and ownership, similar to the agency theory. This theory suggests that the information asymmetry problem of the agency can be minimized when management publishes adequate and timely information through their financial statements to send good signals to their owners or investors (Ezat, 2010).

Signals are the actions taken by management to mitigate the problem of asymmetric information by providing shareholders with information about their firm's performance during the fiscal year (Karasek *et al.*, 2012). Therefore, firms that perform well would like to differentiate themselves by signaling their good performance and gaining a good reputation from those

who underperform. Again, firms with bad news are mostly motivated to publish their financial information timelier to avoid further deterioration of their reputation due to late disclosure (Ezat, 2010).

However, since the information is prepared by management without shareholders' involvement, shareholders engage the services of an auditor to assess the accuracy of the information provided. This serves as a signal to interested and potential investors and other stakeholders that the information provided by management is of high quality. Again, firms may appoint auditors with a good reputation to send signals regarding the quality of financial information to interested parties. Firms performing better may afford to employ the services of a reputable auditor to send a signal that it is of good standing and that the auditors add integrity to the production of financial reports, thereby improving the public's trust in the provided information, according to Moore and Ronen (1990).

In addition, signals of good or bad news disclose in the financial report will influence stakeholders' decisions and, ultimately, the firm's capital market (Mukhtaruddin, Ubaidillah, Dewi, Hakiki & Nopriyanto, 2019). Therefore agents (management) tend to manipulate this information to suit the expectation of the principals (owners) and this will affect the quality of the financial report they produce. Therefore, auditors will require adequate time to assess and analyze the credibility and reliability of the report produce since stakeholders will depend on this report in decision making, and the consequences of their decision whether good or bad depends on the quality of the report.

However, though the auditors require adequate time to verify and authenticate the report given the relevance and value of the report to the stakeholder depends on the timely information. Therefore, the length of ARL could affect the relevance and value of the financial report to its stakeholders. Thus, the longer the ARL, the less timely firm's financial information is being published, hence reducing its value and relevance while the shorter the ARL, the timelier firm's financial information is being published, therefore, enhancing its value and relevance.

Again, the length of the ARL could signal good or bad news concerning the firm. This is because it is perceived that management may want to postpone publishing financial reports to reduce the embarrassment and discomfort of publishing bad news to its stakeholders while management with good news will be in a hurry to publish their statement. That is, a longer ARL could send stakeholders a bad signal about the firm, while a shorter one confirms the quality of the information published. This implies the length of the ARL could signal higher or lower quality of the financial report. The signaling theory, therefore, offers a theoretical basis for financial report quality and ARL models.

Application of Theories to the Study

The current study draws on various aspects of the theories explained above to examine the relationships between audit report lag (ARL) and earnings quality of listed firms in Ghana.

The Agency theory provides insights on the introduction and essence of an audit. That is since firms are separate legal entities from their owners,

owner appoints managers to run the day-to-day activities of their firms. This has created the need for the owners to appoint a third party thus an auditor to assess the performance of the managers and also ensured that the financial report presented truly reflects the actual financial snapshot of their firms. Again, this third parties (auditors) ensures that the goals and objectives of the managers are in line with that of the owners. Auditors are to produce reports on the firm's performance after reviewing and investigating all financial transactions entered into by management within the fiscal period and also assessing the fairness of the financial reports produce at the end of the period. However, these reports lag since the auditors can only start their work after the fiscal period. This study then argues the auditor's report and its lag line with the agency theory.

The signaling theory on the other hand provides discusses on information asymmetry arising from the separation of management and ownership resulting in the disclosure of financial information. Signals are the actions taken by management to mitigate the problem of asymmetric information by providing owners and other interested stakeholders with information about the firm's performance during the fiscal year.

However, management may want to postpone publishing financial reports to reduce the embarrassment and discomfort of publishing bad news to its stakeholders while management with good news will be in a hurry to publish their statement sending a signal of good news to their stakeholders. Also, a delay in financial report publication may present a good signal. That is auditors had adequate time to assessed and analyzed the credibility and

reliability of the report produce. The study then argues auditor's report lag and earnings quality line with the signaling theory.

Empirical Review

For several reasons, many researchers have taken a great interest in studying ARL. According to most of these reports, such as Subekti and Widiyanti (2004) and Ahmad *et al.* (2003), ARL is the time difference between the date of the financial report and the date of the audit opinion, suggesting the auditor's completion of the audit. ARL, which in some studies was term audit delay, can be defined as the duration of the completion of an audit, which is from the date a firm's financial books are closed to the date the audit report is released (Utami, 2006). Knechel *et al.* (2001) recognizes three components that sum up to be the overall ARL. These are the scheduling lag, the fieldwork lag, and the reporting lag. Scheduling lag is the time from the year-end date of the firm to the beginning of audit fieldwork, fieldwork lag is the time spent performing the fieldwork, and the time between the end of fieldwork and the date of the audit report is published in the reporting lag. For public firms registered with the Securities and Exchange Commission (SEC) in the United States, the audit report shall be dated not earlier than the date on which the auditor obtained adequate evidence to support their opinion (Public Accounting Oversight Board (PCAOB), 2002). As the date of the audit report for US public firms coincides with the end of the fieldwork lag, this implies that for these firms, the reporting lag component of ARL is minimal. Furthermore, proprietary audit engagement data indicate that the ARL fieldwork lag component is negatively associated with the quantum of audit work performed before year-end (Ashton *et al.*, 1987; Knechel *et al.*, 2001).

Givoly *et al.* (1982), Ashton *et al.* (1987), Atiase, Bamber & Freeman (1988), Bamber *et al.* (1993), Henderson and Kaplan (2000), Ettredge *et al.* (2006) and Behn, Searcy and Woodroof (2006) have established that the length of time to complete an audit of a financial report, significantly affects the timing audited financial results of a firm is published. In several studies, ARL was used as a proxy for audit efficiency and audit effort (Bamber *et al.*, 1993; Knechel *et al.*, 2001; Mitra, Song & Yang, 2015). For example, Knechel, Rouse and Schelleman (2009) developed and used a theoretical audit production model to measure the efficiency score for a sample of audits using an accounting firm's proprietary audit engagement data. They discovered that ARL may be considered a reasonable proxy for unusual audit efforts using this score, which supports the claim that ARL serves as a measure of the occurrence of negotiations with auditor-client management. Once more, a report by Bamber *et al.* (1993) identified that ARL was positively related to the amount of audit work needed. Again, a positive correlation between hours worked and the ARL was also obtained by Knechel *et al.* (2001). From these, there is a clear positive correlation between a construct representing audit effort and the length of time taken to complete the audit in each of these cases.

The essence of shorter ARL for maintaining the quality of financial reports has been illustrated by Soltani (2002), Leventis *et al.* (2005), and Dibia and Onwuchekwa (2013). A shorter ARL is required as an auditor aim at providing accurate, effective and transparent financial information to stakeholders, timely financial information provides stakeholders with valuable and relevant information and also improves investors decision. Furthermore, longer ARLs postpone the publication of financial reports and this has various

consequences. For example, late publication of financial reports may reduce investor confidence according to Ettredge *et al.* (2006). This is because any delay in publishing a firm's earnings suddenly indicates bad news to the markets (Behn *et al.*, 2006). Research by Givoly *et al.* (1982) shows that information on earnings is reported late when earnings are below expectations and publish earlier when expectations are surpassed. Also, Behn *et al.* (2006) show that adverse abnormal returns are correlated with the unexpectedly late publication of earnings. Once again, releasing a financial report later than expected will increase information asymmetry between management and stakeholders as indicated by Bamber *et al.* (1993). This affects the degree of uncertainty associated with decisions taken based on the information published (Ashton *et al.*, 1987). Lastly, the untimely publication of financial reports affects the relevance of the information contained in the financial reports (Whitworth *et al.*, 2014).

Nevertheless, their study also suggests that ARL is not a good proxy for audit efficiency. ARL is considered one of the externally observable measures of audit effort and performance of which there has been a numerous study examining its determinants (Bamber *et al.*, 1993). The intuitive presumption that greater audit effort contributes to higher audit efficiency is an important corollary to their findings. Also, various studies such as Knechel *et al.* (2001), Knechel *et al.* (2009), and Tanyi, Raghunandan and Barua (2010) have also indicated such a relationship. An audit production model linking audit operation, evidence, and assurances level was proposed by Knechel *et al.* (2009). The model assumes that labor inputs are used in the audit process to conduct audit engagement that results in the generation of

audit evidence. There are various types of audit engagement that can be carried out, but they all contribute to the production of audit evidence. Therefore, the higher the effort an auditor used in gathering evidence, the greater the possibility that he/she can draw the right conclusion on the accuracy and reliability of the financial report, hence, achieving a higher level of assurance.

In empirical literatures, the notion that greater audit effort contributes to higher audit quality is intuitive and has some support. A study by Bryant-Kutcher, Peng and Weber (2013), for example, reports that a reduction in publishing deadlines decreases the auditor's willingness to exercise additional effort or extend the audit period, increased pressure on the auditor's timeline, and eventually degraded the quality of audit. Their findings are consistent with the idea that higher audit quality is correlated with a longer audit period. While this assumption may sometimes be true, it is not clear that this is always the case, particularly as the period of the audit increases beyond what may be deemed usual. Audits that run excessively long can signal a problem. According to Alford, Jones and Zmijewski (1994), Bryant-Kutcher, Peng and Zvinakis (2007), Li and Ramesh (2009), and Bartov, DeFond and Konchitchki (2011), the fact that the market reaction adversely to late publications and that the likelihood of late publication is influenced by the time used in completing the audit implies that long audits do not necessarily represent good news in the market. In this context, higher audit quality might not be signaled by a longer audit period and extra audit effort. Hence, the duration of the audit exercise may have nothing to do with the quality of the audit.

Ashton *et al.* (1987), Whittred *et al.* (1984), Bamber *et al.* (1993), Knechel *et al.* (2001) and Lee *et al.* (2008) are some of the several studies that have explored determinants of ARL duration. Ashton *et al.* (1989) and Bamber *et al.* (1993), studied the determinants of ARL by investigating from both the side of the firm's characteristic and auditor characteristic. The study found factors affecting ARL which are related to firm's characteristics, such as the firm size, the presence of extraordinary items and auditor's characteristics, such as the scope of the audit needed, the auditor's experience, the insensitivity of the auditor, and audit tenure. Ashton *et al.* (1989) also identified that various variables that capture the complexity of auditor's client activities such as firm size, industry, and presence of extraordinary items are positively correlated with ARL. Again, with Ashton *et al.* (1987) investigation on the ARL length determinants, they indicated that ARL for firms that earn qualified opinions from their auditor have weak internal control systems and therefore they have longer ARL since a greater amount of audit exercise and effort is required after end of the fiscal period. Again, Bamber *et al.* (1993) concluded that the amount of audit work needed is positively correlated to ARL, while ARL is negatively correlated with incentives to provide timely reports. Knechel *et al.* (2001) also argue that ARL is positively correlated with incremental audit effort, the existence of controversial tax issues, and work done by less experienced auditors. They found in their analysis that ARL was reduced when tax services and management advisory were offered by the firm's auditors. Lee *et al.* (2008) find that ARL has a negative relationship with a variety of factors including engaging any of the Big four audit firms, excess audit hours, unqualified audit opinions, non-audit fees for auditors, and

the provision of non-audit service such as tax service and designing internal control systems by firm's auditor. Compared to those of domestic firms, Lee *et al.* (2008) observed a shorter ARL in multinational firms. Again, calculating for ARL, Whittred *et al.* (1984) used three different measures, that is, preliminary lag, signature lag, and total lag. The preliminary lag is the number of days from the end of the fiscal period before the financial report is received for audit, while the signature lag is the number of days from the end of the fiscal period to the date indicated on the report that the auditor's opinion was signed and total lag is the number of days from the end of the fiscal period to the date financial report is published.

The effect of the late publication of a financial report on its contents has been investigated by other streams of studies. Hirshleifer *et al.* (2013), Givoly *et al.* (1982), Kross (1982) and Kross and Schroeder (1984) concluded that there are lower abnormal returns associated with late earnings announcements than early announcements. There is also evidence that management may purposely speed up or postpone the publication of good or bad news (Givoly *et al.*, 1982; Pastena & Ronen, 1979; Patell & Wolfson, 1982; Ronen & Livnat, 1981; Verrecchia, 1983).

Foster (1981), Givoly *et al.* (1982) and Hirshleifer *et al.* (2013) argued that with reporting delay, the information quality of financial reports will deteriorate as investors receive information from alternative information outlets, the prevalence of leaks, the use of inside information, voluntary disclosures by firms or information obtained from financial reports released by other firms. Due to the delays in earnings disclosure, these literatures dealt with the deliberate delay of bad news by management.

In conclusion, much of the existing ARL literature concentrated on the determinants of the ARL and its association, the ARL as an audit effort and efficiency measure, the influence of the ARL duration on the relevance of financial information, and the usefulness of ARL to financial information users in their decision. This study, however, tends to concentrate on the relationship between ARL and earnings quality.

Conceptual Framework

According to Huberman and Miles (1994), a conceptual framework is a visual or written product, one that describes the key causes, ideas or variables to be examined and the presumed relationships between them either graphically or in narrative form. The framework illustrates the connections of the variables under study. They also argued that the most important thing that should be considered about the conceptual framework is that the researcher plans to analyze a conception or model existing already.

The study explores the relation between ARL and the quality of earnings. The study analyzed whether there was an already existing relationship between ARL and earnings quality using earnings smoothness, earnings surprise, earnings closeness to cash, and accrual quality as a measure. Again, the study took into consideration control variables such as firm size, audit firm reputation, profitability, and debt in assessing the relationship.

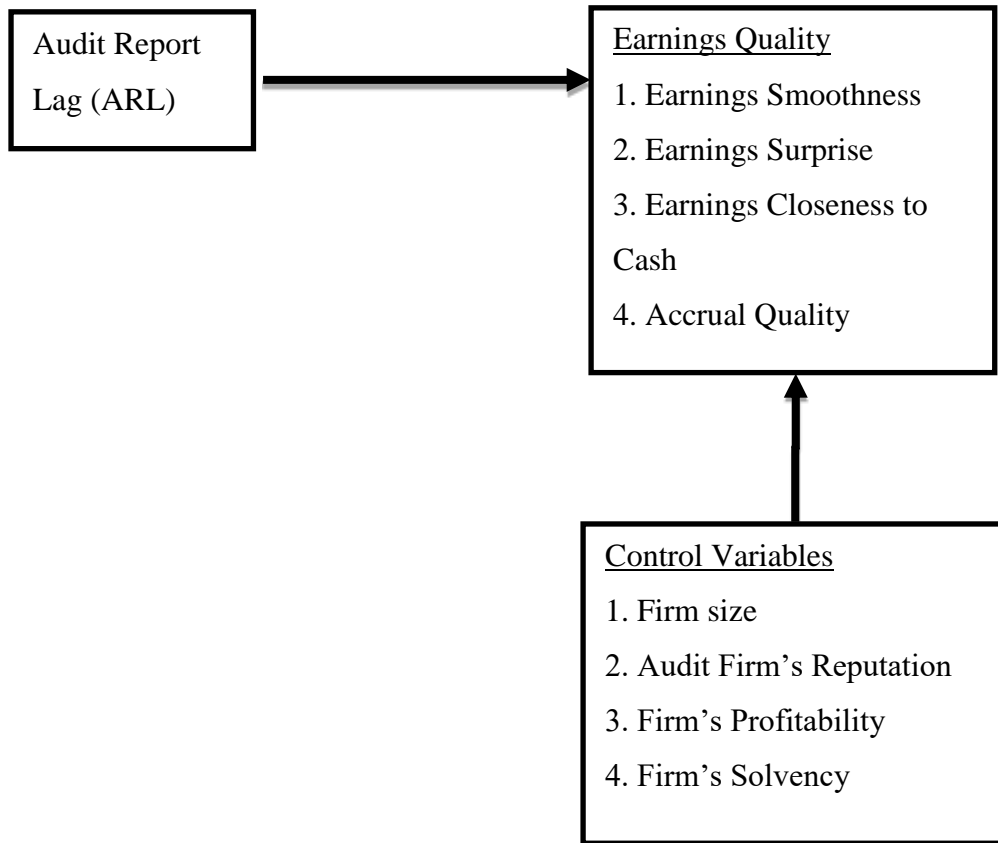


Figure 1: Conceptual Framework

Source: Author's Construct (2021)

From the figure above, the study expects audit report lag (ARL) to influence earnings quality while firm size, audit firm's reputation, firm's profitability, and solvency are controlled in order to access the relationship between these two variables.

Chapter Summary

This chapter produced an overview of the ARL and earnings quality and also two theories which are agency theory and signaling theory. It was followed by the empirical review and the conceptual framework in which the implications of the empirical review were drawn.

CHAPTER THREE

RESEARCH METHODS

Introduction

A suitable methodology enables researchers to collect valuable data for their studies, analyses, and chronologically present them. This chapter explains the research methodology used in this study. These include the study area, research paradigm, research design, data and data sources, target population, sampling procedure, and data analysis procedure, and ethical considerations.

Research Approach

According to Creswell (2009), the choice of a particular study design depends partly on the research approach. This study uses quantitative research which focuses on mathematical models, theories and hypotheses pertaining to the phenomena. This study employs quantitative research because it will use statistical calculations in its analysis for conclusions. Al-Hassan (2015) asserts that, if the nature of the study requires prediction of an outcome and the identification of the influence of variables on a phenomenon, then the best research approach is quantitative approach. Quantitative research is based mainly on the measurement of quantity in respect of the study variables. Zikmund, Babin Carr and Griffin (2010) further explained that quantitative approach collects and presents data in quantitative form and subsequently subject the data to rigorous and formal quantitative analysis in a rigid fashion.

Research Design

According to Burns and Grove (2010), the design of the study enables the study to be properly and adequately prepared and carried out to deduce facts and evidence comparable to the status quo. Again, Bryman (2004) indicated that research design is the framework for the collection of data and the subsequent analysis. Polit and Beck (2004) also described research design as a blueprint for performing a study in a way that allows maximum control over reasons that may have limited the validity of the study. A researcher is obligated, in carrying out their research, to prepare and strategize how the study will be done to exercise some degree of control over the study. Saunders *et al.* (2011) emphasize inductive and deductive approaches as the two main approaches to research. The researcher collects gather data and develop a theory based on the data analysis with the inductive approach, while the deductive approach relates to the formation of a theory-based hypothesis, testing these hypotheses in the light of those theories and making the necessary modifications and improvements to the theory were needed as a result of the conclusions drawn from the study (Saunders *et al.*, 2011). With this study, a deductive research approach was adopted.

The study started with theories from which hypotheses were established concerning the approach, gathered and analyzed data, and finally assess the results that were obtained with regards to the theories similarly to previous literature on ARL. Also, the study adopted an explanatory research approach to help examine and explain the correlations between variables in a specific relationship between cause and effect (Saunders *et al.*, 2011).

The study was conducted based on some gaps identified in previous literature. Specific research questions were formulated before conducting this study. The structural nature of this research provided the study with a clear direction for information and data collection. Hence, information obtained from the study was not be loosely structured. It involved a clear definition of the problem, formulation of specific research questions, and collection of structured, detailed, and relevant data (Bajpai, 2011).

Population of the study

According to Walker (2007), population is defined as the totality of all subjects about a specification comprising an entire of individuals who are of interest to the researcher and to whom the results or findings of the study can be generalized. That is a group or collection of individuals or objects that are being studied under a study and from which the study wishes to conclude. The population for the study was made up of all firms listed on the Ghana Stock Exchange.

Research sample

Considering the inability to use the entire population, the study sampled firms listed on the Ghana Stock Exchange. The Ghana Stock Exchange Fact Book revealed that the Ghana Stock Exchange had listed thirty-seven (37) firms by the end of 2019. The key criterion used for the sampling was, selected firms should be listed before 2009 and have remained listed as of 2019 or have to be listed and remain listed within 2009 and 2019. Hence, thirty-three (33) were used for this study. This produced a total of three

hundred and four (304) observations of the firm year and this will make the study a longitudinal study, so a regression model will be employed.

Data source

The primary data source for the study was the annual reports of the listed firms on the Ghana Stock Exchange under consideration and this data source is archival, as indicated by Cozby, Bates, Krageloh, Lacherez and Van Rooy, (2012). Annual reports appear to be the primary means of contact between management and stakeholders and are seen as the most effective way for firms to communicate their performance. The annual report was, therefore, an effective method for collecting all the information needed for this study.

The study used only secondary data for its analysis. The data were extracted manually from the audited financial statement of listed firms obtained through Ghana Stock Exchange (GSE) websites and individual firm websites. The target span for data collection was the financial years of firms starting from 2009 to 2019. The 2019 annual reports were the most recent reports for most firms on the GSE at the time the data for this study was collected. The period starting from 2009 to 2019 will sum up to eleven (11) years observation period was selected to compensate the comparatively small sample as a result of the number of firms listed on the GSE and also provided an appropriate number of observations suitable for both assessing the research objectives and also for the statistical tool which will be used.

Model Specification

The main objective of the study was to examine the relationship between ARL and earnings quality of listed firms in Ghana. Hence, the study adopted a regression model to determine this relationship.

$$EQ_{i,t} = a_{i,t} + aARL_{i,t} + aZ_{i,t} + \varepsilon_{i,t} \dots \dots \dots (1)$$

Where,

- EQ is earnings quality
- ARL is audit report lag
- Z is vector controls
- i* is the cross section of firms
- t* is the time series in years
- ε error term

Table 1: Apriority Expectations of Variables

| Variables | Description | Expected |
|------------|----------------------|----------|
| ARL | Audit Report Lag | (+) |
| FS | Firm Size | (+) |
| AR | Auditor's Reputation | (+) |
| PR | Firm's Profitability | (+) |
| SO | Firm's Solvency | (+) |

Source: Field Data (2021)

Data Processing Tool and Estimation Strategy

Data processing involves reducing accumulated data into a manageable size, develop summaries, look for patterns and apply statistical techniques (Cooper & Schidler, 2001). The main objective of the study is to examine the effect of Audit Report Lag (ARL) on the earnings quality of listed firms in Ghana. To address this objective, data were extracted manually from the audited financial statement of listed firms sampled into Microsoft Excel and analyzed using Stata 13.1.

The study employed a panel design because the data structure contained both time series (years) and cross-sectional dimensions (firms). The use of panel data methodology allowed the researchers to control for individual heterogeneity which may lead to biased results when not accounted for in time series and cross-sectional studies. This enriches the study of cross-sectional observation over several periods in panel studies.

The dynamic Generalized Method (GMM) panel estimator developed by Holtz-Eakin and Rosen (1990) and later modified by Arellano and Bond (1991) was used to assess the relationship between audit report lag and earnings quality. Arellano and Bond (1991) approach uses the first difference of the regressors to eliminate the individual effects and then uses all past information of the dependent variable as an instrument (Agyemang, Gatsi & Ansong, 2018). This approach is generally considered to give consistent and efficient results. However, Arellano and Bover (1995) contend that such an approach would lead to specious conclusions if there is persistence in the independent variables. They, therefore, proposed a systems GMM estimator which merges the levels and the differences equations and uses the lagged independent variables as additional instruments for the level equation.

The study employed the two-step system GMM over the one-step since findings from the empirical literature such as Mensah, Gatsi and Idun (2020) and Tchamou (2020) have suggested that the two-step estimator is more efficient than the one-step estimator. That is, the two-step deals with autocorrelation and heteroscedasticity more efficiently than the one-step GMM (Abeka, Andoh, Gatsi & Kawor, 2021). This estimator is more

appropriate in the situation where the dependent variable is persistent that is, the correlation between the dependent variable and its lag should be greater than 0.800 (Agyei, Marfo-Yiadom, Ansong & Idun, 2020). Though the dependent variables did not meet this condition, the choice of the two-step GMM estimator is again justified for the following reasons. Firstly, the estimator is appropriate when the time dimension (years) is lesser than the cross-sectional observations (firms). The number of years for this study is eleven (11) while the firms studied are thirty-two (32). Secondly, the estimator also deals with possible endogeneity problems by controlling for time-invariant omitted variables and simultaneity bias. Another justification for this estimator is its ability to check and control the problem of the over the proliferation of instruments. Lastly, the estimator accounts for unobserved heterogeneity problems (Roodman, 2009).

Following the approaches employed by Agyei *et al.* (2020), Asongu and De Moor (2017), Tchamyou (2020), and Roodman (2009), all independent variables are treated as predetermined or suspected endogenous variables, and hence, the use of *gmmstyle* instruments for them. The approach also treats the years as strictly exogenous, thereby allowing the use of *ivstyle* instruments. Roodman (2009) argues that the time-invariant variables cannot become endogenous in the first difference. The approach also uses orthogonal deviations rather than first differences. The standard two-step GMM model for this study is specified as;

$$EQ_{i,t} = a_1EQ_{i,t-\tau} + a_2ARL_{i,t} + \sum_{h=1}^4 a_h(Z_{h,i-\tau}) + \Theta_i + \mu_t + \varepsilon_{i,t} \dots \dots (2)$$

$$(EQ_{i,t} - EQ_{i,t-\tau}) = a_1(EQ_{i,t-\tau} - EQ_{i,t-2\tau}) + a_2(ARL_{i,t} - ARL_{i,t-2\tau}) +$$

$$\sum_{h=1}^4 a_h(Z_{h,i-\tau} - Z_{h,i-2\tau}) + (\mu_t - \mu_{t-\tau}) + \varepsilon_{i,t} \dots \dots \dots (3)$$

Where,

EQ is earnings quality

ARL is audit report lag

Z is vector controls

i cross section firms

t time series in years

τ auto-regressor coefficient, which is one (1) in this model

Θ firm specific constant or effect

μ time specific constant or effect

ε error term

However, since earnings quality is measure with four different variables, the model is modified to suit each measure and objective as follows;

Objective 1:

$$(SM_{i,t} - SM_{i,t-\tau}) = a_1(SM_{i,t-\tau} - SM_{i,t-2\tau}) + a_2(ARL_{i,t} - ARL_{i,t-2\tau}) + \sum_{h=1}^4 a_h(Z_{h,i-\tau} - Z_{h,i-2\tau}) + (\mu_t - \mu_{t-\tau}) + \varepsilon_{i,t} \dots \dots \dots (4)$$

Where SM is Earnings Smoothing

Objective 2:

$$(ES_{i,t} - ES_{i,t-\tau}) = a_1(ES_{i,t-\tau} - ES_{i,t-2\tau}) + a_2(ARL_{i,t} - ARL_{i,t-2\tau}) + \sum_{h=1}^4 a_h(Z_{h,i-\tau} - Z_{h,i-2\tau}) + (\mu_t - \mu_{t-\tau}) + \varepsilon_{i,t} \dots \dots \dots (5)$$

Where ES is Earnings Surprise

Objective 3:

$$(CC_{i,t} - CC_{i,t-\tau}) = a_1(CC_{i,t-\tau} - CC_{i,t-2\tau}) + a_2(ARL_{i,t} - ARL_{i,t-2\tau}) + \sum_{h=1}^4 a_h(Z_{h,i-\tau} - Z_{h,i-2\tau}) + (\mu_t - \mu_{t-\tau}) + \varepsilon_{i,t} \dots \dots \dots (6)$$

Where CC is Closeness to Cash

Objective 4:

$$(AQ_{i,t} - AQ_{i,t-\tau}) = a_1(AQ_{i,t-\tau} - AQ_{i,t-2\tau}) + a_2(ARL_{i,t} - ARL_{i,t-2\tau}) + \sum_{h=1}^4 a_h(Z_{h,i-\tau} - Z_{h,i-2\tau}) + (\mu_t - \mu_{t-\tau}) + \varepsilon_{i,t} \dots \dots \dots (7)$$

Where AQ is Accrual Quality

Diagnostic Tests

To ensure the robustness and accuracy of the results, several diagnostic tests were also performed. The exclusion restriction of the exogenous variable is tested using the Difference in Hansen Test (DHT) while the Sargan Overidentifying Restrictions (OIR) is used to test the validity of the suspected endogenous variables. The Arellano and Bond second-order autocorrelation tests were also conducted to check the presence of autocorrelation. All three tests should not be significant to indicate their validity. To restrict the problem of instrument proliferation, the study also made sure the number of cross-sections is more than the instruments in all models. The Fischer test is also reported for the joint validity of the estimated coefficients.

Measurement of Variables

The study primarily examined the relationship between ARL and earnings quality using secondary data obtained from annual reports obtain of firms listed on the Ghana Stock Exchange. The independent variable (ARL) was measured as the number of calendar days from year-end to the date of the auditor's report. Again, the dependent variable (earnings quality) was measured using four approaches, thus, earning smoothness, earnings surprise, closeness to cash, and accrual quality. However, variables such as firm size, auditor's reputation, firm's profitability, and firm's solvency were controlled in

other to prevent them from influencing the relationship between the two variables.

Variables, Measurements, and Sources

Table 2: Independent Variable

| Variable | Measurement | Source |
|------------------------|--|---------------|
| Audit Report Lag (ARL) | The number of calendar days from year-end to the date of auditor's report. | Annual report |

Source: Field Data (2021)

Table 3: Dependent Variables

| Variable | Measurement | Source |
|-------------------------|--|---------------|
| Earning Smoothness (SM) | The ratio of the standard deviation of net income divided by the total assets to the standard deviation of cashflow divided by total assets. | Annual report |
| Earnings Surprise (ES) | The ratio of current year net income and last year's net income difference to last year's net income. | Annual report |
| Closeness to Cash (CC) | The ratio of cashflow from operation divided by the net income | Annual report |
| Accrual Quality (AQ) | The ratio of earnings less cashflows from operation to total assets. | Annual report |

Source: Field Data (2021)

Table 4: Control variables

| Variable | Measurement | Source |
|----------------------|--|---------------|
| Firm size | Natural log of the book value of the total asset | Annual report |
| Auditor's reputation | Dummy variable that takes the value of one if the auditor is a BIG 4; and zero otherwise. | Annual report |
| Firm's profitability | Dummy variable that takes the value of one if the firm makes a profit in the year; and zero otherwise. | Annual report |
| Firm's Solvency | The ratio of total debt to total assets. | Annual report |

Source: Field Data (2021)

Ethical Consideration

Though the data needed for the study was freely accessible on the internet, necessary steps were taken to acknowledge the data source and any direct ownership associated with the data extracted from the internet. Again, appropriate measures and due care were taken to avoid any errors and manipulations when extracting the data. The researcher assured that data collected was purely used for academic purposes as a requirement to the award of a degree in Master of Commerce (Accounting).

Chapter Summary

This chapter discussed the research method used in this study. It handled issues such as the research design, target population, sample size and sampling procedure, data source, and data collection procedure. The chapter again discussed the analytical technique adopted and the appropriateness of the adopted analytical technique for the study. However, the study inherent some limitations as a result of the analytical technique adopted. For instance, the established relationship between the dependent and independent variable may change if more or additional data are taken into consideration. Again, the cause-and-effect relationship between the dependent and independent variable was assumed to remain unchanged but, in the situation where this assumption does not hold, the findings of the study may be misleading and erroneous. And lastly, the analytical technique is sensitive to outliers and prone to multicollinearity.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

The results and discussions of the analysis conducted in this study were reported in this chapter. The results were presented in the form of tables and regression analysis showing the effects of independent variables on the dependent variable used in the study. The following is a brief overview of the chapter: Descriptive statistics are first presented followed by correlation analysis and then an analysis of the system GMM results. The discussion of results is presented according to the objectives of the study before closing the chapter with a summary.

Descriptive Statistics

This section presents the summary statistics of all the variables used in this study. The descriptive statistics featured in the study include the mean, standard deviation, minimum, maximum, and the number of observations for each variable. These statistics are illustrated extensively in Table 6. This is was necessary to identify the basic features of the data and also to determine if there are major discrepancies and variations among the variables.

Table 5: Descriptive Statistics

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|------------|-----|-------------|-------------|-----------|---------------|
| SM | 304 | -0.9212 | 0.7255 | -6.3877 | -0.0818 |
| ES | 270 | -1.8642 | 5.2605 | -51.2958 | -0.0012 |
| CC | 304 | -4.5073 | 12.8035 | -149.5714 | -0.0245 |
| AQ | 304 | -0.1138 | 0.1448 | -1.2988 | -0.0003 |
| ARL (DAYS) | 297 | 102.9226 | 107.2271 | 37 | 1167 |
| FS (GHC) | 304 | 138,000,000 | 468,000,000 | 4505.2 | 4,440,000,000 |
| AR | 302 | 0.7219 | 0.4488 | 0 | 1 |
| PR | 304 | 0.7467 | 0.4356 | 0 | 1 |
| SO | 304 | 0.7226 | 0.2517 | 0.0493 | 1.5491 |

Note: SM is earnings smoothness, ES is earnings surprise, CC is earnings closeness to cash, AQ is accrual quality, ARL is audit report lag, FS is firm size, AR is auditor's reputation, PR is firm's profitability, SO is firm's solvency.

Source: Field Data (2022)

From Table 5, descriptive statistics of the dependent variables indicate a lower earnings quality for most sampled firms on GSE from 2009 to 2019 with regards to all four measurements approach adopted for the study. According to the various measurements adopted, a lower-earning quality measurement ratio represents a better quality of earnings reported and a higher ratio implies a poor reported earnings quality. For this reason, all earnings ratios were negated, hence, a higher negative value indicates high earnings quality while a lower negative value indicates low earnings quality, similar to previous studies such as Francis *et al.* (2004) and Jing (2007).

The descriptive statistics of the sampled firms' earnings smoothness (SM) depicts a lower quality of earnings in respect to its smoothness for the sampled firms on the GSE within the period of 2009 to 2019 as most firms SM ratio is around -0.9212, while minimum and maximum values of -6.3877 and -0.0818 respectively, with 0.7255 standard deviations. Again, the mean of -1.8642 for the sampled firms' earnings surprise (ES) implies a lower earnings quality as the minimum and maximum value for these firms listed on GSE during the years considered are -51.2958 and -0.0012 respectively, with a

standard deviation of 5.2605. Also, earnings closeness to cash (CC) averaged -4.5073, ranging between the minimum and maximum values of -149.5714 and -0.0245 respectively, with a standard deviation of 12.8035. The average value depicts a lower earnings quality since it edges toward the maximum value or lower negative value. Lastly, with minimum and maximum values of -1.2988 and -0.0003 respectively, accrual quality (AQ) recorded a mean of -0.1138, with a standard deviation 0.1448. This again, show a lower earnings quality for most sampled firms.

Concerning the independent variable, the descriptive statistics show an average ARL for the sampled firms to be approximately 103 days within the period of 2009 to 2019. The minimum and maximum days for ARL are 37 and 1167 days respectively. The variable has a standard deviation of approximately 107 days which indicates some level of deviation from the mean for the listed firms sampled within the period under discussion.

With regards to the controls, the descriptive statistics indicate that firm size recorded an average of GHC1.38 million, ranging from a minimum value of GHC4505.2 and a maximum value of GHC4.44million, with a standard deviation of GHC4.68 million. Again, the descriptive statistics indicate that during periods under review, 72 percent of the sampled firms engaged the services of the Big 4 in the audit of their financial statements. This appears to be higher than the findings of Afify (2009) who realized that 40 percent of firms engaged the Big 4. In addition, Habib (2015) discovered that only 34 percent of the firms in China were audited by the Big 4 between 2003 and 2011. This suggests that in Ghana a greater majority of sampled firms rely on the Big 4 for annual audits of financial statements. Also, the average number

of the firms' year profits for the period was 75 percent out of 304, with a minimum of 0 and a maximum of 1. The variation in a firm making profit was 45 percent. Again, the statistics indicate that firms' solvency has a mean of 0.7226 from a minimum of 0.0493 to a maximum of 1.5491 implying reliance of sample firms on debt capital than on equity.

Correlation Analysis

The pairwise correlation matrix for the variables employed in the study is presented in this section. The dependent variables depict correlation coefficients among themselves, ranging from 0.0285 to 0.2706. The correlation between ARL and EQ measures is also relatively low, ranging from 0.0383 to 0.1960. Again, the results show a significant correlation between EQ measures and some experimental variables. For instance, SM is significantly negatively correlated with ARL and positively correlated with PR at a 1% significant level. Also, ES and CC are significantly positively correlated with FS at a 5% significant level, and AQ is significantly positively correlated with AR and PR at 10% and 1% significant level, respectively and significantly negatively correlated with SO at a 1% significant level. Also, ARL shows a significantly positive correlation with FS and SO at a 1% significant level and significantly negatively correlated with AR and PR at 10% and 1% significant level respectively. Furthermore, a closer look at the control variables in the correlation matrix also shows that the correlation between the other variables is below the thresholds suggested by Adam (2016) and Zainodin and Yap (2013). Table 6 presents the correlation between the variables.

Table 6: Correlation Analysis

| | SM | ES | CC | AQ | ARL | FS | AR | PR | SO |
|-----|------------|-----------|----------|------------|------------|------------|---------|------------|--------|
| SM | 1.0000 | | | | | | | | |
| ES | 0.0770 | 1.0000 | | | | | | | |
| CC | -0.2706*** | -0.0354 | 1.0000 | | | | | | |
| AQ | 0.0285 | 0.2204*** | 0.1343** | 1.0000 | | | | | |
| ARL | -0.1960*** | 0.0383 | 0.0600 | -0.0721 | 1.0000 | | | | |
| FS | -0.0200 | 0.1210** | 0.1203** | 0.0924 | 0.1771*** | 1.0000 | | | |
| AR | 0.0622 | 0.0005 | -0.0276 | 0.1049* | -0.0960* | -0.2119*** | 1.0000 | | |
| PR | 0.2115*** | 0.0887 | 0.0326 | 0.3922*** | -0.2898*** | 0.0699 | 0.0777 | 1.0000 | |
| SO | -0.0120 | -0.0170 | -0.0341 | -0.1904*** | 0.2172*** | 0.3539*** | -0.0047 | -0.2017*** | 1.0000 |

***, ** and * represent 1%, 5% and 10% significance levels respectively

Note: SM is earnings smoothness, ES is earnings surprise, CC is earnings closeness to cash, AQ is accrual quality, ARL is audit report lag, FS is firm size, AR is auditor's reputation, PR is firm's profitability, SO is firm's solvency.

Source: Field Data (2022)

Regression Results

The main objective of the study was to examine the relationship between ARL and EQ of listed firms in Ghana. The SGMM regression results for the four research objectives are presented in Table 8 in four columns. The first column presents the effect of ARL on SM, followed by the model that examines the effect of ARL on ES. The next column presents the effect of ARL on CC, while the last column presents results on the effect of ARL and AQ. A positive coefficient from the regression results indicates that an increase in the independent (ARL) will lead to an increased EQ, whilst a negative one will lead to a reduction in EQ.

Table 7: SGMM Regression Models Results

| | Model 1 | Model 2 | Model 3 | Model 4 |
|------|-----------------------|-----------------------|-----------------------|-----------------------|
| | SM | ES | CC | AQ |
| L.SM | 0.7531*** (0.1472) | | | |
| L.ES | | 0.5630*** (0.1010) | | |
| L.CC | | | 0.3934*** (0.0552) | |
| L.AQ | | | | 0.3425*** (0.0671) |
| ARL | -0.0004* (0.0002) | 0.0042*** (0.0009) | 0.0188*** (0.0029) | 0.0002*** (0.0001) |

| Controls | | | | |
|----------------------------|------------------------|------------------------|-----------------------|------------------------|
| FS | 0.0625 (0.1515) | 0.6925** (0.3162) | 0.6715 (0.6633) | 0.0322*** (0.0086) |
| AR | -0.3614*** (0.0426) | -1.1256*** (0.3371) | -0.4423 (0.7373) | 0.0344*** (0.0084) |
| PR | 0.1515 (0.1475) | 0.9981** (0.3890) | -1.5715 (1.3036) | 0.0944*** (0.0122) |
| SO | 0.2507* (0.1418) | -2.8554*** (0.8129) | -3.6629** (1.7702) | -0.1790*** (0.0326) |
| cons | 0.2911 (0.7787) | -3.3107 (2.4385) | -5.0309 (5.3960) | -0.2684*** (0.0455) |
| <i>ARI</i> | 0.022 | 0.147 | 0.097 | 0.029 |
| <i>AR2</i> | 0.119 | 0.352 | 0.146 | 0.139 |
| <i>Sargan OIR</i> | 0.965 | 0.999 | 0.245 | 0.071 |
| <i>Hansen OIR</i> | 0.782 | 0.557 | 0.361 | 0.321 |
| <i>DHT for instruments</i> | | | | |
| (a) Instruments in levels | | | | |
| H excluding group | 0.562 | 0.218 | 0.596 | 0.273 |
| Diff (null, H=exogenous) | 0.757 | 0.766 | 0.245 | 0.388 |
| (b) IV (years, eq(diff)) | | | | |
| H excluding group | 0.721 | 0.507 | 0.384 | 0.265 |
| Diff (null, H=exogenous) | 0.866 | 0.560 | 0.235 | 0.714 |
| <i>Fisher</i> | 285.64*** | 93.99*** | 229.57*** | 657.47*** |
| <i>p-value</i> | 0.000 | 0.000 | 0.000 | 0.000 |
| <i>Instruments</i> | 22 | 22 | 22 | 22 |
| <i>Groups</i> | 32 | 30 | 32 | 32 |
| <i>Observations</i> | 262 | 231 | 262 | 262 |

The p-values are two-tailed tests and corrected standard errors are in parenthesis
 ***, ** and * represent 1%, 5% and 10% significance levels respectively

Source: Field Data (2022)

Audit Report Lag and Earnings Smoothness

The first objective for this study was to examine the relationship between Audit Report Lag (ARL) and Earnings Smoothness (SM) for listed firms in Ghana. As it can be observed from model 1 of Table 7, the lag of the dependent variable (L.SM) is highly significant and positive at a 1% significance level. This is theoretically and empirically so because, past volumes of SM are deemed to influence the current levels of SM of each firm as based on signaling theory, firms try to maintain the same level of earnings quality. That is if a firm fails to maintain its level of earnings quality, stakeholders will perceive that firm is deliberately hiding sensitive information

(Craven & Marston, 1999). This suggests that SM responds positively to the immediate past period's values as indicated by Ogundipe, Ogunniyi, Olagunju and Asaleye (2019) and Atobrah (2015).

In model 1, ARL was found to have a significant and negative effect on SM at a 10% significance level. This suggests that all things being equal, the longer the reporting lag, the lower the quality of SM. Which is, a longer ARL provides an opportunity for irregular earnings variation or volatility by shifting revenues and expenses from one fiscal period to another. This goes contrary to the signaling theory, which is, longer ARL means auditors had adequate to assess the credibility and reliability of the SM and also to the study by Bryant-Kutcher *et al.* (2013) which concluded that a longer audit period indicates higher audit effort which contributes to higher audit quality. However, a shorter ARL signal good news while a longer ARL signal a problem to stakeholders and as indicated by Li *et al.* (2009), a longer ARL has an adverse consequence on the firm. That is, untimely publication of financial reports affects the relevance of the information contained in the financial reports and the degree of uncertainty associated with decisions taken based on the information published (Whitworth *et al.*, 2014; Ashton *et al.*, 1987).

Also, the model indicates a significantly negative relationship between Auditor's Reputation (AR) and Earnings Smoothness (SM) at 1%. That is, concerning AR, all things being equal, auditors with higher reputations are expected to produce a lower earnings smoothness quality. This means firms audited by any of the Big-four audit firms produce lower SM quality while those audited by any of the non-Big-four audit firms produce higher SM quality. This is not consistent with the expectation that Big-four audit firms

with a high level of expertise and professionalism should produce a higher audit quality (Soltani, 2002). That is Firms associates themselves with reputable audit firms usually with any of the Big-four audit firms to enhance the reliability of their financial report since they can complete their audit engagement more efficiently and effectively (Sitorus *et al.*, 2017). Also, the result does not support Al-Ajmi (2008) claims that Big-Four audit firms have invested and acquire adequate resources and technology that enable them to complete audit engagements more efficiently and effectively than the non-Big-Four audit firms, hence, giving them a competitive edge over them.

Again, Firms Solvency (SO) was found to be positively significant SM at a 10% significant level. This implies, firms that report more debt to equity in their capital structure are more likely to report higher SM quality. That is, creditors of these firms closely monitor their activities to protect their interests. This is done by putting in place measures and controls to prevents management from manipulating transactions, hence, reporting quality earnings. Also, highly leveraged firms are expected to report high earnings quality since debt holders usually insert clauses in their contracts to restrict management activities and may again require the firm to engage an auditor who will provide high-quality service to enhance the credibility and integrity of the financial report.

Audit Report Lag and Earnings Surprise

The second objective for this study was to analyze the relationship between Audit Report Lag (ARL) and Earnings Surprise (ES) for listed firms in Ghana. As it can be observed from model 2 of Table 7, the lag of the dependent variable (L.ES) is highly significant and positive at a 1%

significance level. This result is consistent with expectation as firms try to maintain the same level of earnings quality over years as indicated by the signaling theory (Craven *et al.*, 1999). This suggests that ES responds positively to the immediate past period's values as stated by Ogundipe *et al.* (2019) and Atobrah (2015).

In model 2, Audit Report Lag (ARL) was found to have a significant and positive effect on ES at a 1% significance level. This suggests that all things being equal, the longer the reporting lag, the higher the quality of ES. That is, a longer ARL helps in reducing unexpected discrepancies between anticipated earnings and actual earnings and this is in line with agency and signaling theory. That is, this explains the appointment and performance of external auditors and how the length of reporting period influences the auditor's ability to investigate and analyze the reliability and credibility of the financial report. As identified by Bamber *et al.* (1993), ARL is one of the externally observable measures of audit effort and performance. Their intuitive presumption that greater audit effort contributes to higher audit efficiency is an important corollary to the findings of this study. Therefore, the higher the effort an auditor used in gathering evidence, the greater the possibility that he/she can draw the right conclusion on the accuracy and reliability of the financial report, hence, producing a higher audit quality.

Again, the Firm's Size (FS), which is the natural logarithm of the end of the yearbook value of the total assets was found to be significantly positive to ES at 5%. That is, firms with larger total assets have higher ES quality compared to firms with low total assets. This goes in line with the fact that large firms have the resources to engage professional and competent financial

officers and external auditors to produce accurate and appropriate reports that represent the true state of their firm (Davies *et al.*, 1980). Again, large firms are considered to have put in place a strong internal control system hence, it is not likely for them to commit substantial errors in the financial report as compared to smaller firms (Carslaw *et al.*, 1991). Also, in line with the theory of compliance, larger firms are more compliant to rules and regulations that have been established regarding the misrepresentation and manipulations of financial reports than relatively smaller firms (Khulaidah *et al.*, 2017). This is because moving in line with these rules and regulation helps firms to develop and maintain their good image (Sugita *et al.*, 2017).

Also, the model indicates a significantly negative relationship between Auditor's Reputation (AR) and ES at 1%. This means all things being equal, firms that engage highly reputable audit firms have lower ES quality. Meaning, firms audited by any of the Big-four audit firms are expected to produce lower ES quality. However, this is not consistent with the fact that Big-four audit firms have the requisite resources, knowledge, and expertise to conduct their audit engagement more efficiently and effectively as compared to the non-Big Four audit firms and also ability to familiarize themselves quickly with clients' operations (Soltani, 2002; Sitorus *et al.*, 2017).

Furthermore, the model identified a positive significant relationship between Profitability (PR) and ES at 5%. Which is, all other things being equal, firms report high-quality ES when they record profit in a given year. PR is considered as one of the appropriate measures of financial performance of a firm (Adebayo *et al.*, 2016). That is, when a firm records a profit in a specific accounting year, management is more comfortable with communicating it.

Therefore, highly profitable firms are less motivated to manipulate their financial report, unlike unprofitable firms.

Lastly, Solvency (SO) was significantly negative to ES at 5%. This implies, all other things being equal, ES quality for indebted firms is lower as compare to least indebted ones. That is, firms whose capital structure is largely debt are likely to lower ES quality. However, this is not consistent with the fact that indebted firms are closely monitored by their creditors who put in place measures and controls to prevents management from manipulating transactions to protect their interest. However, management may be motivated to misrepresent and manipulate their financial report to meet their creditors' demands and attract potential creditors.

Audit Report Lag and Closeness to Cash

The third objective for this study was to analyze the relationship between Audit Report Lag (ARL) and Closeness to Cash (CC) for listed firms in Ghana. As it can be observed from model 3 of Table 7, the lag of the dependent variable (L.CC) is highly significant and positive at a 1% significance level. This is consistent with the expected result as firms try to maintain the same level of earning quality in aid of reducing the problem of information asymmetry as indicated by signaling theory (Craven *et al.*, 1999). This suggests that CC responds positively to the immediate past period's values as stated by Ogundipe *et al.* (2019) and Atobrah (2015).

In model 3, Audit Report Lag (ARL) was found to have a significant and positive effect on CC at a 1% significance level. This suggests that all things being equal, the longer the reporting lag, the quicker earnings are advance as a valuable earnings asset to estimate operating cashflows. That is,

earnings that can be deposited directly at the bank are considered to be high-quality earnings (Ben-Nasr *et al.*, 2015). This goes in line with the signaling theory which illustrates a higher audit effort contributes to higher audit quality and the agency theory provides the basis for audit function.

Again, Firms Solvency (SO) was found to be negatively significant CC at a 5% significant level. Which indicates, all other things being equal, firms with high debt condition are expected to have lower CC quality as compared to those with low debt condition. However, this is not consistent with the fact that auditors and creditors closely monitor the activities of highly indebted firms by putting in place measures and controls to prevent management from manipulating their financial statements.

Audit Report Lag and Accrual Quality

The fourth objective for this study was to analyze the relationship between Audit Report Lag (ARL) and Accrual Quality (AQ) for listed firms in Ghana. As it can be observed from model 4 of Table 7, the lag of the dependent variable (L.AQ) is highly significant and positive at a 1% significance level. This is consistent with expected results and signaling theory as firms try to reduce the issue of information asymmetry by maintaining the same level of earnings quality (Craven *et al.*, 1999). This suggests that AQ responds positively to the immediate past period's values as stated by Ogundipe *et al.* (2019) and Atobrah (2015).

In model 4, ARL was found to have a significant and positive effect on AQ at a 1% significance level. This suggests that all things being equal, firms with longer ARL are expected to produce a less deceptive manipulative variation in working capital which will cause operations cashflow volatility.

This indicates that auditors need adequate time to conduct their engagement to provide a fair assessment of financial information, hence, satisfying the signaling theory while the agency theory explains the roles and responsibilities of the auditors. Again, ARL as one of the externally observable measures of audit effort and performance supports the intuitive presumption that greater audit effort contributes to higher audit efficiency. Therefore, the higher the effort an auditor used in gathering evidence, the greater the possibility that he/she can draw the right conclusion on the accuracy and reliability of the financial report, hence, producing a higher audit quality. (Bamber *et al.*, 1993).

Again, the Firm's Size (FS) was found to be significantly positive to AQ at 1%. That is, all other things equal, firms with large total assets are expected to have a higher AQ. This is likely because, large firms have information systems and technology better than smaller firms that strengthen the internal control system of the firms, hence, reduce the likelihood of committing substantial errors in their financial report preparation as compared to smaller firms (Carslaw *et al.*, 1991). Also, to maintain a good image, larger firms are more willing to comply with rules and regulations regarding the misrepresentation and manipulations of financial reports than relatively smaller firms (Prabasari *et al.*, 2017).

Also, the model indicates a significantly positive relationship between Auditor's Reputation (AR) and AQ at 1%. Meaning, all things being equal, auditors with higher reputations are expected to produce a higher AQ. Which is, Big-four audit firms are expected to produce high AQ quality. This is in line with the fact that the Big-four audit firms have generated more

experiences and expertise as a result of their large substantial client base and also have enough resources to acquire appropriate and adequate technology, hence, they can conduct their engagement more effectively and efficiently than non-Big-four audit firms. Also, the Big-four audit firms have a greater reputation stake which they are motivated to protect by providing high-quality audits (DeAngelo, 1981).

Furthermore, the model identified a positive significant relationship between Profitability (PR) and AQ at 1%. Which is, all other things being equal, firms report quality AQ when they record profit in a given year. Firms that report high-level PR indicate a firm's success. That is, a firm's success is propelled by its interests and responses to making a profit (Syofiana *et al.*, 2018). Hence, they are less motivated to manipulate their financial report, unlike unprofitable firms.

Lastly, Solvency was significantly negative to AQ at 1%. This implies, all other things being equal, firms with a smaller amount of debts are expected to have high AQ than those with a high amount of debts. That is, firms with a higher amount of debt have greater incentives to manipulate their earnings so as not to violate creditors' restrictions (DeFond & Jiambalvo, 1994). Also, Becker, DeFond, Jiambalvo, and Subramanyam (1998) propose that high leverage is also related to financial distress. A manager in a high leverage firm will try to reduce earnings to obtain better results in the contractual renegotiation.

Chapter Summary

The chapter began by providing the descriptive analysis of the variables employed in the study to give an overall description of the variables. This was followed by the correlation analysis to assess the level of association between each of the respective variables. The main results were presented subsequently based on each objective and these were discussed in relation to existing literature. The chapter ended with a summary.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

This is the final chapter of the study. The chapter summarized the entire research and put forth the conclusions from the results before making recommendations based on the study findings. The chapter finally concludes with some suggestions for future studies.

Summary of Research

The aim objective of the study was to examine the effect of Audit Report Lag (ARL) on the earnings quality of listed firms in Ghana. The study sought to analyze the effect of ARL on earnings quality by adopting four measures based on the relations among income, cash, and accrual.

To achieve objectives of the study, the study adopted an explanatory research approach to help examine and explain the correlations between variables in a specific relationship between cause and effect and again employed quantitative research design since the basis of the study was positivism. The study used only secondary data which were extracted manually from the audited financial statement of listed firms obtained through Ghana Stock Exchange (GSE) websites and individual firm websites for its analysis. The period for data collection was the financial years of firms starting from 2009 to 2019 making eleven (11) years observation period. The data was processed and analyzed by the use of Microsoft Excel and Stata 13.1. The two-step system GMM panel estimator developed by Holtz-Eakin and

Rosen (1990) and later modified by Arellano and Bond (1991) was used to assess the relationship between audit report lag and earnings quality.

Key Findings of the Study

Some interesting revelations were made from the results of this study. This section presents the major findings of the study. These findings are presented based on the objectives of the study.

For the first objective, the study identified that longer ARL enables management to shift revenue and expense accrued within the fiscal period to future fiscal period or from past fiscal period to the current period to minimize irregular earnings variation or volatility. Again, firms that audited by any of the Big-four audit firms produce stable earnings through purposeful intervention and use of certain accounting tools and conventions to reduce earnings volatility. Also, unlike low leverage firms, highly leverage firms able to produce steady earnings without necessarily shifting various revenues and expenses of several reporting periods.

Again, for the second objective, it was identified that a longer ARL reduces the unexpected discrepancies between anticipated earnings and actual earnings. Again, unlike firms that engage any of the Big-four auditing firms and high leverage firms, firms with high total assets value and those that record profits in a given year in Ghana report earnings with less unexpected discrepancies expected earnings and actual earnings.

Also, for the third objective, the study revealed that a longer ARL enables firms to publish earnings that have a comparatively smaller proportion of accruals and a larger proportion of cashflows. However, high leverage firms produce otherwise.

Lastly, the fourth objective revealed that a longer ARL are enabled firms to convert their earnings into cash quicker. Firms can convert their earnings into cash quicker when they have a higher total value amount, engages any of the Big-four auditing firms, and/or record profit that year. However, firms with a high level of debt are unable to convert their earnings into cash quicker.

Conclusions

The study identified that a longer ARL improves the quality of the earnings in terms of reducing unexpected discrepancies between anticipated earnings and actual earnings, producing earnings that can easily be approximated to operating cashflows and producing earnings that have less deceptive manipulative variation in working capital which will cause operations cashflows volatility. However, a longer ARL also provides management an opportunity to engage in irregular earnings variation or volatility by shifting revenues and expenses from one fiscal period to another.

Again, the study revealed that firms with larger total assets amount produce earnings with less unexpected discrepancies between the actual earnings per share of a firm and the anticipated earnings per share of analysts and can convert their accruals to cash quicker than firms with lower total assets amount.

Also, it was identified that firms audited by any of the Big-four audit firms publish earnings with fewer earnings volatility by minimizing the irregular earnings variation purposeful by shifting revenues and expenses of several reporting periods, earnings that are either below or above the estimates

or expectations of analysts and can map its current accruals into previous, current, and future operating cashflows.

Furthermore, the study revealed that firms report earnings with a less unexpected discrepancy between expected earnings and actual earnings for the year and can easily convert their accruals into cash during the year in which they reported profits.

Lastly, firms with large debt in their capital composition were found to be publishing stable earnings with necessary shifting do not shift various revenues and expenses of several years purposely. However, they report earnings that are largely below or above estimates or analysts' expectations, report earnings with a large proportion of accruals compare to cashflows, and cannot map current accruals from past, current, and future operating cashflows.

Recommendations

The study investigated the impact of ARL on the earnings quality of listed firms in Ghana. From the findings it is concluded that auditors need longer ARL to provide high-quality earnings in terms of less unexpected discrepancies between anticipated earnings and actual earnings, a large proportion of cash as compare to accrual, and less deceptive manipulative variation in working capital. This will improve the usefulness of financial information in economic decision-making. However, a longer ARL provides an opportunity for irregular earnings volatility, hence, auditors are expected to put in place measures by ensuring or advising owners not structure management's compensations and incentive against their financial performance in order to reduce these irregularities.

Again, a longer ARL affects the timeliness of the financial information which will reduce the relevancy and its capacity to influence economic decisions. Hence, such much as auditors need adequate time, auditors should know at what point in time the audit engagement tends to threaten the timeliness and relevance of the financial information as a result of the delay in its publication.

Suggestions for Further Research

Further studies can again investigate the effect of ARL on earnings quality using other measures such as earnings persistence, earnings predictability, and earnings management. Again, other studies can consider using balanced panel data and also expand the period.

REFERENCES

- Abdelghany, K. E. (2005). Measuring the quality of earnings. *Managerial Auditing Journal*, 3(4), 65-76.
- Abdillah, M. R., Mardijuwono, A. W., & Habiburrochman, H. (2019). The effect of company characteristics and auditor characteristics to audit report lag. *Asian Journal of Accounting Research*, 8(3), 246-265.
- Abeka, M. J., Andoh, E., Gatsi, J. G., & Kawor, S. (2021). Financial development and economic growth nexus in SSA economies: The moderating role of telecommunication development. *Cogent Economics & Finance*, 9(1), 1862395.
- Abernathy, J. L., Barnes, M., Stefaniak, C., & Weisbarth, A. (2017). An international perspective on audit report lag: A synthesis of the literature and opportunities for future research. *International Journal of Auditing*, 21(1), 100-127.
- Adams, M. B. (1994). Agency theory and the internal audit. *Managerial auditing journal*, 7(4), 335-342.
- Adebayo, P. A., & Adebisi, W. K. (2016). Effect of firm characteristics on the timeliness of corporate financial reporting: evidence from Nigerian deposit money banks. *International Journal of Economics, Commerce and Management*, 4(3), 369-381.
- Afify, H. A. E. (2009). Determinants of audit report lag: Does implementing corporate governance have any impact? Empirical evidence from Egypt. *Journal of Applied Accounting Research*, 3(5), 347-358.
- Agbloyor, E. K., Gyeke-Dako, A., Kuipo, R., & Abor, J. Y. (2016). Foreign direct investment and economic growth in SSA: The role of

- institutions. *Thunderbird International Business Review*, 58(5), 479-497.
- Agyei, S. K., Marfo-Yiadom, E., Ansong, A., & Idun, A. A. A. (2020). Corporate tax avoidance incentives of banks in Ghana. *Journal of African Business*, 21(4), 544-559.
- Agyemang, O. S., Gatsi, J. G., & Ansong, A. (2018). Institutional structures and financial market development in Africa. *Cogent Economics & Finance*, 6(1), 1488342.
- Agyemang, O. S., Gbettey, C., Gatsi, J. G., & Acquah, I. S. K. (2019). Country-level corporate governance and foreign direct investment in Africa. *Corporate Governance: The International Journal of Business in Society*, 4(3), 369-381.
- Ahmad, M., Mohamed, H., & Nelson, S. P. (2016). The association between industry specialist auditor and financial reporting timeliness-Post MFRS period. *Procedia-Social and Behavioral Sciences*, 219, 55-62.
- Ahmad, R. A. R., & Kamarudin, K. A. (2003). Audit delay and the timeliness of corporate reporting: Malaysian evidence. In *Communication Hawaii International Conference on Business*. June, University of Hawaii-West Oahu.
- Ahmed, M. I., & Che-Ahmad, A. (2016). Effects of board size, board committees' characteristics and audit quality on audit report lags. In *ISSC 2016: International Soft Science Conference*, 1(1), 810-818.
- Akhor, S. O., & Oseghale, E. O. (2017). An empirical investigation of audit committee attributes and financial reporting lag in Nigeria banking sector. *Journal of Accounting and Financial Management*, 3(2), 25-38.

- Akle, Y. H. (2011). Financial reporting timeliness in Egypt: a study of the legal framework and accounting standards. *Internal Auditing & Risk Management*, 6(1).
- Al-Ajmi, J. (2008). Audit and reporting delays: Evidence from an emerging market. *Advances in Accounting*, 24(2), 217-226.
- Al-Ajmi, J., & Hussain, H. A. (2011). Corporate dividends decisions: evidence from Saudi Arabia. *The Journal of Risk Finance*, 2(1), 64-77.
- Alcaide Muñoz, L., Rodríguez Bolívar, M. P., & López Hernández, A. M. (2017). Transparency in governments: a meta-analytic review of incentives for digital versus hard-copy public financial disclosures. *The American Review of Public Administration*, 47(5), 550-573.
- Alford, A. W., Jones, J. J., & Zmijewski, M. E. (1994). Extensions and violations of the statutory SEC Form 10-K filing requirements. *Journal of Accounting and Economics*, 17(1-2), 229-254.
- ALFREDSON, K., LEO, K., PICKER, R., LOFTUS, J., CLARK, K., WISE, V., & Sadowski, S. T. (2010). Applying International Financial Reporting Standards. *Journal of International Accounting Research*, 9(2), 70-71.
- Al-Ghanem, W., & Hegazy, M. (2011). An empirical analysis of audit delays and timeliness of corporate financial reporting in Kuwait. *Eurasian Business Review*, 1(1), 73-90.
- Alkhatib, K., & Marji, Q. (2012). Audit reports timeliness: Empirical evidence from Jordan. *Procedia-Social and Behavioral Sciences*, 62(1), 1342-1349.

- Al-Matari, Y. A., Al-Swidi, A. K., FADZİL, F. H. B. H., & Al-Matari, E. M. (2012). Board of directors, audit committee characteristics and the performance of Saudi Arabia listed companies. *International Review of Management and Marketing*, 2(4), 241-251.
- Altman, E. I. (2013). Predicting financial distress of companies: revisiting the Z-score and ZETA® models. In *Handbook of research methods and applications in empirical finance*. Edward Elgar Publishing.
- Anggraini, N., & Ruzikna, R. (2017). *Effect of Capital Structure on Financial Performance on Pharmaceutical Companies Listed on Indonesia Stock Exchange Period 2010-2014*. (Doctoral dissertation, Riau University).
- Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *The review of economic studies*, 58(2), 277-297.
- Arellano, M., & Bover, O. (1995). Another look at the instrumental variable estimation of error-components models. *Journal of econometrics*, 68(1), 29-51.
- Aschauer, E., & Quick, R. (2018). Mandatory audit firm rotation and prohibition of audit firm-provided tax services: Evidence from investment consultants' perceptions. *International Journal of Auditing*, 22(2), 131- 149.
- Ashton, R. H., Graul, P. R., & Newton, J. D. (1989). Audit delay and the timeliness of corporate reporting. *Contemporary accounting research*, 5(2), 657-673.
- Ashton, R. H., Willingham, J. J., & Elliott, R. K. (1987). An empirical analysis of audit delay. *Journal of Accounting Research*, 3(4) 275-292.

- Atobrah, R. U. T. H. (2015). *Determinants of Foreign Portfolio Investment: Evidence from Sub-Saharan Africa* (Doctoral dissertation, University of Ghana).
- Bae, C. H., & Woo, Y. S. (2015). The effect of audit report lag and management discretionary report lag on analyst forecasts: evidence from Korea. *Investment management and financial innovations*, 12,(1-2) 318-329.
- Baik, B. O. K., Farber, D. B., & Lee, S. A. M. (2011). CEO ability and management earnings forecasts. *Contemporary accounting research*, 28(5), 1645-1668.
- Bajpai, N. (2011). *Business research methods*. Pearson Education India.
- Bala, H., Amran, N. A., & Shaari, H. (2019). A conceptual framework for the mediating effect of audit quality on the relationship between audit committee attributes and financial reporting quality. *DLSU Business & Economics Review*, 29(1), 85-92.
- Baldacchino, P. J., Caruana, R., Grima, S., & Bezzina, F. H. (2017). Selected behavioral factors in client-initiated auditor changes: the client-auditor perspectives. *European Research Studies*, 20(2), 16.
- Ball, R., & Shivakumar, L. (2008). Earnings quality at initial public offerings. *Journal of accounting and economics*, 45(2-3), 324-349.
- Bamber, E. M., Bamber, L. S., & Schoderbek, M. P. (1993). Audit structure and other determinants of audit report lag: An empirical analysis. *Auditing*, 12(1), 1.

- Bannister, J. W., & Newman, H. A. (1996). Accrual usage to manage earnings toward financial analysts' forecasts. *Review of Quantitative Finance and Accounting*, 7(3), 259-278.
- Barron, O. E., Byard, D., & Yu, Y. (2017). Earnings announcement disclosures and changes in analysts' information. *Contemporary Accounting Research*, 34(1), 343-373.
- Barton, J., & Simko, P. J. (2002). The balance sheet as an earnings management constraint. *The Accounting Review*, 77(1), 1-27.
- Bartov, E., DeFond, M., & Konchitchki, Y. (2011). *Capital Market Consequences of Filing Late 10-Qs and 10-Ks*. New York University Law and Economics Working Papers, Paper 254.
- Bédard, J., Coram, P., Espahbodi, R., & Mock, T. J. (2016). Does recent academic research support changes to audit reporting standards? *Accounting Horizons*, 30(2), 255-275.
- Behn, B. K., Searcy, D. L., & Woodroof, J. B. (2006). A within firm analysis of current and expected future audit lag determinants. *Journal of Information Systems*, 20(1), 65-86.
- Ben-Nasr, H., & Al-Dakheel, A. M. (2015). The impact of earnings quality on the cost of equity: Evidence from privatized firms. *International Journal of Financial Research*, 6(1), 68-78.
- Bhandari, S. B., & Iyer, R. (2013). Predicting business failure using cash flow statement-based measures. *Managerial Finance*, 4(1), 1-8.
- Braam, G. J. M., & Beest, F. V. (2013). A conceptually-based empirical analysis on quality differences between UK annual reports and US 10-

- K reports. *Journal of Financial Reporting and Accounting*, 18(3), 425-458.
- Bryant-Kutcher, L., Peng, E. Y., & Weber, D. P. (2013). Regulating the timing of disclosure: Insights from the acceleration of 10-K filing deadlines. *Journal of Accounting and Public Policy*, 32(6), 475-494.
- Bryant-Kutcher, L., Peng, E., & Zvinakis, K. (2007). The impact of the accelerated filing deadline on timeliness of 10-K filings. *Journal of Financial Reporting and Accounting*, 7(3), 25-58.
- Bryman, A. (2004). Qualitative research on leadership: A critical but appreciative review. *The Leadership Quarterly*, 15(6), 729-769.
- Burns, N., & Grove, S. K. (2010). *Understanding nursing research-eBook: Building an evidence-based practice*. Elsevier Health Sciences.
- Cahyadi, B. (2019). Effect of Audit Tenure, Auditor Turnover, Financial Distress, Complexity of Operations, and Kap Size on Audit Delay (Doctoral dissertation, Multimedia Nusantara University).
- Carcello, J. V., Hermanson, D. R., Neal, T. L., & Riley Jr, R. A. (2002). Board characteristics and audit fees. *Contemporary accounting research*, 19(3), 365-384.
- Carey, P., & Simnett, R. (2006). Audit partner tenure and audit quality. *The accounting review*, 81(3), 653-676.
- Carslaw, C. A., & Kaplan, S. E. (1991). An examination of audit delay: Further evidence from New Zealand. *Accounting and business research*, 22(85), 21-32.

- Chan, P., Ezzamel, M., & Gwilliam, D. (1993). Determinants of audit fees for quoted UK companies. *Journal of Business Finance & Accounting*, 20(6), 765-786.
- Cohen, S., & Leventis, S. (2013, March). Effects of municipal, auditing and political factors on audit delay. In *Accounting Forum*, 37 (1), 40-53.
- Cooper, D. J., & Sherer, M. J. (1984). The value of corporate accounting reports: arguments for a political economy of accounting. *Accounting, Organizations and Society*, 9(3-4), 207-232.
- Cormier, D., Houle, S., & Ledoux, M. J. (2013). The incidence of earnings management on information asymmetry in an uncertain environment: Some Canadian evidence. *Journal of International Accounting, Auditing and Taxation*, 22(1), 26-38.
- Courtis, J. K. (1976). Relationships between timeliness in corporate reporting and corporate attributes. *Accounting and Business research*, 7(25), 45-56.
- Cozby, P. C., Bates, S., Krageloh, C., Lacherez, P., & Van Rooy, D. (2012). *Methods in behavioral research*. Retrieved from [http://MethodsInBehaviorResearch\(PaulCozby\).pdf](http://MethodsInBehaviorResearch(PaulCozby).pdf) (jblfmu.edu.ph)
- Craven, B. M., & Marston, C. L. (1999). Financial reporting on the Internet by leading UK companies. *European accounting review*, 8(2), 321-333.
- Creswell, J. W. (2003). A framework for design. *Research design: Qualitative, quantitative, and mixed methods approaches*, 9-11.
- Dang, N. H., Pham, D. C., & Vu, T. B. H. (2018). Effects of financial statements information on firms' value: evidence from Vietnamese

- listed firms. *Investment Management and Financial Innovations*, 15(4), 210-218.
- Dao, M., & Pham, T. (2014). Audit tenure, auditor specialization and audit report lag. *Managerial Auditing Journal*. 9(4), 20-27
- Daoud, K. A. A., Ku Ismail, K. N. I., & Lode, N. A. (2014). The timeliness of financial reporting among Jordanian companies: do company and board characteristics, and audit opinion matter? *Asian Social Science*, 10(13), 191-201.
- Daoud, K. A. A., Ku Ismail, K. N. I., & Lode, N. A. (2014). The timeliness of financial reporting among Jordanian companies: do company and board characteristics, and audit opinion matter?. *Asian Social Science*, 10(13), 191-201.
- Darmawan, E. (2018). Factor analysis? Factors affecting audit delays in companies listed on the indonesia stock exchange for the period 2014-2016. *Scientific Journal of Accounting and Finance*, 7(2), 10-28.
- Darmawan, E. (2021). The Effect of Accounting Information Systems on Quality of Financial Statements (Case Study at Pt Nerounworks Indonesia). *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(8), 377-380.
- Darmawan, I. P. E., Sutrisno, T., & Mardiaty, E. (2019). Accrual Earnings Management and Real Earnings Management: Increase or Destroy Firm Value? *International Journal of Multicultural and Multireligious Understanding*, 6(2), 8-19.

- Davies, B., & Whittred, G. P. (1980). The association between selected corporate attributes and timeliness in corporate reporting: further analysis. *Abacus*, 16(1), 48-60.
- DeAngelo, L. E. (1981). Auditor size and audit quality. *Journal of accounting and economics*, 3(3), 183-199.
- Dechow, P. M. (1994). Accounting earnings and cash flows as measures of firm performance: The role of accounting accruals. *Journal of Accounting and Economics*, 18(1), 3-42.
- Dechow, P. M., & Dichev, I. D. (2002). The quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review*, 77(1), 35-59.
- Dechow, P. M., Kothari, S. P., & Watts, R. L. (1998). The relation between earnings and cash flows. *Journal of accounting and Economics*, 25(2), 133-168.
- Dechow, P., Ge, W., & Schrand, C. (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of accounting and economics*, 50(2-3), 344-401.
- DeFond, M. and Jiambalvo, J. (1994) 'Debt covenant effects and the manipulation of accruals', *Journal of Accounting and Economics*, 17(1), 145-76.
- DeFond, M. L. (2010). Earnings quality research: Advances, challenges and future research. *Journal of Accounting and Economics*, 50(2-3), 402-409.

- DeFond, M., & Zhang, J. (2014). A review of archival auditing research. *Journal of accounting and economics*, 58(2-3), 275-326.
- DeFond, M., Raghunandan, K. and Subramanyam, K. (2002) 'Do non-audit service fees impair auditor independence? Evidence from going concern audit opinion', *Journal of Accounting Research*, 40 (4), 1247–1274.
- DeGeorge, F., Patel, J., & Zeckhauser, R. (1999). Earnings Management to. *Journal of Business*, 72(1).
- Desai, H., Hogan, C. E., & Wilkins, M. S. (2006). The reputational penalty for aggressive accounting: Earnings restatements and management turnover. *The Accounting Review*, 81(1), 83-112.
- Dewangga, A., & Laksito, H. (2015). *Factors that affect audit report lag* (Doctoral dissertation, Faculty of Economics and Business).
- Dewi, I.C., & Hadiprajitno, P.B. (2017). Effect of tenure audits and public accounting firms of manufacturing specialization on audit report lag (ARL). *Diponegoro Journal of Accounting*, 6(4), 450-461.
- Diandi, A. A. S. (2016). *Effect of profitability, company size and size of public accounting firm (kap) on timeliness of financial statements (A Study on Property, Real Estate and Building Construction Sector Listed on Indonesia Stock Exchange Period 2010-2014)* (Doctoral dissertation, Faculty of Economics Unpas Bandung).
- Dini, J. I. (2019). Influence of company size, leverage, profitability and audit quality on audit delay on company (Study on Manufacturing Companies Listed on Indonesia Stock Exchange Period 2015-2017) (Doctoral dissertation, Universitas Pembangunan Jaya).

- Do, N. H., & Pham, N. V. T. (2020). The influence of sustainable earnings on stock price: evidence from publicly listed Vietnamese business enterprises. *Asian Academy of Management Journal of Accounting & Finance*, 16(2), 16-28.
- Dopuch, N., Holthausen, R. W., & Leftwich, R. W. (1986). Abnormal stock returns associated with media disclosures of 'subject to' qualified audit opinions. *Journal of Accounting and Economics*, 8(2), 93-117.
- Dopuch, N., Mashruwala, R., Seethamraju, C., & Zach, T. (2012). The impact of a heterogeneous accrual-generating process on empirical accrual models. *Journal of Accounting, Auditing & Finance*, 27(3), 386-411.
- Doyle, J. T., & Magilke, M. J. (2013). Decision usefulness and accelerated filing deadlines. *Journal of Accounting Research*, 51(3), 549-581.
- Doyle, J. T., Lundholm, R. J., & Soliman, M. T. (2006). The extreme future stock returns following I/B/E/S earnings surprises. *Journal of Accounting Research*, 44(5), 849-887.
- Dura, J. (2017). Effect of profitability, liquidity, solvency, and company size on Audit Report Lag on companies listed on indonesia stock exchange. *Asian Journal of Business and Economics*, 11(1), 64-70.
- Durand, G. (2019). The determinants of audit report lag: a meta-analysis. *Managerial Auditing Journal*, 8(2), 93-117.
- Dyer, J. C., & McHugh, A. J. (1975). The timeliness of the Australian annual report. *Journal of Accounting Research*, 3(1), 204-219.
- Eghliaow, S. M. (2013). *An empirical examination of the determinants of audit report delay in Libya* (Doctoral dissertation, Victoria University).

- EMEH, Y. (2013). Corporate Governance Structure and Timeliness of Financial Reports of Quoted Firms in Nigeria. *Corporate Governance*, 5(32).
- Emeh, Y., & Appah, E. (2013). Audit committee and timeliness of financial reports: Empirical evidence from Nigeria. *Journal of Economics and Sustainable Development*, 4(20), 14-25.
- Erer, M., & Cömert, Ç. E. (2014). Timeliness of financial reporting in Turkey. *İktisat, İşletme ve Finans*, 29(337), 73-94.
- Eshleman, J. D., & Guo, P. (2014). Do Big 4 auditors provide higher audit quality after controlling for the endogenous choice of auditor? *Auditing: A Journal of Practice & Theory*, 33(4), 197-219.
- Ettredge, M. L., Li, C., & Sun, L. (2006). The impact of SOX Section 404 internal control quality assessment on audit delay in the SOX era. *Auditing: A Journal of Practice & Theory*, 25(2), 1-23.
- Ettredge, M., Fuerherm, E. E., & Li, C. (2014). Fee pressure and audit quality. *Accounting, Organizations and Society*, 39(4), 247-263.
- Ezat, A. N. (2015). The impact of audit-related factors on audit report lag for the Egyptian listed non-financial companies. *Journal of the Faculty of Commerce for Scientific Research*, 10(1), 1-45.
- Ezat, A. N. (2019). The impact of earnings quality on the association between readability and cost of capital. *Journal of Accounting in Emerging Economies*, 8(2), 93-117.
- Fagbemi, T. O., & Uadiale, O. M. (2011). An appraisal of the determinants of timeliness of audit report in Nigeria: Evidence from selected quoted

companies. In *the New Orleans International Academic Conference New Orleans, Louisiana USA*.

Farouk, M. A., & Hassan, S. U. (2014). Impact of audit quality and financial performance of quoted cement firms in Nigeria. *International Journal of Accounting and Taxation*, 2(2), 1-22.

Ferreira, C., & Morais, A. I. (2020). Analysis of the relationship between company characteristics and key audit matters disclosed. *Revista Contabilidade & Finanças*, 31(83), 262-274.

Field, L. C., & Walkins, M. (1991). The information content of withdrawn audit qualifications: new evidence on the value of "subject to" opinion. *Auditing: A Journal of Practice and Theory*, 10(2), 49-61.

Fink, J. (2020). A Review of the Post-Earnings-Announcement Drift. *Journal of Behavioural and Experimental Finance*, 100446.

Firth, M., & Smith, A. (1992). Selection of auditor firms by companies in the new issue market. *Applied Economics*, 24(2), 247-255.

Foster, G. (1981). Intra-industry information transfers associated with earnings releases. *Journal of accounting and economics*, 3(3), 201-232.

Francis, J. R. (2004). What do we know about audit quality? *The British accounting review*, 36(4), 345-368.

Francis, J., LaFond, R., Olsson, P. M., & Schipper, K. (2004). Costs of equity and earnings attributes. *The accounting review*, 79(4), 967-1010.

Frost, C. A., Gordon, E. A., & Pownall, G. (2008). Financial reporting and disclosure quality, and emerging market companies' access to capital in global markets. *Available at SSRN 802824*.

- Gaio, C., & Raposo, C. C. (2014). Corporate governance and earnings quality: International evidence. *Journal of Accounting and Finance*, 14(3), 52.
- Garsombke, H. P. (1981). The timeliness of corporate financial disclosure. In annual reports communication via Courtis, JK. *AFM Exploratory Series*, (11).
- Ghaemi, M. H., Dorosti, A. A., & Masoumi, J. (2012). Earnings management through real activities manipulation: the evidence from Tehran Stock Exchange. *American Journal of Scientific Research*, 66, 162-166.
- Gilling, D. M. (1977). Timeliness in corporate reporting: some further comment. *Accounting and Business Research*, 8(29), 34-36.
- Gissel, J. L., Giacomino, D., & Akers, M. D. (2005). Earnings Quality: It's Time to Measure and Report. *The CPA Journal*, 8(2), 93-117.
- Givoly, D., & Palmon, D. (1982). Timeliness of annual earnings announcements: Some empirical evidence. *Accounting review*, 486-508.
- Gossel, S. J., & Beard, A. (2019). Governance and portfolio flow in Sub-Saharan Africa. *Applied Economics Letters*, 26(11), 883-887.
- Graham, J. R., Harvey, C. R., & Rajgopal, S. (2005). The economic implications of corporate financial reporting. *Journal of accounting and economics*, 40(1-3), 3-73.
- Gray, G. L., Turner, J. L., Coram, P. J., & Mock, T. J. (2011). Perceptions and misperceptions regarding the unqualified auditor's report by financial statement preparers, users, and auditors. *Accounting Horizons*, 25(4), 659-684.

- Habib, A. (2015). The New Chinese Accounting Standards and Audit Report Lag. *International Journal of Auditing*, 19(1), 1-14.
- Habib, A., & Bhuiyan, M. B. U. (2011). Audit firm industry specialization and the audit report lag. *Journal of international accounting, auditing and taxation*, 20(1), 32-44.
- Habib, A., Bhuiyan, M. B. U., Huang, H. J., & Miah, M. S. (2019). Determinants of audit report lag: A meta-analysis. *International journal of auditing*, 23(1), 20-44.
- Habib, A., Jiang, H., & Zhou, D. (2015). Related-party transactions and audit fees: Evidence from China. *Journal of International Accounting Research*, 14(1), 59-83.
- Harindahyani, D. L. S., & Harindahyani, S. (2018). The effect of corporate governance on audit report timeliness in indonesia. *Jurnal Akuntansi Bisnis*, 16(1).
- Hassan, Y. M. (2016). Determinants of audit report lag: evidence from Palestine. *Journal of Accounting in Emerging Economies*, 8(2), 93-117.
- Hegazy, M. A., Al Sabagh, A., & Hamdy, R. (2015). The effect of audit firm specialization on earnings management and quality of audit work. *Journal of Accounting in Emerging Economies*, 3(1), 143-164.
- Hejazi, R., Ansari, Z., Sarikhani, M., & Ebrahimi, F. (2011). The impact of earnings quality and income smoothing on the performance of companies listed in Tehran stock exchange. *International Journal of Business and Social Science*, 2(17).

- Henderson, B. C., & Kaplan, S. E. (2000). An examination of audit report lag for banks: A panel data approach. *Auditing: A Journal of Practice & Theory*, 19(2), 159-174.
- Hirshleifer, D., Hou, K., & Teoh, S. H. (2009). Accruals, cash flows, and aggregate stock returns. *Journal of Financial Economics*, 91(3), 389-406.
- Hirshleifer, D., Hsu, P. H., & Li, D. (2013). Innovative efficiency and stock returns. *Journal of financial economics*, 107(3), 632-654.
- Holtz-Eakin, D., & Rosen, H. (1990). Federal deductibility and local property tax rates. *Journal of Urban Economics*, 27(3), 269-284.
- Hossain, M. A., & Taylor, P. J. (1998). An examination of audit delay: Evidence from Pakistan. *Papers by for APIRA*, 98, 1-16.
- Hsu, H. T., & Khan, S. (2019). Chief accounting officers and audit efficiency. *Asian Review of Accounting*.
- Huberman, A. M., & Miles, M. B. (1994). *Data management and analysis methods*. Retrieved from <https://psycnet.apa.org/record/1994-98625-026>
- Ibrahim, A.M., & Suryaningsih, R. (2016). Effect of profitability, leverage, reputation cap and audit opinion on audit delay. *Ultimaccounting: Journal of Accounting Sciences*, 8(1), 1-21.
- Ika, S. R., & Ghazali, N. A. M. (2012). Audit committee effectiveness and timeliness of reporting: Indonesian evidence. *Managerial Auditing Journal*. 3(4), 41-53.

- Imam, S., Ahmed, Z. U., & Khan, S. H. (2001). Association of audit delay and audit firms' international links: Evidence from Bangladesh. *Managerial Auditing Journal*, 9(1), 1-21
- Iqbal, J., & Farooqi, F. A. (2011). *Stock price reaction to earnings announcement: the case of an emerging market*. Retrieved from <https://mpra.ub.uni-muenchen.de/30865/>
- Ismail, H., Mustapha, M., & Cho, O. M. (2012). Timeliness of audited financial reports of Malaysian listed companies. *International Journal of Business and Social Science*, 3(22).
- Ismail, K. N. I. K., & Chandler, R. (2004). The timeliness of quarterly financial reports of companies in Malaysia. *Asian Review of Accounting*, 8(1), 1-21
- Jackson, S. B., & Pitman, M. K. (2001). Auditors and earnings management. *The CPA journal*, 71(7), 38.
- Jaggi, B., & Tsui, J. (1999). Determinants of audit report lag: Further evidence from Hong Kong. *Accounting and business research*, 30(1), 17-28.
- Jayanimita, N. P. A., Ratnadi, N. M. D., Widanaputra, A. A. G. P., & Ariyanto, D. (2020). The Effect of Good Corporate Governance on Timeliness of Annual Financial Report Publication. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 4(1), 257-263.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, 3(4), 305-360.

- Jensen, M. C., & Meckling, W. H. (1919). Theory of the firm: Managerial behavior, agency costs and ownership structure. In *Corporate Governance* (pp. 77-132). Gower.
- Jiang, H., Habib, A., & Zhou, D. (2015). Accounting restatements and audit quality in China. *Advances in Accounting*, 31(1), 125-135.
- Jin, Z. X. X. (2006). A Survey of Cause, Motivation and Measure Models of Earnings Management [J]. *Nankai Economic Studies*, 6(2), 17-26.
- Kamalluarifin, W. F. S. W. (2016). The influence of corporate governance and firm characteristics on the timeliness of corporate internet reporting by top 95 companies in Malaysia. *Procedia Economics and Finance*, 35, 156-165.
- Karami, G., Karimiyan, T., & Salati, S. (2017). Auditor tenure, auditor industry expertise, and audit report lag: Evidences of Iran. *Iranian Journal of Management Studies*, 10(3), 641-666.
- Karasek III, R., & Bryant, P. (2012). Signaling theory: Past, present, and future. *Academy of Strategic Management Journal*, 11(1), 91.
- Karasek III, R., & Bryant, P. (2012). Signaling theory: Past, present, and future. *Academy of Strategic Management Journal*, 11(1), 91.
- Karim, W., Ahmed, K., & Islam, A. (2006). The effect of regulation on timeliness of corporate financial reporting: Evidence from Bangladesh. *Joaag*, 1(1), 15-35.
- Khasharmeh, H. A., & Aljifri, K. (2010). The timeliness of annual reports in Bahrain and the United Arab Emirates: An empirical comparative study. *The International Journal of Business and Finance Research*, 4(1), 51-71.

- Khelif, H., & Achek, I. (2016). IFRS adoption and auditing: a review. *Asian Review of Accounting*, 4(1), 257-263.
- Kim, H., Lee, H., & Lee, J. E. (2015). Mandatory audit firm rotation and audit quality. *Journal of Applied Business Research (JABR)*, 31(3), 1089-1106.
- Knechel, W. R. (2007). The business risk audit: Origins, obstacles and opportunities. *Accounting, Organizations and Society*, 32(4-5), 383-408.
- Knechel, W. R., & Payne, J. L. (2001). Additional evidence on audit report lag. *Auditing: A Journal of Practice & Theory*, 20(1), 137-146.
- Knechel, W. R., Krishnan, G. V., Pevzner, M., Shefchik, L. B., & Velury, U. K. (2013). Audit quality: Insights from the academic literature. *Auditing: A Journal of Practice*, 32(Supplement 1), 385-421.
- Kosasih, M., & Arfianti, R. I. (2020). The industry's specialization capability of auditors moderates the influence of audit tenure and audit quality as well as the influence of financial ratios to audit report lag. *Accounting Journal*, 9(1), 86-106.
- Kross, W. (1982). Profitability, earnings announcement time lags, and stock prices. *Journal of Business Finance & Accounting*, 9(3), 313-328.
- Kross, W., & Schroeder, D. A. (1984). An empirical investigation of the effect of quarterly earnings announcement timing on stock returns. *Journal of accounting research*, 153-176.
- Kusi, B. A., Agbloyor, E. K., Fiador, V. O., & Osei, K. A. (2016). Does information sharing promote or detract from bank returns: Evidence from Ghana. *African Development Review*, 28(3), 332-343.

- Lai, K. M., Srinidhi, B., Gul, F. A., & Tsui, J. S. (2017). Board gender diversity, auditor fees, and auditor choice. *Contemporary Accounting Research, 34*(3), 1681-1714.
- Lambert, B. (2008). Jones. "Unintended consequences of accelerated filings: Are mandatory reductions in audit delay associated with reductions in earnings quality." *SSRN working paper*.
- Lambert, T. A., Jones, K. L., Brazel, J. F., & Showalter, D. S. (2017). Audit time pressure and earnings quality: An examination of accelerated filings. *Accounting, Organizations and Society, 58*, 50-66.
- Lee, H. Y., & Jahng, G. J. (2008). Determinants of audit report lag: Evidence from Korea-an examination of auditor-related factors. *Journal of Applied Business Research (JABR), 24*(2).
- Lennox, C. S., Francis, J. R., & Wang, Z. (2012). Selection models in accounting research. *The accounting review, 87*(2), 589-616.
- Lestari, S. Y., & Nuryatno, M. (2018). Factors affecting the audit delay and its impact on abnormal return in Indonesia Stock Exchange. *International Journal of Economics and Finance, 10*(2), 48-56.
- Leuz, C., & Wysocki, P. D. (2016). The economics of disclosure and financial reporting regulation: Evidence and suggestions for future research. *Journal of accounting research, 54*(2), 525-622.
- Leventis, S., Weetman, P., & Caramanis, C. (2005). Determinants of audit report lag: Some evidence from the Athens Stock Exchange. *International Journal of Auditing, 9*(1), 45-58.
- Li, E. X., & Ramesh, K. (2009). Market reaction surrounding the filing of periodic SEC reports. *The Accounting Review, 84*(4), 1171-1208.

- Lirungan, D., & Harindahyani, S. (2019). The Effect of Corporate Governance on Audit Report Timeliness in Indonesia. *Jurnal Akuntansi Bisnis*, 16(1), 80-94.
- Listiana, L., & Susilo, T. P. (2012). Factors that affect the company's reporting lag. *Media Research Accounting*, 2(1).
- LUO, W. (2012). *Determinants and implications of audit reporting lags in China*. Unpublished Master's Thesis, Longman University, Hong Kong.
- Lyimo, G. D. (2014). Assessing the measures of quality of earnings: Evidence from India. *European Journal of Accounting Auditing and Finance Research*, 2(6), 17-28.
- Ma, S., Lee, K. H., Kim, C. H., Rhee, J., Zhang, X., & Xu, D. (2015). Accurate, low cost and instrumentation-free security audit logging for windows. In *Proceedings of the 31st Annual Computer Security Applications Conference* (pp. 401-410).
- Mahdavi, G., & Hosseini Nia, S. (2015). Investigating effectiveness of audit quality on reduction of audit report delay in companies listed in Tehran Stock Exchange. *Journal of Accounting of Knowledge*, 6(21), 7-31.
- MARDIANTO, I. (2019). Effect of information technology capability, operating complexity and kap reputation on audit report lag (*Empirical Study on Service Companies Listed on Indonesia Stock Exchange Period 2017-2018*) (Doctoral dissertation, Universitas Airlangga).
- Mario Kristop Jaori, M. (2018). Analysis of Factors Affecting Financial Reporting [Empirical Study in IDX Period 2014-2016]. *Accounting Journal*, 7(2).

- Mashuri, A. A. S., & Ermaya, H. N. L. (2022). Company Size Moderated Audit Delay Determination on LQ45 Companies on the Indonesia Stock Exchange. *Journal Research of Social, Science, Economics, and Management*, 1(10), 1776-1790.
- Mathuva, D. M., Tauringana, V., & Owino, F. J. O. (2019). Corporate governance and the timeliness of audited financial statements. *Journal of Accounting in Emerging Economies*, 6(21), 7-31.
- Mawardi, R. (2017). The effect of internal and external factors to audit delay and timeliness (Empirical study from real estate, and property company in Indonesia). *Journal of Accounting and Business Research Airlangga*, 2(1).
- Mbobu, M. E., & Ekpo, N. B. (2016). Operationalising the qualitative characteristics of financial reporting. *International Journal of Finance and Accounting*, 5(4), 184-192.
- McGee, R. W., & Yuan, X. (2012). Corporate governance and the timeliness of financial reporting: a comparative study of the People's Republic of China, the USA and the European Union. *Journal of Asia Business Studies*, 6(1), 5-16.
- McLelland, A. J., & Giroux, G. (2000). An empirical analysis of auditor report timing by large municipalities. *Journal of Accounting and Public Policy*, 19(3), 263-281.
- Mechelli, A., & Cimini, R. (2014). Is comprehensive income value relevant and does location matter? A European study. *Accounting in Europe*, 11(1), 59-87.

- Meidiyustiani, R., & Febisianigrum, P. (2020). The Effect of Profitability, Solvency, and Audit Opinions on Audit Delay Moderated by Company Size. *ACCOUNTING: Journal of Accounting and Finance*, 1(2), 147-157.
- Mensah, F., Gatsi, J., & Idun, A. A. (2020). Monetary policy and financial development in Africa: Do governance mechanisms matter? *Journal of Economic and Financial Sciences*, 13(1), 1-13.
- Miller, B. P. (2010). The effects of reporting complexity on small and large investor trading. *The Accounting Review*, 85(6), 2107-2143.
- Mitra, S., & Hossain, M. (2009). Value-relevance of pension transition adjustments and other comprehensive income components in the adoption year of SFAS No. 158. *Review of quantitative finance and accounting*, 33(3), 279-301.
- Mitra, S., Deis, D. R., & Hossain, M. (2009). The association between audit fees and reported earnings quality in pre-and post-Sarbanes-Oxley regimes. *Review of Accounting and Finance*, 6(21), 7-31
- Mitra, S., Song, H., & Yang, J. S. (2015). The effect of Auditing Standard No. 5 on audit report lags. *Accounting Horizons*, 29(3), 507-527.
- Mock, T. J., Bédard, J., Coram, P. J., Davis, S. M., Espahbodi, R., & Warne, R. C. (2013). The audit reporting model: Current research synthesis and implications. *AUDITING: A Journal of Practice*, 32(Supplement 1), 323-351.
- Modugu, P. K., Eragbhe, E., & Ikhatua, O. J. (2012). Determinants of audit delay in Nigerian companies: Empirical evidence. *Research Journal of Finance and Accounting*, 3(6), 46-54.

- Moore, G., & Ronen, J. (1990). Asymmetric information and external auditing. *Auditing: A Journal of Practice and Theory*, 234-242.
- Muhoro, J., McGee, R. W., Tyler, M., & Tarangelo, T. (2009). Corporate Governance and the Timeliness of Financial Reporting: A Comparative Study of Kenya and Russia. In *Corporate Governance in Developing Economies* (pp. 119-125). Springer, Boston, MA.
- Mukhlisin, M. (2018). Auditor tenure and auditor industry specialization as a signal to detect fraudulent financial reporting. *Academy of Accounting and Financial Studies Journal*, 22(5), 1-10.
- Mukhtaruddin, M., Ubaidillah, U., Dewi, K., Hakiki, A., & Nopriyanto, N. (2019). Good corporate governance, corporate social responsibility, firm value, and financial performance as moderating variable. *Indonesian Journal of Sustainability Accounting and Management*, 3(1), 55-64.
- Munsif, V., Raghunandan, K., & Rama, D. V. (2012). Internal control reporting and audit report lags: Further evidence. *Auditing: A Journal of Practice & Theory*, 31(3), 203-218.
- Normili, N. (2019). Effect of Profitability, Capital Structure, and Auditor Turnover on Timeliness of Financial Report Submission on Mining Companies Listed on Indonesia Stock Exchange (Bei) year 2014-2017 (*Doctoral dissertation, STIE Indonesia Banjarmasin*).
- Nugraha, B., & Syafdinal, S. (2021). The Effect of Competence, Independence, Accountability, and Audit Evidence on Audit Quality. *International Journal of Multicultural and Multireligious Understanding*, 8(7), 653-669.

- Ocak, M., & Ozden, E. A. (2018). Signing auditor-specific characteristics and audit report lag: A research from Turkey. *Journal of Applied Business Research (JABR)*, 34(2), 277-294.
- Ogundipe, A. A., Ogunniyi, A., Olagunju, K., & Asaleye, A. J. (2019). Poverty and income inequality in rural Agrarian household of southwestern Nigeria: the gender perspective. *The Open Agriculture Journal*, 13(1).
- Okpala, K. E. (2012). Adoption of IFRS and financial statements effects: The perceived implications on FDI and Nigeria economy. *Australian Journal of Business and Management Research*, 2(5), 76.
- Oktyawati, D., & Fajri, F. A. (2019). The influence of accounting internal control and human resources capacity on reliability and timeliness of regional government financial reporting (a study in Special Region of Yogyakarta Province). *Jurnal Perspektif Pembiayaan Dan Pembangunan Daerah*, 6(4), 525-534.
- OMER, W. K. H., ALJAAIDI, K. S., & AL-MOATAZ, E. S. (2020). Risk Management Functions and Audit Report Lag among Listed Saudi Manufacturing Companies. *The Journal of Asian Finance, Economics and Business (JAFEB)*, 7(8), 61-67.
- Osadchy, E. A., Akhmetshin, E. M., Amirova, E. F., Bochkareva, T. N., Gazizyanova, Y., & Yumashev, A. V. (2018). Financial statements of a company as an information base for decision-making in a transforming economy. *Accounting Journal*, 9(3), 80-101.

- Owusu-Ansah, S. (2000). Timeliness of corporate financial reporting in emerging capital markets: Empirical evidence from the Zimbabwe Stock Exchange. *Accounting and business research*, 30(3), 241-254.
- Owusu-Ansah, S., & Leventis, S. (2006). Timeliness of corporate annual financial reporting in Greece. *European Accounting Review*, 15(2), 273-287.
- Palmrose, Z. V. (1986). Audit fees and auditor size: Further evidence. *Journal of accounting research*, 97-110.
- Pastena, V., & Ronen, J. (1979). Some hypotheses on the pattern of management's informal disclosures. *Journal of Accounting Research*, 550-564.
- Patell, J. M., & Wolfson, M. A. (1982). Good news, bad news, and the intraday timing of corporate disclosures. *Accounting Review*, 2(1), 509-527.
- Penman, S. H., & Zhang, X. J. (2002). Accounting conservatism, the quality of earnings, and stock returns. *The accounting Review*, 77(2), 237-264.
- Perotti, P., & Wagenhofer, A. (2014). Earnings quality measures and excess returns. *Journal of business finance & accounting*, 41(5-6), 545-571.
- Pizzini, M., Lin, S., & Ziegenfuss, D. E. (2015). The impact of internal audit function quality and contribution on audit delay. *Auditing: A Journal of Practice & Theory*, 34(1), 25-58.
- Polit, D. F., & Beck, C. T. (2004). *Nursing research: Principles and methods*. Lippincott Williams & Wilkins.
- Popoola, O. M. J., Che-Ahmad, A., Samsudin, R. S., Salleh, K., & Babatunde, A. (2016). Accountants' capability requirements for fraud prevention

and detection in Nigeria. *International Journal of Economics and Financial Issues*, 6, S4.

Prabasari, I. G. A. A. R., & Merkusiwati, N. K. L. A. (2017). Impact of profitability, company size, and audit committee on audit delays moderated by KAP's reputation. *E-Journal of Accounting*, 20(2), 1704-1733.

Pramaharjan, B., & Cahyonowati, N. (2015). Factors Affecting Audit Report Lag in Manufacturing Companies (*Doctoral dissertation, Faculty of Economics and Business*).

Pratama, L. S., & Haryanto, H. (2014). Influence of Internal and External Factors of the Company on The Timeliness of Financial Statements (*Doctoral dissertation, Faculty of Economics and Business*).

Pucheta-Martínez, M. C., & García-Meca, E. (2014). Institutional investors on boards and audit committees and their effects on financial reporting quality. *Corporate Governance: An International Review*, 22(4), 347-363.

Puspitasari, K. D., & Latrini, M. Y. (2014). The effect of the size of the company, subsidiaries, leverage and the size of the hood on audit delays. *E-Journal of Accounting Udayana University*, 8(2), 283-299.

Puspitasari, N. I. (2014). Influence of Gender, Pressure of Obedience, Complexity of Tasks, Knowledge, And Ethical Perception of Audit Judgment. *Journal of business finance & accounting*, 40(5), 545-571.

- Rahmawati, E. (2018). Information content and determinants of timeliness financial reporting: evidence from an emerging market. *Academy of accounting and financial studies journal*, 22(4), 1-15.
- Richardson, S. A., Tuna, A., & Wu, M. (2002). Predicting earnings management: The case of earnings restatements. *Available at SSRN 338681*.
- Ronen, J., & Livnat, J. (1981). Incentives for segment reporting. *Journal of Accounting Research*, 459-481.
- Roodman, D. (2009). A note on the theme of too many instruments. *Oxford Bulletin of Economics and statistics*, 71(1), 135-158.
- Roodman, D. (2009). How to do xtabond2: An introduction to difference and system GMM in Stata. *The stata journal*, 9(1), 86-136.
- Rusmin, R., & Evans, J. (2017). Audit quality and audit report lag: case of Indonesian listed companies. *Asian Review of Accounting*, 6(21), 7-31.
- Saad, B., & Abdillah, A. F. (2019). Analisis Pengaruh Ukuran Perusahaan, Leverage, Audit Tenure, dan Financial Distress Terhadap Integritas Laporan Keuangan. *Oikonomia: Jurnal Manajemen*, 15(1).
- Sakka, I. F., & Jarboui, A. (2015). External auditor's characteristics, corporate governance and audit reporting quality. *International Journal of Accounting and Economics Studies*, 3(2), 109-116.
- Sakka, I. F., & Jarboui, A. (2016). Audit reports timeliness: Empirical evidence from Tunisia. *Cogent Business & Management*, 3(1), 1195680.

- Salehi, M., & Azary, Z. (2008). Fraud detection and audit expectation gap: Empirical evidence from Iranian bankers. *International Journal of Business and Management*, 3(10), 65-77.
- Salleh, Z., Hashim, H. A., & Mohamad, N. R. (2012). Accrual quality: The presence of women directors on audit committee boards. *Corporate Ownership & Control*, 10(1), 675-680.
- Sanders, C. B., Steward, M. D., & Bridges, S. (2009). Facilitating knowledge transfer during SOX-mandated audit partner rotation. *Business Horizons*, 52(6), 573-582.
- Sari, W. O. I., Subroto, B., & Ghofar, A. (2019). Corporate governance mechanisms and audit report lag moderated by audit complexity. *International Journal of Research in Business and Social Science (2147-4478)*, 8(6), 256-261.
- Sastrawan, I. P., & Latrini, M. Y. (2016). The effect of profitability, solvency, and company size on audit report lag on manufacturing companies. *E-journal Accounting*, 17(1), 311-337.
- Saunders, M., Lewis, P., & Thornhill, A. (2012). Research methods for business students (6. utg.). *Harlow: Pearson*.
- Savitri, E., & Andreas, R. A. S. S. (2019). Influencing Factors: The Timeliness of Financial Reporting Submissions. *Business and Management Studies*, 5(1), 43-51.
- Schipper, K., & Vincent, L. (2003). Earnings quality. *Accounting horizons*, 17, 97-110.

- Segbefia, P. A. (2016). *Audit report lag, international financial reporting standards (IFRS) and corporate governance in Ghana* (Mphil dissertation, University of Ghana).
- Shah, E. S.M., Andreas, A., & Wiguna, M. (2017). *Effect of Solvency, Public Ownership, Auditor Switching and Holding Company on Audit Delay* (Doctoral dissertation, Riau University).
- Shofiyah, L., & Suryani, A. W. (2020). Audit Report Lag and Its Determinants. *KnE Social Sciences*, 202-221.
- Shwiff, K. (2008). MGM Mirage to beat earnings projections. *Wall Street Journal*, 6(21), 7-31.
- Simamora, R. A., & Hendarjatno, H. (2019). The effects of audit client tenure, audit lag, opinion shopping, liquidity ratio, and leverage to the going concern audit opinion. *Asian Journal of Accounting Research*, 8(3), 43-51.
- Sitorus, N. J., & Ardiati, A. Y. (2017). Effect of New Indonesian Financial Accounting Standards, Size of Public Accounting Firm, Company Size and Company Age on Audit Report Lag. *In Proceedings International Seminar on Accounting Society*, 3(1), 585-597.
- Skinner, D. J., & Srinivasan, S. (2012). Audit quality and auditor reputation: Evidence from Japan. *The Accounting Review*, 87(5), 1737-1765.
- Smirat, B. Y. A., & Yousef, B. (2016). Cash management practices and financial performance of small and medium enterprises (SMEs) in Jordan. *Research Journal of Finance and Accounting*, 7(2), 98-107.

- Soltani, B. (2002). Timeliness of corporate and audit reports: Some empirical evidence in the French context. *The International Journal of Accounting*, 37(2), 215-246.
- Srinidhi, B. I. N., Gul, F. A., & Tsui, J. (2011). Female directors and earnings quality. *Contemporary accounting research*, 28(5), 1610-1644.
- Storey, D. J., Keasey, K., Watson, R., & Wynarczyk, P. (2016). *The performance of small firms: profits, jobs and failures*. Routledge.
- Subramanyam, K. R. (1996). Uncertain precision and price reactions to information. *The Accounting Review*, 5(2) 207-219.
- Suer, A. Z., & Turel, A. (2015). Understanding Going Concern in Auditing: Seker Poultry, Inc. *Acta Universitatis Danubius. Œconomica*, 12(1).
- Sugita, K., & Dwirandra, A. A. N.B. (2017). The size of the cap moderates the influence of financial distress and the size of the client's company on audit report lag. *E-Journal of Accounting*, 21(1), 477-504.
- Sultana, N., Singh, H., & Van der Zahn, J. L. M. (2015). Audit committee characteristics and audit report lag. *International Journal of Auditing*, 19(2), 72-87.
- Suryanto, T., Thalassinou, J. E., & Thalassinou, E. I. (2017). Board characteristics, audit committee and audit quality: the case of Indonesia, *European Research Studies*, 21(3), 316-326.
- Syamsiah, T. N. (2018). *Analysis of Factors Influencing Audit Delay in Manufacturing Companies Registered in Jakarta Islamic Index (JII) Year 2013-2016* (Doctoral dissertation, Muhammadiyah University of Surakarta).

- Syofiana, E., & Haryono, A. (2018). The effect of Financial Distress, Auditor Switching and Audit Fee on Audit Delay on Manufacturing Companies Listed in Indonesia Sharia Stock Index. *JIATAX (Journal of Islamic Accounting and Tax)*, 1(1), 64-79.
- Tan, H. T., Libby, R., & Hunton, J. E. (2002). Retracted: analysts' reactions to earnings preannouncement strategies. *Journal of Accounting Research*, 40(1), 223-246.
- Tanyi, P., Raghunandan, K., & Barua, A. (2010). Audit report lags after voluntary and involuntary auditor changes. *Accounting Horizons*, 24(4), 671-688.
- Tchamou, B. (2020). The Handicapping «Forgetting» of Waste Workers in the Approach of Education to the Sustainable Development of Society. *Проблеми на постмодерността*, 10(2), 235-257.
- Teets, W. R. (2002). Quality of earnings: An introduction to the issues in accounting education special issue. *Issues in Accounting Education*, 17(4), 355-361.
- Thu, P. A., Khanh, T. H. T., Ha, N. T. T., & Khuong, N. V. (2018). Perceived audit quality, earnings management and cost of debt capital: Evidence from the energy listed firms on vietnam's stock market. *International Journal of Energy Economics and Policy*, 8(6), 120-127.
- Tommasetti, R., Santos, N. M. B. F., Macedo, M. A. D. S., & Neto, A. S. (2018). Relationship between modified audit opinion, earnings management and auditor size: evidence from Brazil. *Pensar Contábil*, 20(72).

- Tucker, J. W., & Zarowin, P. A. (2006). Does income smoothing improve earnings informativeness? *The accounting review*, 81(1), 251-270.
- Türel, A. (2010). Timeliness of financial reporting in emerging capital markets: Evidence from Turkey. *İstanbul Üniversitesi İşletme Fakültesi Dergisi*, 39(2), 227-240.
- Türel, A., & Tuncay, F. E. (2016). An empirical analysis of audit delay in Turkey. *Annales Universitatis Apulensis: Series Oeconomica*, 18(2), 97.
- Utami, W. (2006). Analisis Determinan Audit Delay Kajian Empiris di Bursa Efek Jakarta. *Bulletin penelitian*, 9(1), 19-31.
- Uwuigbe, U., Felix, E. D., Uwuigbe, O. R., Teddy, O., & Falola, I. (2018). Corporate governance and quality of financial statements: a study of listed Nigerian banks. *Banks & bank systems*, (13, Iss. 3), 12-23.
- Verrecchia, R. E. (1983). Discretionary disclosure. *Journal of accounting and economics*, 5, 179-194.
- Walker, W. (2007). Ethical considerations in phenomenological research. *Nurse researcher*, 14(3).
- Watts, R. L., & Zimmerman, J. L. (1983). Agency problems, auditing, and the theory of the firm: Some evidence. *The journal of law and Economics*, 26(3), 613-633.
- Whittred, G., & Zimmer, I. (1984). Timeliness of financial reporting and financial distress. *The Accounting Review*, 5(2), 287-295.
- Whitworth, J. D., & Lambert, T. A. (2014). Office-level characteristics of the Big 4 and audit report timeliness. *Auditing: A Journal of Practice & Theory*, 33(3), 129-152.

- Wild, J. J., & Bernstein, L. I Subramanyam, (2001): Financial Statement Analysis. Retrieved from <http://journal.unigha.ac.id/index.php/SemNas/article/view/412>
- Williams, P. A. (1996). The relation between prior earnings forecast by management and analyst response to a current management forecast. *The Accounting Review*, 6(2) 103-115.
- Yendrawati, R., Putra, A. P., & Asmara, R. (2021). The Determinants of Audit Quality: A Study Using the Approach of Earnings Surprise Benchmark. *Journal of Economics and Management Sciences*, 4(3), 16-18.
- Zainodin, H. J., & Yap, S. J. (2013, September). Overcoming multicollinearity in multiple regression using correlation coefficient. In *AIP Conference Proceedings* (Vol. 1557, No. 1, pp. 416-419). American Institute of Physics.
- Zaman, M., Hudaib, M., & Haniffa, R. (2011). Corporate governance quality, audit fees and non-audit services fees. *Journal of Business Finance & Accounting*, 38(1-2), 165-197.
- Zandi, G., & Abdullah, N. A. (2019). Financial statements timeliness: The case of Malaysian listed industrial product companies. *Asian Academy of Management Journal*, 24(2), 127-141.
- Zang, A. Y. (2012). Evidence on the trade-off between real activities manipulation and accrual-based earnings management. *The accounting review*, 87(2), 675-703.
- Zerni, M. (2012). Audit partner specialization and audit fees: Some evidence from Sweden. *Contemporary Accounting Research*, 29(1), 312-340.

APPENDICES

List of firms used for the analysis in the study

| S/N | FIRM | ABBREVIATIONS |
|------------|--|----------------------|
| 1 | AngloGold Ashanti | AGA |
| 2 | Access Bank Ghana | ACCESS |
| 3 | Agricultural Development Bank | ADB |
| 4 | Aluworks Limited | ALW |
| 5 | Benso Oil Palm Plantation | BOPP |
| 6 | CalBank PLC | CAL |
| 7 | Clydestone Ghana Limited | CLYD |
| 8 | Camelot Ghana Limited | CMLT |
| 9 | Cocoa Processing Company | CPC |
| 10 | Digicut Advertising and Production Limited | DIGICUT |
| 11 | Ecobank Ghana Limited | EGH |
| 12 | Enterprise Group PLC | EGL |
| 13 | Ecobank Transnational Incorporation | ETI |
| 14 | Fan Milk Limited | FML |
| 15 | Ghana Commercial Bank Limited | GCB |
| 16 | Guinness Ghana Breweries PLC | GCBL |
| 17 | Ghana Oil Company Limited | GOIL |
| 18 | Golden Star Resources Limited | GSR |
| 19 | HORDS Limited | HORDS |
| 20 | Mega African Capital Limited | MAC |
| 21 | Meridian-Marshalls Holdings | MMH |
| 22 | MTN Ghana | MTNGH |
| 23 | Produce Buying Company Limited | PBC |
| 24 | Republic Bank Ghana PLC | RBGH |
| 25 | Samba Food Limited | SAMBA |
| 26 | Standard Chartered Bank Ghana Limited | SCB |
| 27 | SIC Insurance Company Limited | SIC |
| 28 | Societe General Ghana Limited | SOGEGH |
| 29 | Sam Wood Limited | SWL |

| | | |
|----|---------------------------|-------|
| 30 | Trust Bank Limited | TBL |
| 31 | Tullow Oil PLC | TLW |
| 32 | Total Petroleum Ghana PLC | TOTAL |
| 33 | Unilever Ghana PLC | UNIL |