

Original Research Article

Investigating the Auditor's Adopted Safeguards in Ensuring Audit Quality amid the COVID-19 Pandemic: Evidence from an Emerging Market

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Abstract: The deadly and infectious COVID-19 respiratory disease has brought in its wake untold uncertainties on the business environment globally. The impact of this fatal pandemic has shocked the transactions of businesses and service providers, including auditing firms to the core. This paper, therefore, explored the safeguards adopted by the auditor to mitigate the impact of the pandemic on audit quality. An online survey was used to administer questionnaires to solicit 289 valid responses from partners and staff of auditing firms in Ghana using a purposive sampling technique. Partial Least Square – Structural Equation Model (PLS-SEM) approach was adopted in assessing the measurement and structural models. The outcome of the study proves that the auditor's instituted safeguards significantly moderate the impact of the COVID-19 pandemic on audit quality. This study provides ample contributions to regulators in the auditing profession to appreciate the impact of the ills of the pandemic on audit quality that forms the basis of informed economic decisions by users of financial reports. The researchers suggest that auditors should apply the appropriate safeguards to anticipated challenges emanating from the pandemic on their practices to express a better opinion on assurance and non-assurance services rendered for clients.

Keywords: Moderated effects; safeguards; audit quality; COVID-19 pandemic; emerging market.

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1.0 INTRODUCTION

Wuhan is a significant transportation and trade hub, hosting a considerable number of industries in China including the Chinese major local steel industry and automobile manufacturers (Wang, Niu, & Qian 2018; Xie, Song, Zhang, Hao, Liu, & Chen, 2018; Yu Zhang, & Zhou, 2017). Ayittey, Ayittey, Chiwero, Kamasah, and Dzuvoor (2020), postulate that the city of Wuhan plays host to over “300 industries of the world’s best 500 companies including Microsoft, German software company SAP and French car maker Groupe PSA.2.” The city, during the past few years has recorded significant economic growth. For instance, its monetary growth rate in 2019 of 7.8% exceeded the average rate of 6.1% of China. The city is therefore considered as a major financial hub of central China (Tsai & Chiang, 2019). Due to this fact, the city attracted a lot of people including traders and students the world over. It is therefore not surprising that, the outbreak of the COVID-19 respiratory disease which

emanated from the city, could reach the rest of the world within a considerable short period of time (Ayittey *et al.*, 2020; Balasubramanian, 2020).

According to the World Health Organisation, the deadly and infectious COVID-19 respiratory disease has killed over 350,000 people and plagued more than 5.5M globally as at May 26, 2020 (Worldometer, 2020). The crisis has brought in its wake untold uncertainties on global trade and supply chains by adversely affecting asset prices, and compelling multinational firms to take difficult measures with restricted information. In Ghana, the focus of this study, according to the Ghana Health Service, as at 26 May, 2020 more than 7000, residents have contracted the disease out of which 30 plus people have lost their lives (Worldometer, 2020). The pandemic has had a devastating impact on the transaction of businesses and provision of services including audit (Bryce, Ring, Ashby, & Wardman, 2020; Kunreuther & Useem, 2018).

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Previous studies on audit quality argue that audit plays significant roles in the affairs of users of accounting information: in buying or selling shares; in mergers and acquisitions; in the assessment and imposition of taxes; in accessing credit from financial institutions, among others (Groomer & Murthy, 2018; Ibanichuka & Briggs, 2018; Mohammed, Ismail, Izah, & Amran, 2019). Auditors over the years have expressed their opinion on financial statements prepared by the management of entities (Al-Khaddash, Al Nawas, & Ramadan., 2013). This venture plays significant role in the development of firms and markets by assisting the various users of accounting information in making sound economic decisions (Birt, Chalmers, Maloney, Brooks, Oliver, & Bond, 2020). Baldacchino, Tabone, and Demanuele (2017) conclude that financial report users should have reasonable assurance that these reports are properly measured, fairly presented and comprehensively disclosed. The auditor has a responsibility of raising his expertise to boost the confidence of users that the financial reports are unbiased, relevant and accurate.

Audit quality is not solely affected by internal controls of the client, but also the size of the auditing firm, and the qualification and proficiency of the auditor, among others (Al-Khaddash *et al.*, 2013). Other factors that can significantly impact on audit quality in this era are the instituted government measures such mandatory lockdown of cities and towns, and social distancing to curb the spread of the pandemic. Common short comings in these studies are: One, they were undertaken in a different geographical setting (i.e., a non-Ghanaian context) and two, they failed to address the safeguards the auditor could adopt to enhance audit quality in moments such as the COVID-19 pandemic. For instance, Albitar, Gerged, Kikhia, and Hussainey (2020) in their study on the phenomenon did not address the safeguards that the auditor could adopt to achieve audit quality. The scholars, rather, highlighted on the impact of COVID-19 social distancing on the auditor. Our study, therefore, aims to address this research gap in auditing literature and extends the existing body of prior studies by exploring the possible effects of the COVID-19 outbreak on audit quality. We aim to achieve this by soliciting data from auditing practitioners, who are members of the Institute of Chartered Accountants, Ghana, on how the auditor could adopt safeguards to enhance audit quality amid the pandemic in Ghana, an emerging market. Specifically, this paper explores the moderating effect of safeguards on audit quality amid the COVID-19 pandemic in Ghana. This study therefore makes the following contributions:

- i Little is known about what changes we might see in audit quality and the moderating role of safeguards from emerging economies. Therefore, predicting the effect of the COVID-19 pandemic on audit quality and the moderating role of safeguards is quite

challenging. This research is applicable and timely as it informs audit professionals and policymakers to limit the impact of the pandemic on audit quality. This paper is a significant attempt in responding to the call made by Albitar *et al.*, (2020), a pioneer study on the phenomenon, calling for empirical research on the effect of the pandemic on audit quality.

- ii Methodologically, this study exhibits that Internet-based data collection approach are more convenient and very crucial in gathering exploratory data during pandemic outbreaks when traditional methods impossible as a result of restrictions from COVID-19 social distancing protocols, high cost of collecting data as well as time pressure. The results of this study aim to provide early signs on the moderating role of safeguards on audit quality during restriction from social distancing.
- iii Emerging economies were projected to be the worst to suffer from the COVID-19 pandemic. However, those in Africa experienced otherwise. The study emphasises on the need for auditor adherence to audit safeguards even in the midst of social distancing due to COVID-19 pandemic outbreak within the context of Ghana, an emerging economy.

The rest of the paper is organized as follows: section 2.0 presents the literature review covering the theoretical framework, and empirical review, i.e., auditors' reputation, auditor qualifications and proficiency, auditor fees, industry specialisation and independence of the auditor. Section 3 presents an overview of the COVID-19 pandemic on businesses and the responses adopted by auditing firms in response to the pandemic, Section 4 explains the directives issued by regulatory bodies. Section 5 elaborates on the Conceptual Framework and presents the Hypotheses of the study, Section 6 presents the Materials used for the study and Methods of gathering the materials and data, Section 7 is on the findings of the study, Section 8 concludes on the findings, and section 9 elaborates on the limitations of the study and suggestions for future studies.

2.0 LITERATURE REVIEW

2.1 Theoretical Framework

The available literature on audit quality and its measurement are countless (Aggreh, 2019; Breger & Edmonds, 2016; Pflugrath, Martinov-Bennie, & Chen, 2007). Nevertheless, to date, no solely acceptable definition or measure of audit quality has come up. A lot of the literature on audit quality comes from the definition of DeAngelo in 1981. To DeAngelo (1981a), audit quality is seen as "the joint probability that an auditor will both discover and report a breach in the client's accounting system. The discovery of a misstatement measures quality in terms of auditor's

knowledge and ability while reporting the misstatement depends on the auditor's incentives to disclose". This clarity is meaningful for the audit of the external financial statement. Nonetheless, it is equally appropriate for internal auditors, and their operational and compliance audits. It should be emphasise that, currently, there is the lack of a uniform meaning of audit quality that embraces the diverse kinds of audit and the audit practitioner. Nevertheless, the expression takes into account the conformity with applicable procedures and standards (DeFond & Zhang, 2014).

2.2 Empirical Review

2.2.1 Auditor's reputation

This paper, due to the impact of the failure of Enron and Andersen on the reputation of the auditing profession, investigates the effect of the reputation of the auditor on audit quality. The reputation of the auditor relates directly to the perceived and actual level of quality of the auditors' report. A lessened stock market responds to earnings announcements when the auditor issues a qualified opinion (Shahzad, Pouw, Rubbaniy, & El-Temtamy, 2018). The auditor of Enron plc, Arthur Andersen failed to ask probing questions when Enron "cooked its book values and earnings". Consequently, the audit procedures and independence of Andersen were subjected to severe scrutiny. Thus, when the auditor's reputation is questioned, the credibility of the financial statement becomes doubtful.

The auditor's reputation for consistency in high-quality work helps to ensure that decisionmakers will confidently accept findings and implement recommendations given. Through the consistent production of high-quality work, reputation is built. A hard-won reputation is on the line for a single failure. To keep and continue to build perfection calls for overwhelming commitment on all and sundry within the firm. Oppositions to outcomes and recommendations are part of the audit work and so they are to be expected. Challenges to the work of the auditor increases, when the auditing firm increasingly deals with tougher and more sensitive matters.

Previous studies reveal that the reputation of the auditor to audit quality is priceless. Stakeholders including regulators, investors, and analysts rely on the audited financial reports in making sound economic decisions. Users, apart from management, due to information asymmetry, employ as proxy, the audit report in assessing the quality and accuracy of the financial reports of the investee's (DeAngelo 1981a).

2.2.2 The qualifications and competence of the auditor

Audit has an ultimate goal of ensuring that the financial reports are free from material misstatements and errors. Accordingly, DeAngelo (1981b) posits that the premium of an audit lies on the stakeholders' ex-ante perception of:

1. The likelihood of the auditor detecting weaknesses in the auditee's reporting system; and
2. The possibility of the auditor reporting the unearthed irregularities.

In designing procedures concerning the handling of tasks, the following are essential:

- i. The acquisition of skills and knowledge;
- ii. Ensuring equitable opportunities and equal treatment for all employees;
- iii. Developing leadership, management skills and proficiencies; and
- iv. Developing a master workforce plan.

These variables are key to the realisation a high level of audit quality.

Prior researches report of a correlation between audit quality and the qualification and proficiency of the auditor (Cheng, Liu, Chien, 2009; Mansouri, Pirayesh, & Salehi, 2009). Besides, the proficiency of the auditor seems to have an impact on his remuneration: his educational level, certification type, and his work experience positively relate to hourly fee rates (Abbot, 2016; Dawit, 2019). Despite the fact that the expertise of the auditor is required in auditing the diverse areas of the client's business, advanced skills in accounting and finance are not a must in operational audits (Torres, Yetano, & Pina, 2019).

In instances where audit firms have separated their financial audit from performance audit, it becomes imperative that the team selected for each task have the requisite background and skills that commensurate the assigned tasks (Soltani, 2007). Auditing Standards require that, for auditing firms to meet the quality requirements expected of the profession, they are to institute measures that will ensure continuous professional competence vide continuing education and training (Glover & Prawitt, 2014; Curtis, Jenkins, Bedard, Deis, 2009). Hands-on exposure on auditing is key gaining proficiency in the auditing profession. The appropriate skills required to augment managerial training to supervise or manage an audit team include operational and strategic planning, budgeting for time, money, and other resources among others. Nevertheless, for auditors to maintain the requisite professional proficiency, they need to pursue continuous education and training to be abreast with happenings in the profession, thereby providing quality audits.

2.2.3 Auditor's fees

The fee charged by the auditor consists of all monies paid by the client to the external auditor for both audit and non-audit services such as management advisory and consultancy services. The components of the audit fees comprise chiefly the remuneration of both field and office staff, traveling expenses, stationeries

and logistics, and other related overheads. The fees charged amount to the estimated labour hours of staff, actual travel costs for the audit work plus a reasonable profit margin. According to Lin, Lin, and Chen (2018), when the audit fee charged on a particular client is significantly proportional to the total income of the audit firm for a particular period, the independence of the auditor comes under severe threat. And this can profoundly impact negatively on audit quality. Oladejo, Yinus, and Sanni (2020), confirm this position by arguing that high audit fees are “noisy proxy for quality”. Ibrahim and Ali (2018), however, argue that a higher level of audit fees commensurate with higher audit quality. Auditees are ready to pay higher audit fees in exchange of quality audits (Cahan, & Sun, 2015).

Auditors who possess a reputational capital provides such certification role for clients for audit fee premium. Higher audit charges commensurate with more frequent audit committee meetings (Sharma & Iselin, 2012). However, audit fee is not correlated with audit committee independence, and accounting and finance competence. Prior studies (*see* for example Al-Khaddash *et al.* 2013; Pratoomsuwan, 2017) conclude of audit fee premium charged by bigger audit firms relative to non-Big firms in exchange for providing audit services of a higher quality.

2.2.4 Industry Specialisation

The impact of an auditor's specialisation in ensuring audit quality is well published (*see* for example Habbash & Alghamdi 2017; Neal & Riley, 2004; Sarwoko, and Agoes, 2014). Auditors with a specialty show substantial knowledge of non-error frequency as compared to non-experts (Solomon, Shields, & Whittington, 1999). Auditor's specialisation minimises financial irregularities (Habbash & Alghamdi 2017; Sarwoko, and Agoes, 2014). This observation is critical in the sense that users of accounting information value accurate knowledge as important for detecting material misstatements in financial reports. Sarwoko, and Agoes (2014), reports that discretionary accruals as a proxy is usually implored for earnings management are lesser for auditees of auditors with expertise in a particular industry as compared to auditees of non-specialist auditors.

The above arguments notwithstanding, some scholars such as Mnif and Tahari (2020), argue that auditors with a specialty in an industry try to shield their reputation by complying with the applicable auditing standards. Auditing industry specialisation evolves in the audit market, and it is critical for big auditing firms. Auditing industry specialisation is considered as a significant issue confronting the accounting profession. Based on this, the connection between industry specialisation by the auditor and audit quality has witnessed considerable interest from

academics. Salehi, Mahmoudi, & Gah, (2019), for instance report that, the specialty of the auditor in the auditee's industry enhances audit risk assessments, and improves on the modification of the contents of audit knowledge. This ultimately assists auditors to expect possible material misstatements.

The expertise of the auditor in the client's industry is crucial, considering the variations in the magnitude, incidence, income effect, cause, and the approach to identifying mistakes and irregularities across a wider base of industries. In line with this, auditing firms consider it more appropriate to practice their work along industrial lines instead of traditional service lines. Besides, the outcome of prior studies (*see* for example Maletta and Wright, 1996; Yasser & Soliman, 2018) report that auditor specialisation in a particular industry has a straightforward impact on the capability of the auditor in assessing risks, identifying errors and misstatements, and improving the quality of earnings. Kharuddin, Basioudis, and Hay (2019) argue that, shifts by audit firms towards industry specialisation as an indication of specialty in a particular, plays a critical role in audit quality. Studies report that, auditors concentrate their practice on specific industries to offer credible information to users of financial reports (Al-Khaddash *et al.*, 2013; Pucheta-Martínez, Bel-Oms, & Rodrigues, 2019). Cahan and Sun (2015), also hold that industry specialisation provides a significant level of assurance relative to a non-specialisation. Auditors' industry experience thus, provide opportunities in identifying errors and misstatements in their practice than non-specialisation.

2.2.5 Independence of the Auditor

The key to the integrity of the auditing process is the auditor's independence. During negotiations on issues on financial reporting, the ability of the auditor to maintain his integrity through independence is key. The aftermath of the financial malfeasance of notable firms such as Enron and World Com have adversely eroded the trust of the public in the auditor's independence. And this has cast significant doubt on audit quality. Auditor independence, undeniably, has a profound impact on audit quality (Herath & Pradier, 2019). Thus, the absence of audit independence implies no quality in the audited financial statements.

The presence of an independent audit committee in the client's firm facilitates the auditor's independence. Hence the auditor is not under the influence of the client. The presence of the audit committee could encourage the organization of meetings, both private and informal without the involvement of the client's management. This will motivate the auditor to be transparent regarding significant matters during the early stages of the audit process. De Angelo (1981b), has provided a popular definition in academics about independence. He argued that independence is the conditional possibility of

reporting a discovered breach. Other scholars perceive independence as a state of mind or an attitude (Muslim, Ahmad, Rahim, & ARPelu, 2020; Schuetze, 1994); an outcome of personality, with integrity and honesty being essential (Magill & Previts, 1991; Tasi & Syamsir, 2020). In the UK's guide to professional ethics, otherwise refer to integrity, objectivity, and independence, no definitions were offered for integrity and independence. However, objectivity has been defined as the state of mind that has regard for all considerations significant to the issue at stake. This position is sometimes referred to as independence.

The success or otherwise of an audit is largely dependent on the auditor's independence. The absence of this conditionality means that the degree to which users of the financial reports could trust the auditor's opinion is eroded. In the absence of the auditor's competence, independence is not to be expected (Albrecht, Mauldin, & Newton, 2018; DeAngelo, 1981b). The auditor's incompetence, due to lack of expertise and inexperience, would compel the auditor to depend on the responses provided by the management of the auditee in drawing conclusions and forming opinions. Other studies (see for instance Daoust, & Malsch, 2020; Herath & Pradier, 2018) report that auditors with a considerable length of tenure are more probable to be independent and be able to withstand the pressures of the client's management. This phenomenon has the potential of ensuring audit quality.

3.0 OVERVIEW OF THE COVID-19 PANDEMIC AND MEASURES ADOPTED BY AUDITING FIRMS

Prior studies on the analysis of the economic outcomes of the COVID-19 pandemic in scholarly articles and the mass media have dwelled predominantly on global and macroeconomic impacts. This to the researchers, is just an aspect of the bigger picture of socio-economic implications of the pandemic. As of now, a few theoretical studies such as Albitar *et al.*, (2020) exists on how the COVID-19 pandemic has affected audit quality. The authors conclude that "the COVID-19 social distancing can largely affect audit fees, going concern assessment, audit human capital, audit procedures, audit personnel salaries and audit effort, which ultimately can pose a severe impact on audit quality". Thus, just as the disease has impacted businesses globally, it is possible to conclude that, the work of the auditor and for that matter audit quality, has not been spared either from the fangs of the disease.

The aggregate economic impact of the COVID-19 pandemic is a topical issue of discussion in the mass media lately (Ferrara, 2020). In the media landscape, the macroeconomic impacts emanating from a combination of shocks in demand and supply in the market are discussed daily across the globe. The effects can be aggregated by looking at, for example, the

implications of the pandemic on macroeconomic variables including unemployment rate, inflation rate, exchange rate, GDP, and interest rate of a country. For instance, commodity scarcity such as stationeries, computers, and accessories created by a decline in productivity or reduction in imports from nations affected by the pandemic could cause a rise in the general price level (Barua, 2020).

From the literature, it is a fact that businesses and service providers such as auditing firms are not spared from the effects pandemic. For example, the impacts of the pandemic may lead to increases in the cost build-up of auditing firms and affect their income levels (Waweru, 2017). Clients who may suffer these shocks could also not be able to afford charged audit fees. This may affect the income levels of the auditing firm. Auditing may downsize its workforce to be able to cope with the economic effects of the pandemic (Greene, 2020). Such approach could cause audit quality as some of the labour force affected may possess the professional proficiency and technical capabilities required for audit works (Maley, 2019).

Auditing firms, globally have adopted several measures ranging from reduction in hours of work to downsizing of their staff strength in response to the COVID-19 pandemic on their activities. For instance, PwC, Australia, has taken the following measures to cushion the impact of the virus on their operations: Reduction in annual income of partners between 30% to 40%, deferring admission of partners until 2021, freezing pay and bonus rises, etc. (PwC Australia, 2020). Deloitte of US, on the other hand has announce redundancy measures: 5% of staff to be laid off effective first week of June, 2020 (advisory and consulting will be adversely affected), and 1.5% of the remaining staff will be on a reduced work schedule with reduced pay (Deloitte US, 2020). EY Australia, however, announce a 20% reduction in remuneration of staff and reduction in hours of work for underutilised staff and partners, cuts in discretionary expenditure, and freezing recruitments (EY Australia, 2020). Again, KPMG Australia, has initiated a redundancy exercise in which 200 staff are to be laid off, 20% pay cut for staff earning in excess of \$62,000, 17% cut in remuneration of equity partners KPMG Australia, 2020). (<https://home.kpmg/uk/en/home/media/press-releases/2020/06/kpmgappoints-new-headof-turnaround.html>.)

4.0 DIRECTIVES ISSUED BY REGULATORY BODIES

The disruption in productivity, collapse of businesses, job losses and financial distresses are becoming economic phenomena of the outbreak of the COVID-19 pandemic. However, there is an assurance of rebuilding and growth after the current socio-economic menace. And according to the International Ethics Standards Board for Accountants (IESBA)

(2020), “reliable and truthful financial reporting and independent auditing are now highly needed by investors and other stakeholders and have a large role to play in managing outcomes of, and exit from, the sudden calamity”. Therefore, confidence in the financial reports is key, particularly in times such as the COVID-19 pandemic, to mitigate destruction and reallocating resources for recovery. The application of the relevant International Code of Ethics for Professional Accountants, according to the board, is critical to preservation and improving trust. This could go a long way to enhance audit quality.

Accordingly, IESBA has issued the following directives; the compliance with the five fundamental principles of ethics by accountants, i.e., integrity, objectivity, confidentiality, professional competence and due care, and professional behaviour, irrespective of their roles, professional duties, and the circumstances in which they perform their professional responsibilities, as have been enshrined in the Code. Additionally, the board insists on establishing safeguards for identified and anticipated threats such as pressures from clients and others to conceal material misstatement and errors, report misleading information to others, in condoning and conniving with others on issues relating to conflict of interest. IESBA also requires the application of safeguards on the exercise of professional judgement and discretion in preparing and presenting information, taking necessary measures when noncompliance with laws and regulations by client is established, charging of fees, the provision of non-assurance services such as providing advice and assistance, overdue association and rotation of partners, and communication with the client.

The International Federation of Accountants (IFAC), in 3rd June, 2020, announced measures that its member bodies are to follow during the pandemic to enhance audit quality. The measures are; audit, ethics and independence, financial reporting, business continuity and crisis management, professional and personal wellness, and general information in the midst of the outbreak. (<https://www.ifac.org/knowledge-gateway/discussion/covid-19-resources-ifacs-network>)

In a survey, dubbed ACCA’s COVID-19 global survey: Inside Business, Impacts and Responses conducted by the Association of Chartered Certified Accountants (ACCA) in 2020, the following findings emerged; 53% of respondents in public practice said they were experiencing pressures completing clients’ services, and one-third (36%) said they have difficulty in meeting reporting deadlines (a fact recognised in jurisdictions where reporting deadlines have been flexed). One fourth of the respondents said they are experiencing challenges in gathering audit evidence, and 27% said they perceived an increased audit risk in relation to valuing assets, completeness of liabilities or going concern issues.

The body in their study attributed that the cause of these challenges that auditors are currently facing in carrying out audit engagements include compliance with governments’ directives of mandatory lockdown and social distancing, and many others in order to control the spread of the COVID-19 pandemic. These has culminated in auditors’ inability to travel to auditees’ premises, inability to access their own offices physically, and performing audits remotely. These difficulties have significantly impacted on the profession technologically. Many auditing firms as a result have invested in technology to enable them perform their work digitally.

ACCA, in their quest to ensure audit quality in spite of enumerated challenges, has issued key considerations for auditors to adhere to by making reference to the applicable International Auditing Standards (ISA). The considerations consist of; the identification and assessment of Risk of material misstatement in reference to ISA 315 (revised), the auditor’s response to assessed risks in accordance with ISA 330, the procedures to obtain sufficient appropriate evidence per ISA 500, auditing of accounting estimates per ISA 540, reporting on subsequent events in accordance with ISA 560. Others include assessing the going concern status of clients’ businesses according to ISA 570 (revised), modifications to the opinion in the independent auditor’s report per ISA 705 (revised), and emphasis of matter paragraphs and other matter paragraphs in the independent auditor’s report in accordance with ISA 706 (revised). (https://www.accaglobal.com/content/dam/ACCA_Global/img/respcam/Coronavirus/The%20impact-of-Covid-19-on-Audit-and-Assurance-challenges-and-considerations.pdf)es

In the United Kingdom, the Financial Reporting Council (FRC) in March 2020 issued guidance for auditors in the midst of the pandemic. The list which includes: the acceptance and take-on of new audit engagements, approach to planned audit approach, materiality assessment, how to communicate with senior management of client’s business, how to gather sufficient-appropriate audit evidence such receipt of audit confirmations, compliance with regulatory frameworks by clients, assessing the going concern status of client’s business, etc. during the COVID-19 pandemic to ensure audit quality. (<https://www.frc.org.uk/about-the-frc/covid-19/covid-19-bulletin-march-2020>)

Following from the literature, our curiosity as academics have been greatly aroused by these phenomena. The researchers therefore seek to be part of the pioneer studies in ascertaining if audit quality is under threat in Ghana due to the COVID-19 pandemic and to verify if the safeguards adopted by auditor in addressing the ills of the pandemic are enough to safeguard audit quality. This issue gap, is thus, the crux

of this paper. This study therefore, sought to achieve the following objectives:

- i To analyse the socio-economic effects of the COVID-19 pandemic on audit quality;
- ii To analyse the technological effects of the COVID-19 pandemic on audit quality;
- iii To examine the moderating effects of safeguards applied by auditors to ensure audit quality amid the COVID-19 pandemic;
- iv To investigate the socio-economic effects of the COVID-19 pandemic on safeguards applied by auditors to enhance audit quality amid the COVID-19 pandemic;
- v To appraise the technological effects of the COVID-19 pandemic on safeguards applied by auditors to enhance audit quality amid the COVID-19 pandemic.

5.0 CONCEPTUAL FRAMEWORK AND HYPOTHESES FORMULATION

Conceptual framework is a graphical presentation of relationships among constructs. Conceptual framework is a pictorial exhibition that offers either a narrative or graphical description concerning the variables of the intended research and the presumed relationship existing between them. Conceptual framework is also considered as a cluster of broad theories and concepts adopted from a study to model a presentation thereafter (Jabareen, 2009). In this paper, review of theories and empirical studies show that there is a connection between the effects of the COVID-19 pandemic, auditor’s adopted safeguards, and audit quality. The construct items that are proxies of audit quality, dependent variable include, (1) auditor qualifications and proficiency, (2) auditor reputation, (3) audit fees, (4) auditor’s independence, (5) industry specialisation, and (6) audit firm size. However, the proxies for the independent variables of this study, the socioeconomic and technological aspects of the

COVID-19, include (1) reduction in working hours, (2) downsizing of staff strength through dismissals and redundancy exercises, (3) resignation of highly skilled and experienced auditors (4) poaching of experienced auditors by other auditing firms, (5) pay cuts, (6) deferral of distribution of profit to partners, (7) reduction in promotion bonuses, (8) suspending (“freezing”) partner admissions, (9) reduction in physical contact between the auditor and the auditee, (10) challenges in virtual audit, (11) Challenges in attending to stocktaking and verifying inventories, (12) challenges in obtaining Sufficient Appropriate audit evidence, (13) challenges in the virtual conduct of entry and exit meetings, (14) challenges in reviewing audit evidence, and (15) challenges in the virtual training of auditors. The proxies of the moderating variables (i.e., auditor’s adopted safeguards include (1) compliance with the five fundamental principles of ethics by accountants, i.e., integrity, objectivity, confidentiality, professional competence and due care, and professional behaviour, (2) the identification and assessment of risk of material misstatement in reference to ISA 315 (revised), (3) the auditor’s response to assessed risks in accordance with ISA 330, (4) the procedures to obtain sufficient appropriate evidence per ISA 500, (5) auditing of accounting estimates per ISA 540, (6) reporting on subsequent events in accordance with ISA 560, (7) assessing the going concern status of clients’ businesses according to ISA 570 (revised), and (8) modifications to the opinion in the independent auditor’s report per ISA 705 (revised), and emphasis of matter paragraphs and other matter paragraphs in the independent auditor’s report in accordance with ISA 706 (revised). These construct items have been taken from the literature. Thus, diagram below show the framework demonstrating the connection existing between the independent, moderating, and the dependent variables.

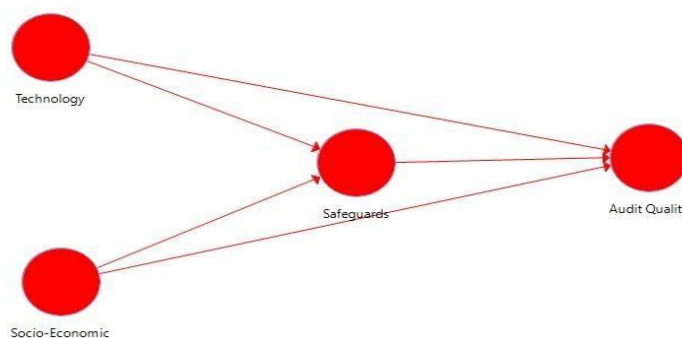


Figure 6.1: Conceptual Framework
Authors’ Construct COVID-19

Along these lines, the researchers tested the following hypotheses:

H1: Safeguards implored by the auditor significantly moderate the socio-economic and technological impacts of the COVID-19 pandemic on audit quality.

H2: Socio-economic impacts of the COVID-19 pandemic significantly influence audit quality.

H3: Socio-economic impacts of the COVID-19 pandemic significantly influence the safeguards instituted by the auditor to enhance audit quality.

H4: Technological impacts of the COVID-19 pandemic significantly influence audit quality.

H5: Technological impacts of the COVID-19 pandemic significantly influence the safeguards instituted by the auditor to enhance audit quality.

6.0 MATERIALS AND METHODS

The researchers adopted an online survey to collect data from partners and staff of auditing firms in Ghana, who are members of the Institute of Chartered Accountants, Ghana using a purposive sampling technique. A total of 289 valid responses were provided by the respondents. The respondents were assured of confidentiality and anonymity in the collection process. Sixty days were used in the data collection process.

The data collected using questionnaire designed for the research is the main source of information for the construct items adopted for this study. These construct items, as outlined in *6.0 Conceptual Framework and Hypotheses Formulation*, include the qualification and proficiency of the auditor, the auditor's independence, challenges in partaking in stocktaking and inventory verification activities physically, challenges in reviewing audit evidence, compliance with the five fundamental principles of ethics, assessing the going concern status of clients' businesses according to ISA 570 (revised), etc.

Various rigour tests (i.e., reliability, validity, normality, and multicollinearity) on the collected data are performed to establish the consistency and credibility of this study's findings. Such tests enhance the generalisability of the study's results (Kuranchie, 2019). The model adopted for this research is thus:

$$AQ = C + \beta_1 SE + \beta_2 T + \beta_3 [S \times (SE + T)] + \epsilon$$

Where;

AQ = Audit Quality

C = Y Intercept

SE = Socio-Economic effects of the COVID-19 Pandemic

S = Auditor's adopted Safeguards

E = Error

Out of the sample, 65.3% were male and 34.7% being female. 43.7% of the respondents were under thirty years old, 38.8 % were between thirty and fifty years old, and 17.5% were more than fifty years old. 52.3% of the respondents had professional accounting qualification, 29.8% possessed postgraduate qualification, and 17.9% had bachelor's degree in accounting. All the construct items, i.e., the independent variables (socio-economic and technology), moderating variable (auditor's adopted safeguards), and the dependent variable (audit quality) were measured using a five-point Likert scale ranging from 1 "strongly disagree" to 5 "strongly agree".

The data collected were subsequently transformed into quantifiable numbers to assist in examining the research objectives using partial least squares structural equation modelling (PLSSEM) approach. PLS-SEM is a useful analytical tool. It offers authors with a seamless and secured approach in processing and analysing collected data in terms of the requirements of the data, complexity of the data and specification of relationships (Dijkstra & Henseler, 2015; Sarstedt, Ringle, Smith, Reams, & Hair, 2014). This study adopted a two-step approach in examining and presenting the outcome of the PLS-SEM (Henseler, Ringle, & Sinkovics, 2009). The goodness-of fit (GoF) is not appropriate for model approval as it has weakness in separating the valid and invalid models. This claim was supported by Hair, Sarstedt, Hopkins and Kuppelwieser (2014) in a study adopting PLS way models. Thus, the two-step model is deemed suitable for this study. Figure 2 reports the first of the two steps of the PLS-SEM. The first step comprises of measurement of both internal and external consistencies. For internal consistency measurement to be realised, Hair, Black, Babin, Anderson, and Tatham (2010) recommend factor loadings threshold of 0.5; Cronbach's Alpha (CA) and composite reliability (CR) thresholds of 0.7 (Hair, Hult, Ringle, & Sarstedt, 2016).

In line with the recommendation on factor loadings, the independent variables, socio-economic and technology had 8 and 7 items respectively but 3 were maintained for each of them, since the others were unable to meet the threshold requirement. Hence, they were deleted. The moderating variable, safeguards had 8 construct items but 5 of them could not meet the benchmark requirement and were thus deleted. The dependent variable, audit quality, had 6 construct items but 2 of them were deleted as they could not meet the threshold requirement (*see* Figure 2 and Table 1). In assessing external consistency otherwise known as convergent validity, average variance extracted (AVE) was used. According to Hair *et al.* (2016), a threshold of 0.5 of AVE is acceptable. In this study, both internal and external validity were achieved (*see* Table I). Inferring from Table 1, Cronbach's Alpha and composite reliability values are in excess of 0.7 and AVE figures more than 0.5. Thus, the responses are both reliable and valid. In ascertaining if there exists collinearity problem or otherwise, the researchers examined both inner and outer Variance Inflation Factors (VIFs) (*see* Table 1 for results). Hair, Hult, Ringle, Sarstedt, and Thiele (2017) conclude that the rule of thumb is that, the VIF value should be lesser than 5. Inferring from Table 1, of the values of the outer VIF are lesser than the threshold. We, therefore, establish that the presence of collinearity problem(s) is not seen in this model. The responses are reliable and consistent. The presence of collinearity problem was also assessed in the model using both inner and outer Variance Inflation Factors (VIFs) are lesser than the maximum threshold value of 5 (Hair *et al.*, 2017).

Inferring from Table 2, we assert that there is no collinearity problem in the model.

Table 1: Factor Loadings

	SE	T	S	AQ
SE3	0.680			
SE4	0.936			
SE5	0.907			
T2		0.837		
T3		0.787		
T5		0.819		
S5			0.888	
S6			0.866	
S7			0.876	
AQ3				0.875
AQ4				0.803
AQ5				0.854
AQ6				0.858

Note: SE=Socio-Economic; T= Technology; S= Safeguards, AQ= Audit Quality

Various scholars including Hair et al., (2010), assert that the rule of thumb of the factor loadings should be 0.5. From Table 1 and figure 2, we establish

that the model is internally consistent as the factor loadings are more than the threshold of 0.5.

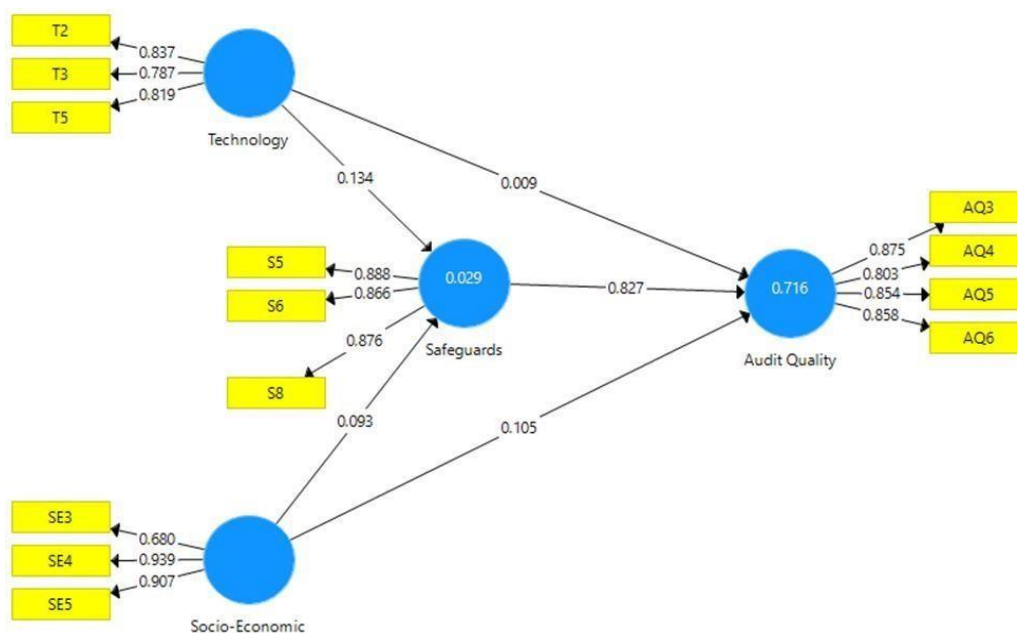


Figure 2: Measurement Model Assessment

Hair et al., (2016), assert that the rule of thumb for CA and CR should be 0.7. For convergent, an AVE threshold of 0.5 is recommended (Hair et al., 2016). The study's outcome is thus valid (see Table 2).

Table 2: Reliability and Validity

	CA	rho_A	CR	AVE
SE	0.870	0.872	0.911	0.719
T	0.850	0.851	0.909	0.769
S	0.822	0.938	0.885	0.723
AQ	0.773	0.817	0.855	0.663

Note: SE=Socio-Economic; T= Technology; S= Safeguards, AQ= Audit Quality

In achieving discriminant validity, the researchers analysed the Fornell-Larckel criterion, Heterotrait-Monotrait Ratio, and cross loadings. With respect to the Fornell-Larckel, the square root of AVE (diagonal figure) for each variable should be more than the correlation of the latent variables. In this study, this has been established (see Table 2 and Table 3). In terms of the Heterotrait-Monotrait ratio (HTMT), a figure smaller than 0.90 is acceptable (Dijkstra & Henseler, 2015). Inferring from Table 5, this has been met. Regarding the cross loadings" threshold, this too has

been met (see Table 6). Accordingly, the discriminant validity of the study has been met.

In assessing the discriminant validity of the model, Fornell-Larckel (FL) criterion, heterotrait-monotrait ratio (HTMT) and cross loading were analysed. Regarding FL, the rule of thumb is that, the square root of AVE for every variable should be higher than the correlation of the latent variables. This criterion was achieved (see Table 3 and Table 5). With respect to HTMT, Dijkstra and Henseler, (2015), recommend a figure lesser than 0.90. Inferring from Table 4, this was achieved. Thus, the study met all the recommended discriminant validity tests.

Table 3: Fornell-Larckel criterion (FL)

	AQ	S	SE	T
AQ	0.848			
S	0.839	0.877		
SE	0.193	0.105	0.850	
T	0.136	0.143	0.091	0.814

Note: SE=Socio-Economic; T= Technology; S= Safeguards, AQ= Audit Quality

Table 4: Heterotrait-Monotrait Ratio (HTMT)

	AQ	S	SE	T
AQ				
S	0.874			
SE	0.204	0.115		
T	0.143	0.151	0.163	

Note: SE=Socio-Economic; T= Technology; S= Safeguards, AQ= Audit Quality

Table 5: Correlation Matrix of Latent Variables

	AQ	S	SE	T
AQ	1.000			
S	0.839	1.000		
SE	0.193	0.105	1.000	
T	0.136	0.143	0.091	1.000

Note: SE=Socio-Economic; T= Technology; S= Safeguards, AQ= Audit Quality

The correlation existing between the dependent variable, audit quality, and the independent variables, socio-economic and technology are positive but not as positively strong as the correlation ($\cong 84\%$) existing between the dependent variable, audit quality and the moderating variable, safeguards (see Table 5). In spite of the strong correlation existing between audit quality safeguards, there is no multicollinearity problems in the model (see Table 6).

Table 6: Variance Inflation Factors (VIFs)

Construct	Item	VIF (Inner)		VIF (Outer)
		AQ	S	
AQ	AQ3			2.636
	AQ4			1.853
	AQ5			2.318
	AQ6			2.252
S	S5			2.198
	S6	1.030		1.911
	S8			2.160
SE	SE3			1.583
	SE4	1.017	1.008	2.637
	SE5			2.172
T	T2			1.243
	T3	1.027	1.008	2.556
	T5			2.462

Note: SE=Socio-Economic; T= Technology; S= Safeguards, AQ= Audit Quality

The presence of collinearity problem was absent from the model as both inner and outer Variance Inflation Factors (VIFs) values are lesser than the maximum threshold value of 5 (Hair et al., 2017). Inferring from Table 6, we assert that there is no collinearity problem in the model.

The second step of the PLS-SEM involved checking the formulated hypotheses. In this section, all the hypotheses were analysed to establish their acceptance or rejection. To this end, a t-value of 1.96 was assumed. The relationship possessing a threshold of 1.96 was accepted. However, the relationship having t-value lesser than 1.96 was rejected. This assessment is found in Table 7 and Figure 3.

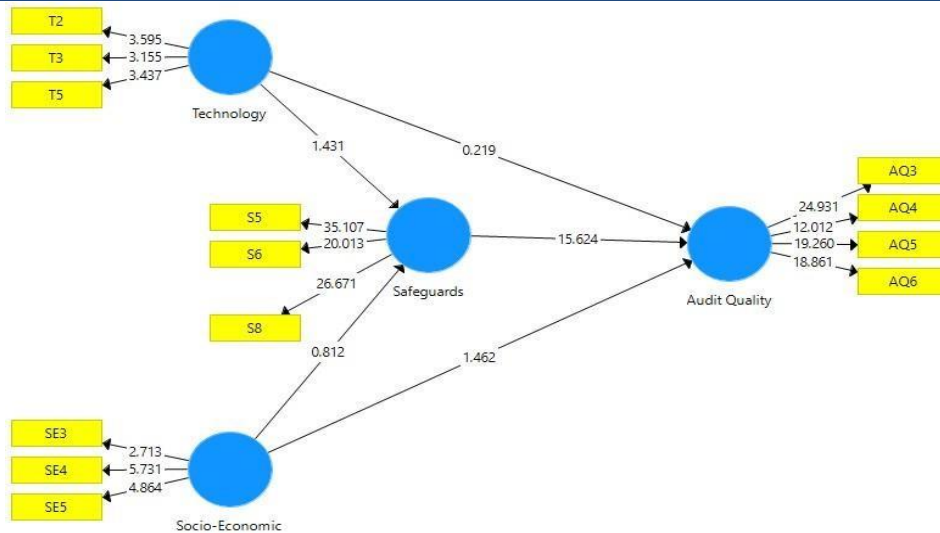


Figure 3: Measurement Model Assessment

Table 7: Direct Effects Results

Hypotheses	Path	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-Statistics ((O/STDEV))	P values
H1	S→AQ	0.827	0.830	0.053	15.624	0.000
H2	S→AQ	0.182	0.181	0.128	1.462	0.158
H3	S→AQ	0.093	0.101	0.114	0.812	0.417
H4	S→AQ	0.120	0.137	0.089	0.348	0.178
H5	S→AQ	0.134	0.151	0.094	1.431	0.153

Table 7: Moderating effects of Safeguards on Audit Quality

Items	Beta (β)	t-value	Significance
(SE & T) × S	0.827	15.624	0.000
Model Indices			
R2	0.716		
R2-Adjusted	0.710		
SRMR	0.075		

This study’s outcomes found that 71.6% variability in audit quality was accounted for by the interaction between the independent variables, moderating variable (safeguards) and the dependent variable, audit quality. Thus, the predictive ability of technology and socio-economic constructs with audit safeguards on audit quality is satisfactory. This study again revealed that the auditor’s adopted safeguards significantly ($\beta = 0.827$, P-value = 0.000) moderate the relationship between the impact of the COVID-19 pandemic (proxied by technology and socioeconomic variables) and audit quality. and firm performance. Thus, H1 is fully supported that, the auditor’s adopted safeguards significantly moderate the relationship between the impact of the COVID-19 pandemic (proxied by technology and socioeconomic variables) and audit quality.

7.0 FINDINGS OF THE STUDY

The main objective of this study was to examine the moderated effect of the auditor’s adopted safeguards in mitigating the impact of the COVID-19 pandemic on

audit quality in Ghana through soliciting data from audit practitioners in Ghana who are members of the Institute of Chartered Accountants Ghana (ICAG). This paper, thus, explores the moderated effect of the auditor’s adopted safeguards to ensure audit quality amid the COVID-19 pandemic. A total of five (5) hypotheses were established based on these investigations. In examining the hypotheses, this study establishes that t-value of 15.624 above the rule of thumb of 1.96 with a positive β value (0.827) were found. Based on this, the first hypothesis (H1) was supported. It implies that safeguards implored by auditors significantly moderate the impact of the COVID-19 pandemic on audit quality. Hypothesis two (H2) addressed the socio-economic impact of the COVID-19 pandemic on audit quality in which a t-value of 1.462 with positive $\beta = 0.093$ value was established. Thus, the socio-economic aspects of the COVID-19 pandemic have some influence on audit quality. Hypothesis three (H3) considered the socioeconomic impact of the COVID-19 pandemic on safeguards in which a t-value of 0.812 with positive β

value = 0.182 were established. Hence the socio-economic impact of the COVID-19 pandemic influences safeguards implored by the auditor in ensuring audit quality.

Added to these, H4 investigated the relationship between the technological aspects of the impact of the COVID-19 pandemic on audit quality. A t-value of 0.348 with a positive $\beta = 0.120$ were found. Thus, the impact of the technological aspect of the COVID-19 pandemic on audit quality is significant. Lastly, H5 established the relationship between the technological aspect of the COVID-19 pandemic and the safeguards implored by the auditor to enhance audit quality. A t-value of 1.431 and a positive $\beta = 0.134$. We conclude that the technological aspect of the COVID-19 pandemic has some level of influence on audit quality. Finally, in this paper, only H1 is fully supported and thus, accepted as it is the only hypothesis that meets the benchmark t-value of at least 1.96. All the remaining hypotheses could not meet the threshold and were therefore rejected.

In sum, the effects of the COVID-19 pandemic on audit quality amid the moderating role of safeguards employed by the auditor were examined. The study was conducted in Ghana. The outcomes of the study show that the moderating role of safeguards is significant in achieving audit quality amid the COVID-19 pandemic. Continuous application of safeguards by the auditor is necessary to mitigate the effects of the COVID-19 pandemic on audit quality. Therefore, this paper is critical for auditors to enhance the quality of assurance services rendered vide the application of the requisite safeguards in their work. Hence, auditing firms should adopt and educate their staff concerning the implementation of suitable safeguards to achieve audit quality.

8.0 CONCLUSION

We have the perception that, since the global financial crisis of 2007 to 2008, the COVID-19 pandemic is the next crisis to have unleashed the most devastating effects on the auditing practitioner and the auditee. It is this conviction that this study aims to investigate empirically by soliciting data from audit practitioners in Ghana who are members of the Institute of Chartered Accountants, Ghana concerning how the auditor's adopted safeguards can mitigate the impact of the pandemic on audit quality. The paper explored the moderating effect of the auditor's adopted safeguards on audit quality amid the COVID-19 pandemic. Audit quality enhances the credibility of financial reports. However, in the era of the COVID-19 pandemic with its associated restrictions imposed by governments have adverse effects on the assurance services of auditors; physical attendance during stocktaking is curtailed, poaching of experienced auditors by other auditing firms that have enough financial muscles is on the ascendency, resignation and dismissal of auditors

around, etc. have adverse effects on audit quality. Thus, the identification and implementation of the appropriate safeguards by the auditor to address the adverse effects of the ills of the pandemic to enhance audit quality cannot be overemphasised. To this end, the application of safeguards including, the compliance with the five fundamental principles of ethics by accountants, i.e., integrity, objectivity, confidentiality, professional competence and due care, and professional behaviour, assessing the going concern status of clients' businesses according to ISA 570 (revised), the identification and assessment of risk of material misstatement per ISA 315 (revised), the procedures to obtain sufficient appropriate evidence per ISA 500, etc. are critical in ensuring audit quality.

This paper has implications for practitioners as the safeguards applied by auditors during the pandemic are critical in ensuring audit quality. Audit quality offers reasonable assurance to users of the financial reports that; the business is financially viable, the business will operate into the foreseeable future, the firm is guarded against error and irregularities, the business operates within the relevant regulations, businesses are competently run, and ultimately, businesses are socially and environmentally responsible. Audit quality, is thus, key in the economic decision-making process of users of financial reports. Therefore, the absence of audit quality undermines the integrity and credibility of the audited financial statement. This paper, thus, is among the pioneer studies to explore the moderating effect of safeguards on the socio-economic and technological aspects of the COVID-19 pandemic on audit quality in the context of an emerging market.

On policy, due to the social distancing protocols instituted by governments globally, most auditing firms have resorted to "working from home", as a means of providing assurance and non-assurance services to clients. Accordingly, this study proposes that auditing firms make significant investments in IT infrastructure such as data function, artificial intelligence, digital programmes, etc. to facilitate a successful work-from-home policy. Besides, the impact of social distancing has resulted in long working hours of auditing practitioners. This may culminate in delays in submitting audit reports on clients' financial reports. We thus, propose that regulatory bodies such as the Securities and Exchange Commission, Central Bank, etc., relax filling compliance requirements of audited financial reports, as the ills of mandatory lockdowns of cities and towns are felt by firms as well. This recommendation is aimed at giving auditing practitioners ample time to render quality audits for the benefits of the users of the audit report. In addition, tax authorities may consider relaxing tax return filling and payments schedules of businesses, tax waiver, tax holidays, etc. to businesses that are severely affected by

the disease. These measures are intended to mitigate the impact of the pandemic.

9. LIMITATIONS AND SUGGESTIONS FOR FUTURE STUDIES

The study targeted audit practitioners of Ghana who are members of the Institute of Chartered Accountants, Ghana (ICAG). However, as online survey was adopted in the collection of data, a major limitation of this study was the possibility of non-audit practitioners who are members of ICAG might have responded to the survey. In addition, due to the

attendant social distancing protocols and other measures, the sample size of the study was small and this can affect the generalisation of the findings. Future studies are recommended to address this phenomenon. We also encourage other researchers to use other methods such as qualitative methods to further obtain the in-depth opinions of audit practitioners on how safeguards influence audit quality in the midst of the COVID-19 pandemic. Future studies may also explore the mediating role of safeguards on corporate governance mechanisms put in place by corporate entities to enhance audit quality during the pandemic.

APPENDIX: CONSTRUCTS' ITEMS

1. Challenges in attending to stocktaking and verifying inventories (T2)
2. Challenges in obtaining Sufficient Appropriate audit evidence (T3)
3. Challenges in reviewing audit evidence (T5)
4. Pay cuts (SE3)
5. Reduction in working hours (SE4)
6. Resignation of highly skilled and experienced auditors (SE5)
7. Compliance with the five fundamental principles of ethics (S5)
8. Identification and assessment of risk of material misstatement in reference to ISA 315 (revised) (S6)
9. Assessing the going concern status of clients' businesses according to ISA 570 (revised) (S8)
10. Auditor qualifications and proficiency (AQ3)
11. Auditor independence (AQ4)
12. Auditor reputation (AQ5)
13. Audit fees (AQ6)

DECLARATION: We (authors), declare that this manuscript has not been submitted to another journal for publication.

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