

Internal Control Practices and Financial Performance of Small and Medium-Sized Enterprises at Cape Coast Metropolis

Dorcas Akosua Bawa-Desbordes¹, Osman Light², Patricia Otobil³

¹Accountant, Directorate of Finance, University of Cape Coast

²Tutor, School of Business University of Cape Coast

³Assistant Accountant, Directorate of Finance, University of Cape Coast

Abstract

This paper explores the influence of internal control practices on the financial performance of Small and Medium-sized Enterprises (SMEs) in Ghana, with a particular focus on those within the Cape Coast metropolis. It specifically examines how control activity, internal audits, risk audits, and control environments affect SMEs' financial performance using a quantitative approach and explanatory research design. Agency theory supported the study, and primary data were gathered via structured questionnaires from 200 sampled owner-managers of SMEs in Cape Coast. Data processing was then carried out using IBM SPSS (v.26) and Smart-PLS3 software and analyzed via PLS-SEM. The findings showed that all four internal control practices favourably affected SMEs' financial performance in Cape Coast. Therefore, we conclude that internal audit, risk audit, control activity, and control environment are significant predictors of SMEs' financial performance in the metropolis. It was recommended that policymakers, including owner-managers, should continue to implement and strengthen internal control practices to expand SMEs' financial performance.

Keywords: Internal control practices, Control activities, Control environment, Internal audit, Risk audit, and Financial performance

1.0 Introduction

Small and Medium-sized enterprises (SMEs) make up about 95% of companies across the globe are micro, small or medium enterprises and that they provide 60 percent of the world's total employment (World Economic Forum, 2024). SMEs are the backbone of economies worldwide and of the world of work (International Labour Organisation (ILO), 2023). In developed economies, such as the EU, SMEs make up 99.8% of the total enterprises in the bloc, and are responsible for over 100 million jobs (World Economic Forum, 2024). In Organisation for Economic Cooperation and Development OECD countries, SMEs account for about 99 percent of firms and 70 percent of all jobs, and they contribute more than 50 percent of GDP in high-income countries worldwide (McKinsey & Company, 2022). Likewise, in emerging economies, their contribution to GDP can reach 40 percent (World Bank, 2022). In Ghana, a Sub-Saharan African (SSA) country, SMEs play a significant role in the economy, and constitute over 90 percent of business enterprises in the country. Moreover, SMEs form around 80 percent of the total employment in Ghana and accounts for 60% of the country's GDP (Statista, 2023).

Despite their relevance to global economies, SMEs have generally been exposed to low sales, slow growth, expansion challenges, and failure. According to US Business Statistics Report (2024) one in five (21%) of SMEs fail after just one year in business due to poor internal control practices and mechanisms. In developing economies such as Africa, SMEs failure rate is high at about 54% with Ghana ranking 3rd with 74% failure rate due to employee pilferage, poor monitoring and evaluation and inadequate internal checks (Modern Ghana, 2024). Within the Cape Coast metropolis, for instance, SMEs continue to fold-up due to poor internal controls, absence of monitoring mechanisms among others. This has led to increased unemployment, low standard of living, and inadequate contributions to government revenue. A report by the Cape Coast Metropolitan Assembly [CCMA] (2020) revealed that the majority (over 70%) of businesses within the metropolis are small- and medium-sized. In view that the agency theory posited that principals (i.e., owners of SMEs) need to implement internal control practices (ICPs) to effectively manage their agents (i.e., employees, suppliers), thereby achieving expected targets (Sarens, Abdol Mohammadi & Lenz, 2012). The agency theory aims to resolve conflicts between the principal and the agent, especially when it's difficult to verify the agent's actions. Second, it offers solutions for situations where the principal and agent behave differently due to their varying attitudes toward risk (Caselli & Negri, 2018).

In this regard, the concept of internal control continues to garner the attention of practitioners and researchers. Internal control refers to the policies and practices created by management to attain efficient operations and protect business assets (COSO, 2009; Dubihlela & Nqala, 2017; Kabuye et al., 2019). Internal control comprises a set of procedures, rules, and practices that organizations implement to offer directions, improve operational efficiency, and strengthen compliance to policies (Alabdullah, 2021). Vu and Nga (2022) stressed that internal controls are carried out by implementing notable practices, such as control activities, internal audits, control environments, and risk assessment.

The control environment encompasses the rules, procedures, and structures used to monitor and regulate firms' environmental activities (COSO, 2009; Kabuye et al., 2019). Control activities also describe activities such as authorization, reconciliation, and segregation of duties that help in the proper execution of management directives in organizations (Zhou, Chen & Cheng, 2016). Studies have found that internal control practices (ICPs) improve firm performance by ensuring proper financial records, financial soundness, waste minimization, and resource optimization (Zhou et al., 2016; Lai et al., 2017). They also help SMEs quickly adjust to changing situations to achieve set performance targets (Alabdullah, 2021).

In Ghana, although organizations including SMEs have been found to implement these key practices to internally control their operational activities (Agbenyo, Jiang & Cobblah, 2018; Tetteh et al., 2022). However, this cannot be said in the case of SMEs within the Cape Coast metropolis? The metropolis is among the 23 districts in the central region and one of the least-growing metropolises in Ghana. Although studies have linked internal control practices (ICPs) with financial performance (Ibrahim, Diibuzie & Abubakari, 2017; Kabuye et al., 2019); less attention has been given to the specific dimensions of ICP, such as control activities, internal audits, control environments, and risk assessment in the context of SMEs in Ghana, and the Cape Coast Metropolis. In addition, Ghanaian studies investigating SMEs' financial performance have largely focused on financial literacy (Adomako et al., 2016; Agyapong & Attram, 2019), access to finance (Boateng & Poku, 2019), record-keeping (Adom, Amakye, Doh & Anku, 2014; King-Aidoo, 2019) and innovation (Asiedu, 2016; Tetteh & Essegbey, 2014; Oduro, 2019). Given the paucity of research on the effect of ICPs on financial performance of SMEs in Ghana. It is against this background that the current study sought to investigate the effect of internal control practices on the financial performance of SMEs within the Cape Coast metropolis. In addition, the PLS-SEM technique

was adopted to address methodological weaknesses in related studies (Ibrahim et al., 2017; Kabuye et al., 2019) using the linear regression tool.

1.1 Significance of the Paper

The research explored ICPs and SMEs' financial performance and its outcomes can assist policy makers, industry players and researchers within the scope of SMEs in Ghana. For instance, the study's outcome provided a valuable framework which can assist policy makers such as the government, its ministries and agencies when developing policies aimed at promoting internal controls among SMEs. The study can also help industry players such as Ghana Enterprise Agency (GEA), Association of Ghana Industries (AGI), among others in appreciating the relevance of ICPs in modern day businesses and thereby fast-track their implementation among the SMEs.

Moreover, the study's outcome can help management of the SMEs in selecting and investing in relevant ICPs in order to improve upon their current internal controls and overall firm performance. More precisely, the study reveals the practices with the highest significant effect on their financial performance; thereby, providing a guideline to them with respect to which ICP to focus on. Also, the study's results added to the body of knowledge on internal control and financial performance in the context of SMEs in a developing economy. This can, therefore, help in bridging current literature gap and also assist potential researchers in accessing relevant information and materials to carry out their studies.

1.2 Structure of the Paper

The rest of the paper covered the literature review, research methods, results and discussion, and conclusions and managerial implications.

2.0 LITERATURE REVIEW

2.1 Agency Theory

William Meckling and Michael Jensen developed agency theory in the late 1960s to describe the relationship between principals and agents (Meckling & Jensen, 1976). In this arrangement, the principal hires an agent to execute work that he or she is unable to do on their own. According to this idea, both the agent and principal are motivated by their own interests, which creates a presumption of inevitable conflicts. One of the arguments put forward by this theory is that to ensure that agents behave in a way that meets the expectations of principals, they (firms) must implement a set of rules and regulations, strategies, practices, and systems. An example of such a practice is the implementation of appropriate internal control procedures. Agency costs are reduced by the implemented systems, which ultimately allows the principal to lower total expenditures (Kamau, 2016). The theory further proposes that internal control procedures essentially integrated into organizational systems, policies, and legislation will prevent conflict with or between employees, helping to fulfil set objectives (Morris, 2011). Mrima and Ronald (2022) similarly recommend the implementation of internal controls to control or monitor the activities of agents to achieve the overall performance of the firm. More precisely, the theory suggests that SMEs, as principals, can strengthen their financial performance by implementing internal control practices to manage their agents.

The theory further supports the assertion that SMEs that fail to implement internal controls, such as risk audits, internal audits, control environments, and control activities, are likely to reveal financial gaps to their agents (i.e., employees), thereby affecting financial performance. This is because poor internal controls could allow agents to enrich themselves at the expense of the principal (managers/owner of SMEs). Simply put, the theory argues for SME managers/owners within the Cape Coast metropolis to

adopt these internal control practices to control their agents' activities to promote financial performance. As a result, the theory unequivocally highlights the critical role that control practices play in reducing potential risks in the operational and financial domains to enhance financial performance.

2.2 Empirical Review

2.2.1 Internal Audit and Financial Performance

Matthew (2020) discovered a positive correlation between the internal control and financial performance at Sassco, with the COSO Principles explaining over 50% of the difference in financial performance. This current paper considered how the risk assessment, information systems, and control parts of the COSO would have affected things. The author concludes that internal control based on adherence to COSO control principles has a favorable effect on the financial performance of Kenyan savings cooperative organizations.

Other studies, including those carried out in Kenyan small- and medium-sized businesses by Roussy, Barbe, and Raimbault (2020), indicated a positive correlation between the COSO principles and financial success, notably ROI. An internal audit allows the management of businesses to follow disciplined and structured protocols to identify corporate priorities, policies, and practices (Ezejiofor & Okolocha, 2020). Chen et al. (2020) stressed that internal audits are significant in improving control procedures and systems through monitoring and evaluation. It is necessary to attain effective and efficient operations to meet a firm's targets. Prasad et al. (2020) added that internal auditing provides objective, independent, and systematic activity designed to create value and enhance business operations.

Hamour et al. (2021) investigated the moderating role of board independence on COSO components and the financial performance of banks in Jordan. The study's findings revealed that COSO components, including internal audits, significantly affect banks' financial performance, concluding that any variation in the financial performance of Jordanian banks is significantly contributed by internal audits. A similar outcome was recently reported by Nam et al. (2022), who focused on banks in Vietnam. More precisely, the study revealed that internal controls, including internal audits, significantly and positively affect the profitability of Vietnamese banks. Therefore, for banks to be able to expand their financial performance levels, attention should be given to internal controls, especially the five COSO elements. A similar outcome was reported by Ezejiofor et al. (2021).

Conclusively, from the perspective of the agency theory, internal audit [IA] plays a crucial role in enhancing organizations' financial performance [FP] in many study areas; however, there is limited focus on Ghana. Given the inadequacy of the literature within the Ghanaian context, it remains unclear whether recommendations in previous studies can be adopted by SMEs in Ghana, especially those within the Cape Coast metropolis. In addition, some studies (Kinyua et al., 2015; Ibrahim et al., 2017; Babatope & Adewunmi, 2019) relied on a linear regression analytical tool that has been exposed to criticism in recent times. In view of this, the present study addresses both methodological and geographical gaps to expand the existing literature. Finally, research by Kinyua et al. (2015) and Ibrahim et al. (2017) had no theoretical underpinning that raised questions regarding the foundations upon which their studies were developed. Based on this review, it was hypothesized that:

H₁: There is a positive and significant relationship between internal audit and financial performance.

2.2.2 Control Environment and Financial Performance

The control environment is related to the governance of management with regard to integrity, employee morale, ethical standards, philosophy, and supportive attitudes (Zakaria et al., 2016). It also involves

managerial competence, leadership style, the philosophy of key stakeholders, and the delegation of responsibility and authority (Jovetic et al., 2018). Mumba and Wekesa (2020) posited that a control environment is successful when a firm upholds ethical principles by establishing appropriate evaluation standards. They concluded that businesses must continue to invest in finding, developing, and hiring qualified individuals to see improvements in their financial performance.

Additionally, the control environment is viewed as the cornerstone of all internal control elements (Hanoon et al. 2021). As a result, the board of directors is in a position to exercise control and supervision duties; define lines of authority and responsibility; hire, train, and develop qualified people; and hold them responsible for delivering the level of performance required to achieve goals. The financial performance of Universal banks in Ghana was found to be directly impacted by the control environment by Otoo et al.'s (2021) quantitative analysis. The study's conclusions indicate that Ghanaian Universal banks can increase their levels of financial performance as long as they maintain an effective control environment. Hamour et al. (2021) strengthened existing studies by revealing that implementing a control environment is crucial to improving the financial performance of banks in Jordan. They specifically conclude that these banks can never meet their financial performance targets if minimal attention is given to internal controls, including the control environment. Alfartoosi et al. (2021) discovered that the control environment, a COSO dimension, has a favorable impact on the financial performance of Iraqi banks. They concluded that banks' levels of financial performance increased and vice versa as they developed the five COSO dimensions, including the control environment.

Conclusively, from the perspective of the agency theory, control environment is essential for enhancing firms' financial performance across a range of research fields, but with limited focus on Ghana. Given the inadequacy of the literature within the Ghanaian context, it remains unclear whether recommendations in previous studies can be adopted by SMEs in Ghana, especially those within the Cape Coast metropolis. In addition, some studies (Mahadeen et al., 2016; Bentley-Goode et al., 2017) have relied on a linear regression analytical tool that has been exposed to criticism in recent times. In view of this, the present study addresses both methodological and geographical gaps to expand the existing literature. Finally, studies by Mahadeen et al. (2016) and Bentley-Goode et al. (2017) had no theoretical underpinning that raised questions regarding the foundations upon which their studies were developed. Based on this review, it was hypothesized that:

H₂: There is a positive and significant relationship between control environment and financial performance.

2.2.3 Risk Audit and Financial Performance

Risk audits are a key constituent of ICS because of firms' exposure to numerous risks, consequently affecting their performance levels (Mary et al., 2014). Maduekwe and Kamala (2016) postulated that risk audit focuses on identifying and addressing potential business risks. A firm's risk can be proactively detected and mitigated using risk analysis techniques. Risk audit is an essential tool for managing risk effectively in all organizational settings. To conduct risk audit effectively, a sequence of actions is taken to classify all risks into significant components. Risk audit considers the possibility of an incident occurring and its associated implications. The goal is to discover appropriate strategies to manage risk within the chain rather than producing several papers (Abiodun, 2020).

Further studies, indicate that the internal audit function can positively impact a firm's financial performance (Abdeljawad et al., 2020; Koutoupis et al., 2018). Similarly, there has been a shift in internal

audit focus from merely evaluating processes to addressing business risks (risk audit), which has become a fundamental aspect of enhancing firm performance (Benli & Celayir, 2014; Amran et al., 2023).

Al-Maskari et al. (2019) posited that business enterprises that tolerate risks by following established frameworks and standards attain positive organizational outcomes, including financial and operational performance goals. Similarly, internal controls include risk assessment or audit guarantees that businesses follow rigorous guidelines to safeguard them from unwanted legal action and related expenses (Kiyieka & Muturi, 2018; Kabuye et al., 2019).

Drawing from the agency theory and the relationships that been established in empirical studies, risk audit plays a critical role in the enhancing the financial performance of a firm. The empirical gaps require a study on risk audit and financial performance among SMEs in the developing economy. Based on this review, it was hypothesized that:

H₃: There is a positive and significant relationship between risk audit and financial performance.

2.2.4 Control Activities and Financial Performance

Moreover, Eniola and Akinselure (2016) asserted that organizations that apply control activities are able to develop communication systems that are timely, effective, and relevant and improve communication obligations, which could in turn promote financial performance. Similar to Ibrahim et al. (2017), they suggested that failing to implement appropriate internal controls, particularly control activities, might open businesses to financial mismanagement and misconduct, which would ultimately impact their financial stability. Proper internal control implementation, particularly control activities, enhances businesses' financial performance efficacy and budgetary participation of businesses (Rosman et al., 2016; Rapani & Malim, 2020; Al-Waeli et al., 2021).

Tetteh et al. (2020) found a significant relationship between internal control systems and corporate success, as shown by total profitability "(control environment, control activity, information, and communication)." The five COSO components, including control activities, have a substantial positive impact on boosting the FP of Jordanian banks (Hamour et al., 2021). They specifically concluded that when Jordanian banks adopt activities to control their business operations, they could lead to significant improvements in their financial performance levels.

Consequently, drawing from the agency theory and numerous studies, control activities, an internal control procedure, are essential for enhancing firms' financial performance; however, these studies have failed to focus on Ghana, an emerging economy. Given the inadequacy of the literature within the Ghanaian context, it remains unclear whether recommendations in previous studies can be adopted by SMEs in Ghana, especially those within the Cape Coast metropolis. In addition, some studies (Rosman et al., 2016; Ibrahim et al., 2017) have relied on a linear regression analytical tool that has been exposed to criticism in recent times. In view of this, the present study addresses both methodological and geographical gaps to expand the existing literature. Finally, some studies (Eniola & Akinselure, 2016; Kabuye et al., 2019) have no theoretical underpinning that raises questions with respect to the foundations upon which their studies were developed. Based on this review, it was hypothesized that:

H₄: There is a positive and significant relationship between control activities and financial performance.

2.3 Conceptual Framework

A conceptual framework was included in this current paper to help explain and connect the concepts discussed. This framework presents a pictorial view of the ideas developed in this current paper. As shown in Figure 1, the framework was built around two key variables: the dependent variable (financial

performance) and the independent variable (internal control practices). From Figure 1, financial performance is measured in terms of sales margin, return on investment, operating costs, profit margin, and total assets. Internal control practices, on the other hand, include internal audit, risk audit, control activities, and a control environment. Four arrows can be seen moving from the independent variables to the dependent variable, implying that a direct relationship exists between these variables.

3.0 RESEARCH METHODS

The study followed the post positivism. The approach was quantitative and the research design was the explanatory design in explaining the causal linkages between ICPs and FP (Creswell & Creswell, 2017; Bloomfield & Fisher, 2019). The research was conducted on SMEs within the Cape Coast Metropolis (CCM). It specifically targeted registered SMEs owner–managers in the city of Cape Coast. The Ghana Enterprise Agency [GEA] 2020 database revealed that SMEs in Ghana, including those within the CCM, account for over 90% of all businesses and contribute immensely to economic development, resource allocation, innovation, and poverty reduction. Ghana Enterprise Agency (GEA) (2020) database indicated that there are 250 registered SMEs in the city. Therefore, 250 owner-managers of registered SMEs in Ghanaian City of Cape Coast made up the study's target group. This present paper used the sampling determination table developed by Krejcie and Morgan (1970) to select 150 owners/managers from a vast population of 250. Of the 250 population members, 150 responders were chosen using a straightforward random sample probability strategy via the lottery method. Using the lottery method, representatives of the registered SMEs were assigned numbers on different slips, folded, and mixed in a box. In addition, shuffling was performed and slips were removed until the sample size was obtained. A structured questionnaire, with a five-point Likert-like scale (1 being least agreement and 5 being the greatest agreement) was used to gather primary data from the 150 sampled respondents. The questionnaire was designed with 32 measurement scales in three (3) distinct sections (see appendix). The current paper's validity was attained through peer review, expert evaluation, literature review, and pretesting. Additionally, reliability assesses the reliability and repeatability of the study tool is (Saunders et al., 2009). Pre-testing was performed on 35 selected SMEs in Kasoa City to gauge reliability. Following the workout, the data were processed using the SPSS software and analysed using the scale function reliability test. The result was assessed with the rule that each construct's Cronbach's alpha (α) values should be 0.70 or above to achieve reliability (Saunders et al., 2009; Best & Kahn, 2016). From Table 1, all constructs met the reliability criteria (i.e., $\alpha \geq 0.70$) to indicate the reliability of the instrument (see Table 1).

The data were processed using IBM SPSS version 26 and SmartPLS3. The analytical tool was the Partial Least Square Structural Equation Modelling (PLS-SEM). PLS-SEM can manage missing data and normality violations without requiring any significant assumptions about the distributional properties of the raw data (Hair et al., 2017). In addition, PLS-SEM analyses causal relationships between and among variables and produces superior results compared to the linear regression analytical tool (Wong, 2019; Hair et al., 2021). Prior to applying the PLS-SEM to assess the study's hypotheses, fundamental presumptions like “item loadings, multicollinearity, reliability (indicator and construct), validity (discriminant and convergent) and outer model significance (i.e., predictive accuracy, effect size, coefficient of determination, etc)” were also assessed and discussed (Hair et al., 2021). The hypotheses were then tested using 5000 bootstraps and the output was presented in both figures and tables and discussed extensively. Ethical clearance and approval were sought from the University of Cape Coast Institutional Review Board. Informed consent form together with the questionnaire was sent to each

respondent. Only respondents who consented by signing the informed consent responded to the questionnaire.

The research method diagram can be seen in the appendix.

4.0 RESULTS AND DISCUSSION

4.1 Respondents' Socio-Demographic Features

After distributing 150 questionnaires to the owners/managers of SMEs within the Cape Coast metropolis, the researcher obtained a valid data set of 137, which was used for the actual analysis. This is because 137 valid responses produced a valid response rate of 91.3% (i.e., > 50). The results for demographic features are presented in the Appendix (see Table 2).

4.2 Model Assessment

Prior to the actual hypotheses testing, the PLS-SEM qualities were initially assessed using item loadings, reliability (indicator [IR], construct [CR]), validity (convergent [CV], discriminant [DV]), and multicollinearity. The model was initially evaluated to understand the structural model results (Hair et al., 2017). Assessments were also conducted to ensure that the model is valid and reliable; hence, its findings could be relied upon to make valid conclusions and policy recommendations.

4.2.1 Item Loadings (Structural and Measurement)

This section first presents all constructs and their item loadings based on the four exogenous variables comprising internal audit, control activities, control environment, risk audit, and one endogenous variable known as financial performance. Each exogenous construct had five indicators, while the endogenous construct had seven items that were assessed based on the loadings. Figure 2, for instance, presents the initial model with all constructs and associated item loadings prior to the assessment.

From Figure 2, the construct indicators are presented by acronyms; for instance, control activities (CA) had CA1, CA2, CA3, CA4, and CA5; control environment (CE) comprised CE1, CE2, CE3, CE4, and CE5; risk audit (RA) had RA1, RA2, RA3, RA4, RA5; internal audit (IA) also had IA1, IA2, IA3, IA4, and IA5; and financial performance (FP) comprised FP1, FP2, FP3, FP4, FP5, FP6, FP7. These items were assessed to check whether they truly measured their designated constructs within the study area. Item loadings are generally assessed to ensure that the items adapted from previous studies are valid and replicable within a given study's context (Memon et al., 2021). The rule for assessing the items suggests that each loading should be >0.70 (Hair et al., 2017, 2021).

Items with poor loadings (i.e., <0.70) should be removed from the model; however, those that fall between 0.60 and 0.69 could be maintained if they play crucial roles in the study's analysis (Hair et al., 2019). Based on this rule, the researcher assessed the first model, and items below the required threshold of 0.70 were duly removed to create the final model. Sarstedt et al. (2021) revealed that items below 0.70 are inferior measures of their assigned constructs; hence, they must be removed. Based on this assertion, all inferior items were removed from the model; the final model is presented in Figure 3.

In terms of RA, items such as RA1 and RA2 were removed, IA had IA1 and IA4 removed, CA had CA4 and CA5 removed, CE also had CE1 and CE4 removed, and FP had FP3, FP4, and FP5 removed. This was done to improve the quality of the model and ensure valid findings. This suggests that the hypotheses were tested on the basis of the final model structure.

4.2.2 Assessment of Measurement Model

After assessing the item loadings, the model's quality in terms of reliability (IR and CR), validity (CV and

DV), and multicollinearity (i.e., inner VIF values) were assessed (see Table 3).

4.2.3 Reliability Assessment

This section discusses the model indicator (IR) and construct (CR) reliability scores, as presented in Table 3. To determine the extent to which an indicator's fluctuation is explained by its latent variable, the IR was evaluated (Hair et al., 2017). Wong (2019) also revealed that IR is a vital tool for evaluating the unidimensionality of scale items to ensure their reliability. Hair et al. (2019, 2021) revealed that both Cronbach's alpha (CA) and rho_A can be used to assess IR; however, rho_A provides a more reliable outcome. Hence, IR was assessed using rho_A, with the rule that the values for each construct should be > 0.70 . As shown in Table 3, all constructs' rho-A scores were > 0.7 (i.e., 0.70-0.833).

Additionally, construct reliability (CR) was evaluated, because it explains how well a certain variable is measured by combining various indicators. A construct's indicators must have high correlations with one another to achieve CR (Hair et al., 2019). The rule proposes that a construct's CR value should be > 0.70 (Hair et al., 2017, 2019; Wong, 2019). From Table 3, all the constructs had CR values > 0.7 (i.e., 0.843-0.885), imply that each construct's assigned indicators had strong correlations among them, hence leading to CR.

4.2.4 Validity Assessment

In terms of the validity of the model, two issues were discussed: (i) construct or convergent validity (CV), and discriminant validity. For instance, CV was assessed using the model's average variance extracted (AVE) values (Hair et al., 2017; Sarstedt et al., 2021). The AVEs demonstrate how well a construct captures the variance of an indicator in terms of the total variance and measurement error that results (Hair et al., 2021). The study complied with the rule that all AVE values should be > 0.50 for CV to occur. As shown in Table 3, all AVEs were > 0.50 (i.e., 0.643-0.720); with the lowest value of 0.643 (CA) and the highest value of 0.720 (IA). Hence, the validity of the model was convergent, and thus it met the validity criteria.

Discriminant validity (DV) is generally assessed to check for possible collinearity issues in a model (Hair et al., 2017). Hair et al. (2017) proposed that DVs that are discriminantly valid lack significant levels of collinearity. DV is assessed using any of the three approaches: Fornell and Larcker (1981), cross-loadings, and the heterotrait-monotrait (HTMT) ratio. In relation to this current paper, the HTMT ratio approach was adopted because it shows superior output given its strength in easily detecting the absence of discriminant validity in basic research. Table 4 showed the model's HTMT ratios.

The rule of thumb for assessing the HTMT ratio is the correlation values among the constructs should be < 0.90 (Wetzels, Odekerken-Schroder & Vab Oppen, 2009). Simply put, DV is achieved if the HTMT values are < 0.90 . Deductively, all constructs' HTMT values were < 0.90 , with the highest value of 0.824 in the link between FP and CA. The results indicated that the constructs were clearly different from each other.

4.2.5 Multicollinearity

Table 3 reported the inner VIF scores to specifically help in testing for possible multicollinearity. Hair et al. (2017) revealed that multicollinearity is evaluated to check whether the path coefficients are bias free. It ensures that the significant levels of possible collinearity among the exogenous variables are minimised drastically. The rule proposes that all VIF values should be < 10 (Pallant & Manuel, 2007); hence, multicollinearity exists when the VIF scores > 10 and this could affect the quality of the PLS-SEM. Deductively, all the VIFs were well below 10 suggesting absence of multicollinearity. More precisely, the

VIFs ranged between 1.783 (IA) and 2.235 (CE) to show absence of multicollinearity among the constructs.

4.2.6 Explanation of Target Endogenous Variable Variance

The study further possible variances in the model's endogenous variables by assessing the following: "predictive accuracy using coefficient of determination (R^2), adjusted R^2 scores, predictive relevance (Q^2) using Stone-Geisser's test, and effect sizes (f^2)" (see Table 5).

4.2.7 Predictive Accuracy

The predictive accuracy of the model was assessed using the coefficient of determination (R^2) and the adjusted R^2 values. R^2 , for instance, represents the collective contributions of the exogenous constructs (CA, CE, IA, RA) to the endogenous construct (FP). Simply put, R^2 suggests a change in FP that is linearly accounted for by the combination of the four internal control practices. Henseler et al. (2009) suggested that R^2 values < 0.29 , $0.29 - 0.67$ and > 0.67 signify weak, moderate, and strong contributions of the exogenous constructs to the endogenous construct.

From Table 5, the R^2 value was 0.674, indicating that combining the four ICPs linearly accounted for approximately 67.4 percent of any change in SMEs' financial performance. Simply put, adopting the four key ICPs (CE, CA, IA, RA) would moderately (67.4%) contribute to any change in the FP of SMEs within the Cape Coast metropolis. Table 5 also reveals an adjusted R^2 of 0.664, indicating that any adjustments in the combined ICPs would account for about 66.4% of any variation in FP; hence, implementing ICPs is key to improving the overall financial performance of the SMEs under study by 66 percent, even when adjusted.

4.2.8 Effect Size (f^2)

Table 5 also reports f^2 of each independent construct by adopting Cohen's (1988) impact criterion. Cohen (1988) suggested that values of 0.02 (small), 0.15 (medium) and 0.35 (large) f^2 s respectively. Based on Cohen's criteria, all exogenous constructs had small f^2 s; however, IA had the highest f^2 value of 0.116, followed by CA (0.113), CE (0.074), and RA (0.065) (see Table 5). This result indicates that when SMEs in Cape Coast implement all four ICPs, internal audits would have the most effect, while risk audits or assessments would have the lowest f^2 .

4.2.9 Predictive Relevance (Q^2)

The model's predictive relevance based on the Stone-Geisser's (Q^2) test was assessed. Roldán and Sanchez-Franco (2012) revealed that Q^2 is analyzed by removing a portion of the data matrix, analyzing the remaining model, and predicting the removed part based on the estimations. Henseler et al. (2009) suggested that Q^2 is achieved if its value is greater than zero for the assigned construct. The rule suggests that $0.02 \leq Q^2 < 0.15$ (weak), $0.15 \leq Q^2 < 0.35$ (moderate) and $Q^2 > 0.35$ (strong) Q^2 . From the model, all Q^2 values were > 0 and > 0.35 , indicating strong predictive relevance. Thus, all the exogenous constructs strongly predicted any change in the endogenous variable.

4.2.10 Significance of Path Coefficients

After meeting the quality assessment of the model, the study reported the hypothesis results. Four hypotheses were developed, and this section presents the outcomes using 5000 bootstraps as proposed by previous scholars (Hair et al., 2017, 2021; Wong, 2019; Memon et al., 2021). The hypotheses were tested to determine whether significant effects existed among causal relationships. In addition, the strengths (i.e., weak, moderate, and strong) and directions (positive or negative) of each relationship are discussed in this section. Table 6 contains five columns representing the structural path, path coefficients (β), t-statistics, p-values, and decision rules for each hypothesis.

The hypotheses were specifically assessed based on the model's t-statistics, with the rule that the values should be > 1.96 ($p < 0.05$) (Hair et al., 2019, 2021; Memon et al., 2021). This rule means that the directional hypothesis is significant and supported if its t-statistic is > 1.96 . This implies that the causal links between exogenous and endogenous constructs are statistically significant. We report and discuss the results of the hypotheses in the following sections. The rule for assessing β values was < 0.35 (weak), $0.35-0.65$ (moderate) and > 0.65 (strong).

5.0 Discussion

5.1 Internal Audit on Financial Performance

The study's first hypothesis (H1) was that internal audit (IA) has a significant positive effect on SMEs' financial performance (FP) on Cape Coast. The following results were obtained after analyzing the data: $t\text{-stat}=3.228$ (>1.96), $p\text{-value}=0.001$, and $\beta=0.260$. Given the t-statistic, the hypothesis was supported, indicating that IA has a significant effect on FP. The β value also indicates that IA had a positive but weak effect on FP. This result specifically means that any unit increment in IA would lead to a significant and positive unit increment in FP by 26 percent. This result implies that SMEs ensuring that their activities are properly audited internally could lead to improved financial performance. As such, SMEs that regularly conduct internal audit exercises to identify possible weaknesses and take required actions play significant roles in improving their financial performance levels.

The study's findings were supported by Babatope and Adewunmi (2019), who revealed that an internal audit is a key dimension of control systems to ensure better financial performance. They concluded that an internal audit is an independent activity that emphasizes regular monitoring and evaluation to ensure that any financial performance constraints are easily identified and addressed. Vento et al. (2020) also reveal that internal audits play a key role in improving firms' financial performance by ensuring proper governance practices and risk control. Similarly, Ezejiofor and Okolocha (2020) concluded that internal audits allow businesses to follow structured and disciplined mechanisms to develop stronger financial and overall corporate performance.

5.2 Control Environment on Financial Performance

The second research hypothesis was also tested, and its output is reported in Table 6. The model's t-stat was 3.001 ($p\text{-value}=0.003$) to signify 'support.' This result means that the control environment (CE) has a significant effect on SME's financial performance (FP). The β value of 0.233 indicates that CE has a positive but weak effect on FP; hence, any change in CE would result in a significant, positive, but weak change in FP of the SMEs in Cape Coast by 23.3 percent. As such, SMEs would experience improved financial performance when they are committed to carrying out set operations, ensuring that employees act at high integrity levels, and taking the required steps to solve or correct problems. Although the study reported a weak effect, it suggests that when SMEs carry out their activities based on set policies and structures, their financial performance levels would improve significantly.

The study's findings were supported by agency theory, which suggests that SMEs that conduct their business activities based on set structures, policies, and practices can attain positive outcomes, including financial performance. This is because a proper control environment ensures that both management and owners and employees of SMEs act ethically and take proper measures to solve problems that could consequently lead to improved financial performance. The theory's assertion is supported by Dharmadasa et al. (2014), Zakaria et al. (2016), and Bentley-Goode et al. (2017), who reveal that the control environment is key to improving firms' internal control systems that invariably promote financial

performance. Mahadeen et al. (2016) concluded that a regular review of set policies or strategies helps address firms' constraints in promoting financial performance.

5.3 Risk Audit on Financial Performance

The final hypothesis that, "risk audit has a significant positive effect on financial performance" was also tested and found a t-stat of 2.406, $p=0.016$, and $\beta=0.214$. The results revealed that the hypothesis was supported, suggesting that risk audits play a significant, positive, but weak role in promoting financial performance. The implication is that when SMEs in Cape Coast regularly assess or audit possible risks, this could lead to improved financial performance. This is because risk is an indispensable occurrence in any business; hence, when SMEs constantly assess it, their performance levels would improve. With risk analysis, SME owners/managers act proactively to identify and address possible risks, including operational, managerial, and financial risks, to minimize their likelihood, impact, or severity of occurrence, thereby improving their financial and overall firm performance in Cape Coast.

The study's result is supported by Mary et al. (2014), who revealed that when firms establish proper measures to constantly identify and assess risks, it could lead to better firm performance. Njeri (2014) also revealed that risk audits focus on assessing the likelihood and severity of risk occurrence to promote positive outcomes. Risk, in most instances, could be devastating if firms fail to proactively detect and address it prior to its occurrence. Hence, ensuring a proper risk audit is crucial for expanding the financial performance of firms, including SMEs (Wanjara, 2014). Kiyieka and Muturi (2018) concluded that internal controls, including risk audits, ensure that firms follow strict policies or rules to quickly detect possible risk to minimize financial malpractices, theft, fraud, and so on to improve financial performance. Deductively, all the hypotheses were supported to indicate the positive and significant effects of internal control practices such as risk audits, control environments, control activities, and internal audits on the financial performance of SMEs in Cape Coast. Based on the model's t-statistics, control activities (CA) had the highest significant effect, followed by internal audit (IA), control environment (CE) and risk audit (RA) respectively. The results revealed that, although all the ICPs had weak significant effects on the FP of SMEs, CA had better effects than IA, CE, and RA. Hence, SMEs on Cape Coast can attain a higher FP when more attention is given to CA rather than the others.

5.4 Control Activities on Financial Performance

Additionally, control actions (CA) have a significant impact on the financial performance (FP) of SMEs. The t-stat in Table 6 is 3.417 ($p 0.05$), indicating that the hypothesis is "supported." This finding indicates that CA significantly influences the financial performance of SMEs on Cape Coast. The model's result of 0.274 showed that CA had a favorable but marginally significant impact on FP. According to this finding, CA is responsible for approximately 27.4% of any change in FP; as a result, FP changes considerably for every unit change in CA. Control activities ensure that SMEs take the required actions to address possible operational challenges, establish proper control measures, spend limited funds and other resources judiciously and regularly review existing policies and procedures and by so doing, thereby improving their financial performance levels.

Existing studies support this finding, indicating that control activities play a significant role in expanding firms' financial performance (Amudo & Inanga, 2009; Nyakundi et al., 2014; Rosman et al., 2016). For instance, Rosman et al. (2016) revealed that control activities, as part of internal controls, ensure proper budgetary allocation to attain better financial performance. Eniola and Akinselure (2016) also indicated that control activities that emphasize the implementation of proper systems to monitor how management directives or policies are complied with play a significant role in improving financial performance. Agency

theory asserts that when firms introduce proper control activities to detect and avoid financial mismanagement by employees, this could lead to improved financial performance.

6.0 CONCLUSIONS AND IMPLICATIONS

6.1 Conclusions

According to the study, internal audits play a small but substantial role in the financial success of SMEs on Cape Coast. In general, this result is supported by agency theory and previous research. This led to the conclusion that internal audit is a crucial marker of the financial success of SMEs in the Cape Coast in Ghana's Central region.

Additionally, the study found that the financial performance of SMEs is significantly improved, but only slightly, by control action. Agency theory contends that organizations that use control activities ensure that corrective actions are taken to solve operational and financial challenges, which ultimately leads to improved financial performance. In conclusion, the more control actions SMEs employ as part of their internal controls, the better their financial performance.

Regarding objective three, the research found that the control environment has a favorable but substantial impact on the financial performance of SMEs on Cape Coast. The findings were broadly supported by prior research and agency theory, which led to the conclusion that a controlled environment is crucial for enhancing the financial performance of SMEs in Cape Coast, Ghana.

Finally, the study discovered that risk audits have a considerable impact on SMEs' financial performance. This effect was also found to be helpful but not very powerful. The study's findings were supported by pertinent literature that demonstrated how crucial risk audits are for firms to identify, evaluate, and reduce risk occurrence to achieve successful outcomes. As a result, the researcher concluded that a risk audit is a critical component of internal control that supports SMEs' financial performance.

6.2 Managerial Implications

The study recommended that policymakers, including the government and agencies like the Ghana Enterprise Agency (GEA), should revise and/or develop comprehensive frameworks to ensure proper internal audit within the scope of SMEs in Ghana, especially Cape Coast. These policies should be properly enforced to ensure owner-managers' compliance to help them promote their financial performance levels. Owner managers, on the other hand, should adopt appropriate measures or procedures to properly audit their activities to attain better financial performance. For instance, owner-managers should ensure that their businesses' financial accounts and other operational activities are well monitored and assessed.

The study also suggested that owner-managers of SMEs in Cape Coast and other regions in Ghana should emphasize control activities to expand their financial performance levels. For instance, owner-managers should ensure that proper corrective actions are undertaken to address possible operational issues. They also need to institute proper control procedures and measures to ensure that funds are well spent and assets are properly protected. Owner-managers should ensure that existing policies, strategies, and business guidelines are regularly reviewed to meet current trends to safeguard business operations and associated overall SMEs' financial performance.

The study's findings support agency theory by demonstrating that internal audits, control actions, a strong control environment, and risk audits play crucial roles in improving the financial performance of SMEs in Cape Coast, Ghana. Internal audits and control actions act as monitoring mechanisms that ensure managers' actions align with the owners' interests, while a controlled environment reduces the risk of

opportunistic behaviour. Risk audits help manage differences in risk preferences between principals and agents by identifying and mitigating risks. Together, these elements contribute to better financial outcomes for SMEs, aligning with the core principles of agency theory.

6.3 Data Availability Statement

The data that support the findings of this current paper are available on request from the corresponding author, [Osman Light]. The data are not publicly available due to [restrictions e.g. their containing information that could compromise the privacy of research participants].

6.4 Author Contributions Statement

Professor Daniel Agyapong worked on the conception and design, Osman Light worked on the analysis and interpretation of the data; Dorcas Bawaa worked on the drafting of the paper, Patricia Otabil worked on revising it critically for intellectual content; and the final approval of the version to be published was done by Professor Daniel Agyapong and Osman Light; and that all authors agree to be accountable for all aspects of the work.

6.5 Disclosure of Interest

Authors have no conflict of interest in this work.

6.6 Declaration of Funding

There was no funding for this work.

7.0 REFERENCES

1. Ab Hamid, M. R., Sami, W., & Sidek, M. M. (2017, September). Discriminant validity assessment: Use of Fornell & Larcker criterion versus HTMT criterion. In *Journal of Physics: Conference Series* (Vol. 890, No. 1, p. 012163). IOP Publishing.
2. Abdeljawad, I., Oweidat, G. A., & Saleh, N. M. (2020). Audit committee versus other governance mechanisms and the effect of investment opportunities: evidence from Palestine. *Corporate Governance: The International Journal of Business in Society*, 20(3), 527-544.
3. Abiodun, E. A. (2020). Internal Control Procedures and Firm's Performance. *International Journal of Scientific & Technology Research*, 9(2), 6407-6415.
4. Abu Hamour, A. M., Massadeh, D. D. M., & Bshayreh, M. M. (2021). The impact of the COSO control components on the financial performance in the Jordanian banks and the moderating effect of board independence. *Journal of Sustainable Finance & Investment*, 1-15.
5. Adams, M. B. (1994). Agency theory and the internal audit. *Managerial auditing journal*, 9(8), 8-12. <https://doi.org/10.1108/02686909410071133>.
6. Adesunkanmi, O. S., & Oluwasola, A. F. (2022). Moderating effect of internal control activities on risk assessment and performance of Insurance Companies in Nigeria. *Gusau International Journal of Management and Social Sciences*, 5(1), 18-18.
7. Adom, P. K., Amakye, K., Doh, E., & Anku, R. (2014). SMEs record keeping in Ghana: Has VAT made it better?. *International Journal of Economics and Financial Issues*, 4(1), 152-169.
8. Adomako, S., Danso, A., & Ofori-Damoah, J. (2016). The moderating influence of financial literacy on the relationship between access to finance and firm growth in Ghana. *Venture Capital*, 18(1), 43-61 (2016). doi:<https://doi.org/10.1080/13691066.2015.1079952>.
9. Adu-Frimpong, A. A. (2016). *Evaluating the effects of Internal Control in the Operations of financial institutions: A Case Study of Bond Savings and Loans* (Doctoral dissertation, Kwame Nkrumah University of Science and Technology, Ghana).

10. Agbenyo, W., Jiang, Y., & Cobblah, P. K. (2018). Assessment of government internal control systems on financial reporting quality in Ghana: A case study of Ghana revenue authority. *International Journal of Economics and Finance*, 10(11), 40-50.
11. Agyapong, D. (2020). Analyzing financial risks in small and medium enterprises: evidence from the food processing firms in selected cities in Ghana. *International Journal of Entrepreneurial Behavior & Research*, 27(1), 45-77. <https://doi.org/10.1108/IJEER-05-2020-0269>.
12. Agyapong, D., & Attram, A. B. (2019). Effect of owner-manager's financial literacy on the performance of SMEs in the Cape Coast Metropolis in Ghana. *Journal of Global Entrepreneurship Research*, 9(1), 1-13.
13. Ahmed, A. M., & Muhammed, A. A. (2018). Internal control systems & its relationships with the financial performance in telecommunication companies—a case study of Asiacell. *International Journal of Scientific and Technology Research*, 7(11), 82-88.
14. Akinleye, G. T., & Kolawole, A. D. (2020). Internal controls and performance of selected tertiary institutions in Ekiti state: a committee of sponsoring organisations (COSO) framework approach. *International Journal of Financial Research*, 11(1), 405-416.
15. Al_Khero, I. M. M., Janudin, S. E. B., Abdelhakeem, A., & Ahmed, K. (2019). The impact of financial engineering on the financial performance in Iraqi Banks. *Global Journal of Accounting and Finance*, 2, 33-46.
16. Alabdullah, T. T. Y. (2021). New Insights to Investigate the Impact of Internal Control Mechanisms on Firm Performance: A Study in Oman. *Riset Akuntansi dan Keuangan Indonesia*, 6(2), 205-214.
17. Al-ahdal, W. M., Alsamhi, M. H., Tabash, M. I., & Farhan, N. H. (2020). The impact of corporate governance on financial performance of Indian and GCC listed firms: An empirical investigation. *Research in International Business and Finance*, 51, 101083.
18. Alfartoosi, A., Jusoh, M. A., Mohsin, H. J., & Yas, H. (2021). The effect of e-accounting and mediated by internal control system on the performance of SME in Iraq. *American Journal of Business and Operations Research*, 3(1), 5-38.
19. Al-Khadash, H. A., Jireis, J. R., & Embassy-Jordan, U. (2017). COSO enterprise risk management implementation in Jordanian commercial banks and its impact on financial performance. *Int J Bus Manage*, 6(3), 208.
20. Al-Maskari, A., Al-Maskari, M., Alqanoobi, M., & Kunjumammed, S. (2019). Internal and external obstacles facing medium and large enterprises in Rusayl Industrial Estates in the Sultanate of Oman. *Journal of Global Entrepreneurship Research*, 9(1), 1-14.
21. Al-Waeli, A. J., Hanoon, R. N., Ageeb, H. A., & Idan, H. Z. (2020). Impact of accounting information system on financial performance with the moderating role of internal control in Iraqi industrial companies: An analytical study. *Jour of Adv Research in Dynamical & Control Systems*, 12(8), 246-261.
22. Al-Waeli, A. J., Ismail, Z., & Khalid, A. A. (2020). The impact of environmental costs on the financial performance of industrial companies in Iraq. *International Journal of Management (IJM)*, 11(10), 1955-1969.
23. Amissah, A. (2017). *Effect of internal control systems on performance of companies in the insurance industry in Ghana*. Doctoral dissertation, University of Cape Coast, Ghana.
24. Amran, N. A., Malek, M., Ismail, M. S., & Mohamad Nor, M. N. (2023). A Review on Risk-Based Audit Approach: Malaysian Public Sector's Perspective. *IPN Journal of Research and Practice in*

- Public Sector Accounting and Management*, 13(2), 85-108.
25. Asare, A. (2014). Challenges affecting SME's growth in Ghana. *OIDA International Journal of Sustainable Development*, 07(06), 23–28.
 26. Asiedu, M. (2016). SME owners' perception and innovation practices in a developing nation context: a descriptive study. *Journal of Advocacy, Research and Education* 2(2), 113-119.
 27. Asiligwa, M., & Rennox, G. (2017). The Effect of internal controls on the financial performance of commercial banks in Kenya. *Journal of Economics and Finance*, 8(3), 92-105.
 28. Aspal, P. K., & Dhawan, S. (2016). Camels rating model for evaluating financial performance of banking sector: A theoretical perspective. *International Journal of System Modeling and Simulation*, 1(3), 10-15.
 29. Bayyoud, M., & Sayyad, N. A. (2015). The impact of internal control and risk management on banks in Palestine. *International Journal of Economics, Finance and Management Sciences*, 3(3), 156-161.
 30. Benli, V. F., & Celayir, D. (2014). Risk based internal auditing and risk assessment process. *European Journal of Accounting Auditing and Fianance Research*, 2(7), 1-16.
 31. Bentley-Goode, K. A., Newton, N. J., & Thompson, A. M. (2017). Business strategy, internal control over financial reporting, and audit reporting quality. *Auditing: A Journal of Practice & Theory*, 36(4), 49-69.
 32. Best, J. W., & Kahn, J. V. (2016). *Research in education*. Pearson Education India.
 33. Boateng, S., & Poku, K. O. (2019). Accessing finance among women-owned small businesses: Evidence from lower Manya Krobo municipality, Ghana. *Journal of Global Entrepreneurship Research*, 9(1), 5-19.
 34. Cape–Coast Metropolitan Assembly (CCMA). *Annual Report*. Cape Coast Ghana: CCMA.
 35. Caselli, S., & Negri, G. (2018). Theoretical foundation of private equity and venture capital. *Private equity and venture capital in Europe*, 19-25.
 36. Chalmers, K., Hay, D., & Khlif, H. (2018). Internal control in accounting research: A review. *Journal of Accounting Literature*, 42(1), 80-103. <https://doi.org/10.1016/j.acclit.2018.03.002>.
 37. Channar, Z. A., Khan, M., & Shakri, I. H. (2015). Internal control effectiveness & its relationship with financial performance. *IBT Journal of Business Studies (JBS)*, 2(2), 1-18.
 38. Chen, Y., Lin, B., Lu, L., & Zhou, G. (2020). Can internal audit functions improve firm operational efficiency? Evidence from China. *Managerial Auditing Journal*, 35(8), 1167-1188. <https://doi.org/10.1108/MAJ-01-2019-2136>.
 39. Cohen, J. (1988). Set correlation and contingency tables. *Applied psychological measurement*, 12(4), 425-434.
 40. Committee of Sponsoring Organizations of the Treadway Commission. (2009). *COSO Internal control-integrated framework: Guidance on monitoring internal control systems*, Volume III: Examples. COSO.
 41. Connelly, L. M. (2014). Ethical considerations in research studies. *Medsurg Nursing*, 23(1), 54-56.
 42. Cooper, D. R., Schindler, P. S., & Sun, J. (2006). *Business research methods* (Vol. 9, pp. 1-744). New York: Mcgraw-hill.
 43. Creswell, J. W. (2014). *A concise introduction to mixed methods research*. SAGE publications.
 44. Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
 45. Dickins, D., & Fay, R. G. (2017). COSO 2013: Aligning internal controls and principles. *Issues in*

- Accounting Education*, 32(3), 117-127.
46. Dorsey, A. (2015). COSO 2013: the path forward: organizations miss out on adding value when they practice" check the box" compliance. *Internal Auditor*, 72(4), 71-73.
 47. Dubihlela, J., & Nqala, L. (2017). Internal controls systems and the risk performance characterizing small and medium manufacturing firms in the Cape Metropole. *International Journal of Business and Management Studies*, 9(2), 87-103.
 48. Ejoh, N., & Ejom, P. (2014). The impact of internal control activities on financial performance of tertiary institutions in Nigeria. *Journal of Economics and Sustainable Development*, 5(16), 133-143.
 49. Eniola, O. J., & Akinselure, O. P. (2016). Effect of internal control on financial performance of firms in Nigeria (a study of selected manufacturing firms). *Journal of Business and Management*, 18(10), 80-85.
 50. Ezejiofor, R. A., & Okolocha, C. B. (2020). Effect of internal audit function on financial performance of commercial banks in Nigeria. *Journal DOI*, 6(7), 1-18.
 51. Ezejiofor, R. A., Ebubechukwu, J. O., & Ndum, N. B. (2021). Effect of internal control on execution of capital project in Nigeria: Evidence from Anambra State Public Sector. *Research Journal of Management Practice* | ISSN, 2782, 7674.
 52. Farooq, M., Noor, A., & Ali, S. (2021). Corporate governance and firm performance: empirical evidence from Pakistan. *Corporate Governance: The International Journal of Business in Society*, 22(1), 42-66. <https://doi.org/10.1108/CG-07-2020-0286>.
 53. Fatah, N. A., Hamad, H. A., & Qader, K. S. (2021). The Role of Internal Audit on Financial Performance Under IIA Standards: A Survey Study of Selected Iraqi Banks. *Qalaai Zanist Journal*, 6(2), 1028-1048.
 54. Fontrodona, J., & Sison, A. J. G. (2006). The nature of the firm, agency theory and shareholder theory: A critique from philosophical anthropology. *Journal of Business Ethics*, 66(1), 33-42.
 55. Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. New York, USA: Sage.
 56. Hagin, C., & Caesar, L. D. (2021). The antecedents of success among small-and medium-sized enterprises: evidence from Ghana. *Journal of Global Entrepreneurship Research*, 1-19.
 57. Hair Jr, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2017). *Advanced issues in partial least squares structural equation modeling*. saGe publications.
 58. Hair, J. F., Astrachan, C. B., Moisescu, O. I., Radomir, L., Sarstedt, M., Vaithilingam, S., & Ringle, C. M. (2021). Executing and interpreting applications of PLS-SEM: Updates for family business researchers. *Journal of Family Business Strategy*, 12(3), 100392.
 59. Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European business review*, 31(1), 2-24.
 60. Hanoon, R. N., Khalid, A. A., Hanani, N., Rapani, A., Aljajawy, T. M., & Alwaeli, A. J. (2021). The impact of internal control components on the financial performance, in the Iraqi banking sector. *Journal of Contemporary Issues in Business and Government*, 27(3), 2518.
 61. Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In *New challenges to international marketing*. Emerald Group Publishing Limited.
 62. Ibrahim, S., Diibuzie, G., & Abubakari, M. (2017). The impact of internal control systems on financial performance: The case of health institutions in upper west region of Ghana. *International Journal of*

- Academic Research in Business and Social Sciences*, 7(4), 684-696.
63. International Labour Organisation (2023). *MSMEs: The backbone of economies and the world of work*. Geneva: International Labour Organisation
64. International Trade Centre (2020). Promoting SME competitiveness in Africa: Data for de-risking investment. ITC, Geneva
https://www.intracen.org/uploadedFiles/intracenorg/Content/Publications/Africa_SME%20web.pdf.
65. International Trade Centre. (2016). *SME competitiveness in Ghana: Alliances for Action*. Geneva: ITC.
66. Iqbal, S., Nawaz, A., & Ehsan, S. (2019). Financial performance and corporate governance in microfinance: Evidence from Asia. *Journal of Asian Economics*, 60, 1-13.
67. Jakub, S., Viera, B., & Eva, K. (2015). Economic Value Added as a measurement tool of financial performance. *Procedia Economics and Finance*, 26, 484-489.
68. Jatana, C. (2022). Corporate governance, CEO compensation, and corporate performance: evidence from India. *Corporate Governance: The International Journal of Business in Society*, (ahead-of-print).
69. Jovetic, S., Ljubisavljević, S., & Karapavlović, N. (2018). Effects of internal control on the financial indicators of companies. *Explicator*.
70. Kabuye, F., Bugambiro, N., Akugizibwe, I., Nuwasiima, S., & Naigaga, S. (2019). The influence of tone at the top management level and internal audit quality on the effectiveness of risk management practices in the financial services sector. *Cogent Business & Management*, 6(1), 1704609.
71. Kabuye, F., Kato, J., Akugizibwe, I., & Bugambiro, N. (2019). Internal control systems, working capital management and financial performance of supermarkets. *Cogent Business & Management*, 13(2), 191-204. <https://doi.org/10.1108/09675421211254876>.
72. Kamau, J. (2016). *Effects of internal control practices on financial performance of Small and Medium Enterprises in Nairobi County*. Doctoral dissertation, University of Nairobi, Kenya.
73. King-Aidoo, G. (2020). *Proper accounting record keeping and performance of SMEs within the Cape Coast Metropolis*. Doctoral dissertation, University of Cape Coast, Ghana.
74. Kinyua, J. K., Gakure, R., Gekara, M., & Orwa, G. (2015). Effect of internal control environment on the financial performance of companies quoted in the Nairobi Securities Exchange. *International Journal of Innovative Finance and Economics Research*, 3(4), 29-48.
75. Kiyieka, E. N., & Muturi, W. (2018). Effect of internal controls on financial performance of deposit taking saving and credit cooperative societies in Kisii county, Kenya. *International Journal of Social Sciences and Information Technology*, 4(10), 30-40.
76. Kizil, C., Kizil, F., & Dolaz, B. (2021). Reconsidering the Role of Internal Controls in the COVID-19 Era. *The Institute for Internal Controls (IIC) e-Magazine*, 2(2), 9-19.
77. Koutoupis, A. G., & Pappa, E. (2018). Corporate governance and internal controls: a case study from Greece. *Journal of governance & regulation*, (7, Iss. 2), 91-99.
78. Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, 30(3), 607-610.
79. Lai, S. C., Li, H., Lin, H., & Wu, F. (2017). The influence of internal control weaknesses on firm performance. *Journal of Accounting and Finance*, 17(6), 82-95.
80. Maduekwe, C. C., & Kamala, P. (2016). Performance measurement by small and medium enterprises in Cape Metropolis, South Africa. *Problems and Perspectives in Management*, 14(2), 46-55.

81. Mahadeen, B., Al-Dmour, R. H., Obeidat, B. Y., & Tarhini, A. (2016). Examining the effect of the Organization's Internal Control System on Organizational Effectiveness: A Jordanian empirical study. *International Journal of Business Administration*, 7(6), 22-41.
82. Mary, M., Albert, O., & Byaruhanga, J. (2014). Effects of internal control systems on financial performance of sugarcane out grower companies in Kenya. *IOSR Journal of Business and Management*, 16(12), 2319-7668.
83. Mathew, K. K. (2020). Impact of internal control procedures and monitoring on financial performance of Saccos in Kenya. A case of Tharaka Nithi County. *Journal Homepage: <http://ijmr.net.in>*, 8(08).
84. McColgan, P. (2001). Agency theory and corporate governance: a review of the literature from a UK perspective. *Department of Accounting and Finance working paper*, 6, 0203.
85. McKinsey and Company (2022). *Beyond financials: Helping small and medium-size enterprises thrive*. Chicago: McKinsey and Company
86. Meckling, W. H., & Jensen, M. C. (1976). Theory of the Firm. *Managerial Behavior, Agency Costs and Ownership Structure*.
87. Ministry of Trade and Industry (2020). Prospect of Small and Medium-sized businesses in Ghana. Accra, Ghana.
88. Modern Ghana (2024). *SMEs development, panacea to graduate unemployment menace in Ghana*. Accra: Modern Ghana
89. Mrima, R., & Ronald, M. (2022). Assessment of Internal Control Practices on Financial Performance of State Corporations in Kenya. *International Journal of Finance and Accounting*, 7(4), 35-54.
90. Mumba, F. N., & Wekesa, M. (2020). Effect of Internal Control on Financial Performance of Star Rated Hotels at the Kenyan Coast. *International Journal of Advanced Research and Review*, 5(5), 101-122.
91. Nam, P. H., Ngoc Thach, N., Van Tuan, N., Nhat, N. M., & Nhung, P. T. H. (2022). Does internal control affect bank profitability in Vietnam? A Bayesian Approach. In *International Econometric Conference of Vietnam* (pp. 219-238). Springer, Cham.
92. Namazi, M. (2013). Role of the agency theory in implementing managements control. *Journal of Accounting and taxation*, 5(2), 38-47.
93. Oduro, S. (2019). Impact of Innovation Types on SMEs' Performance in the Cape Coast Metropolis of Ghana. *Journal of Entrepreneurship and Innovation in Emerging Economies*, 5(2), 110-127.
94. Organisation for Economic Co-Operation and Development (OECD) (2020). *New OECD Outlook on the Global Economy*. Paris, France: OECD.
95. Osipova, E. (2015). Establishing cooperative relationships and joint risk management in construction projects: Agency theory perspective. *Journal of management in engineering*, 31(6), 05014026.
96. Otoo, I. C., Asumah, S., Peprah-Amankona, G., & Andzie, A. T. (2021). Impact of Internal Control Systems on Performance of Universal Banks: Evidence from Ghana. *Journal of Financial Risk Management*, 10(4), 473-486.
97. Ouko, J. K., & Atheru, G. (2022). Internal Control System and Financial Performance of Deposit Taking Savings and Credit Co-Operative Societies in Makueni County, Kenya. *International Journal of Current Aspects in Finance, Banking and Accounting*, 4(1), 1-20.
98. Prasad, N., Hay, D., & Chen, L. (2021). Internal audit use, earnings quality and external audit fees. *Pacific Accounting Review*, 33(4), 474-504. <https://doi.org/10.1108/PAR-04-2020-0050>.
99. Quartey, P., Turkson, E., Abor, J. Y., & Iddrisu, A. M. (2017). Financing the growth of SMEs in

- Africa: What are the constraints to SME financing within ECOWAS?. *Review of development finance*, 7(1), 18-28.
100. Rapani, N. H. A., & Malim, T. (2020). The correlation between internal control components and the financial performance of iraqi banks a literature review. *Jour of Advance Research in Dynamical and Control Systems*, 12(4), 957-966.
101. Rasoolimanesh, S. M. (2022). Discriminant validity assessment in PLS-SEM: A comprehensive composite-based approach. *Data Analysis Perspectives Journal*, 3(2), 1-8.
102. Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2009). Measuring organizational performance: Towards methodological best practice. *Journal of management*, 35(3), 718-804.
103. Rittenberg, L. E. (2013). COSO 2013 a reflection of the times: the long-awaited Internal Control-Integrated Framework update aims to help organizations better design and implement controls, with an eye toward today's business challenges. *Internal Auditor*, 70(4), 60-66.
104. Roldán, J. L., & Sánchez-Franco, M. J. (2012). Variance-based structural equation modeling: Guidelines for using partial least squares in information systems research. In *Research methodologies, innovations and philosophies in software systems engineering and information systems* (pp. 193-221). IGI global.
105. Rosman, R. I., Shafie, N. A., Sanusi, Z. M., Johari, R. J., & Omar, N. (2016). The effect of internal control systems and budgetary participation on the performance effectiveness of non-profit organizations: Evidence from Malaysia. *International Journal of Economics and Management*, 10(2), 523-539.
106. Roussy, M., Barbe, O., & Raimbault, S. (2020). Internal audit: from effectiveness to organizational significance. *Managerial Auditing Journal*, 35(2), 322-342. <https://doi.org/10.1108/MAJ-01-2019-2162>.
107. Sarens, G., Abdolmohammadi, M. J., & Lenz, R. (2012). Factors associated with the internal audit function's role in corporate governance. *Journal of Applied Accounting Research*, 13(2), 191-204. <https://doi.org/10.1108/09675421211254876>.
108. Sarstedt, M., Ringle, C. M., & Hair, J. F. (2021). Partial least squares structural equation modeling. In *Handbook of market research* (pp. 587-632). Cham: Springer International Publishing.
109. Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*. Pearson education.
110. Statista (2023). *Overview of the economic contribution of SMEs in Ghana 2023*. Statista
111. Subedi, D. (2016). Explanatory sequential mixed method design as the third research community of knowledge claim. *American Journal of Educational Research*, 4(7), 570-577.
112. Tetteh, L. A., Kwarteng, A., Aveh, F. K., Dadzie, S. A., & Asante-Darko, D. (2022). The impact of internal control systems on corporate performance among listed firms in Ghana: the moderating role of information technology. *Journal of African Business*, 23(1), 104-125.
113. Thuan, P. Q., Thuy, H. X., Quyen, P. T. H., Truc, T. T. T., & Hien, N. T. D. (2020). Impact the Internal control of the credit operations on the credit effectiveness of commercial banks: A case of HCMC and Dong Nai Province. *Academy of Strategic Management Journal*, 19(6), 1-11.
114. Udeh, I. (2020). Observed effectiveness of the COSO 2013 framework. *Journal of Accounting & Organizational Change*.
115. Umar, H., & Dikko, M. U. (2018). The effect of internal control on performance of commercial banks in Nigeria. *International Journal of Management Research*, 8(6), 13-32.

116. Vu, Q., & Nga, N. T. T. (2022). Does the implementation of internal controls promote firm profitability? Evidence from private Vietnamese small-and medium-sized enterprises (SMEs). *Finance Research Letters*, 45, 102178.
117. Wetzels, O. S., & Odekerken-Schr, G. van Oppen, A. (2009). *Using PLS path modeling for assessing hierarchical construct models: Guidelines and empirical illustration*, 177-95.
118. Wipulanusat, W., Panuwatwanich, K., Stewart, R. A., & Sunkpho, J. (2020). Applying mixed methods sequential explanatory design to innovation management. In *The 10th International Conference on Engineering, Project, and Production Management* (pp. 485-495). Springer, Singapore.
119. Wong, K. K. K. (2019). *Mastering partial least squares structural equation modeling (PLS-Sem) with Smartpls in 38 Hours*. IUniverse.
120. World Bank (2020). *Enterprise survey*. Washington, D.C.: World Bank
121. World Bank (2022). *Quest to better understand the relationship between SME finance and job creation: Insights from new report*. Washington, D.C.: World Bank
122. World Economic Forum (2024). *These charts show which businesses are driving the EU economy*. Geneva: World Economic Forum
123. Zakaria, K. M., Nawawi, A., & Salin, A. S. A. P. (2016). Internal controls and fraud—empirical evidence from oil and gas company. *Journal of Financial crime*, 23(4), 1154-1168. <https://doi.org/10.1108/JFC-04-2016-0021>.
124. Zhou, H., Chen, H., & Cheng, Z. (2016). Internal control, corporate life cycle, and firm performance. In *The Political Economy of Chinese Finance*. Emerald Group Publishing Limited.