

# **Auditing Services and SME Financial Performance: The Moderating Role of Information Technology**

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## **Abstract**

According to numerous studies, small and medium businesses are more financially limited than large businesses due to the lack of audited financial accounts. This study investigates the effects of Audit services on SMEs' financial performance. As a result, to obtain the necessary data for the project, the study used a quantitative strategy and a survey method. The study's participants are registered SMEs from the Registrar General's Department. The sample size was determined using a list of 6,000 registered small and medium businesses. The SMEs were chosen through a systematic selection process and were given questionnaires. The PLS-SEM Software was used to analyse the data collected from the respondents. The findings indicate that the use of audit services results in the avoidance and detection of financial irregularities, resulting in an improvement in SMEs' financial performance. The study also found a positive relationship between information technology and the financial performance of SMEs.

**Keywords:** Audit Services, Small and Medium Scale Enterprise (SME), Financial Performance, information technology.

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## 1 Introduction

Small and medium-sized enterprises (SMEs) are non-subsidary, independent firms that employ fewer than a given number of employees. Small and medium-sized enterprises (SMEs) are businesses that maintain revenue or several employees below a certain threshold. Each country defines what constitutes a small and medium-sized enterprise (SME). Though small and medium in size, they play an essential role in the economy. Their contribution to the growth of national economies is very significant. SMEs in Ghana have also been noted to provide about 85 per cent of manufacturing employment, contribute about 70 per cent to Ghana's GDP, and therefore have catalytic impacts on economic growth, income, and work and help shape innovation (Amoah & Amoah, 2018). As a result, there will be the need for almost every SME to undertake audit services to assist them present financial statements that may show an accurate and fair view or are free from material misstatement. Since their operations are crucial to the economy, it required to be audited to avoid fraud and errors, which will aid bring a better financial performance. SMEs for the past decades have been struggling to stand on their feet as they are not undertaking audit services. Numerous studies have discussed that small and medium enterprises are financially more constrained than large firms due to the lack of audited financial statements, which prevents SMEs from securing loans from investors and banks. For example, Bongini *et al.* (2021) noted that small firms face information opacity, such as the inability to provide financial information. When the firm is small, it is owned and operated by the entrepreneur himself. There is no legal requirement to report financial information regularly; hence, many firms do not maintain audited financial accounts. Audited financial statements are instrumental in accessing credit from financial institutions. Often, banks require audited financial statements before granting credit. Another problem is that with the reduced information risk arising from audited financial statements, potential lending institutions may also offer low-interest rates. In other words, audited financial statements improve borrowers' credibility and reduce lenders' risk. However, a lack of auditing prevents financial institutions from offering Lower interest rates on business loans to SMEs. When a company does not have audited financial statements, they assume that giving out loans to such companies will be high risk hence the need to charge higher interest rates.

Lack of Auditing also prevents better preparation for business growth leading to the collapse of most SMEs (Nazarova, et al., 2020). Auditing is helpful for businesses. The tax authorities accept audited accounts for the assessment of taxes.

Audit reduces avenues for fraud by checking the internal control system. Frequent audit by SMEs helps to ascertain whether or not internal controls are properly functioning, reducing route for embezzlement and fraudulent activities. Although the audit process is not designed to detect fraud, there is no doubt that in the absence of an audit, fraud and errors are more likely to occur and go undetected without any independent examination (Majors & Bonner, 2019).

SMEs' adoption of information technology in their operations will help create a significant impact on their performance, move away from the traditional practice model, and develop new ways of operating. However, there is a need to investigate how Information Technology (I.T.) will help promote efficiency in delivering audit services to SMEs in Ghana. This gap leads to the research questions below: what is the effect of audit services on the financial performance of small and medium enterprises: moderating the impact of information technology? The study's objective is to analyse the effect of internal controls in audit practices on the financial performance of SMEs in Ghana. In addition, the effect of information technology on the financial performance of SMEs and the moderating effect of information technology on financial performance will be looked at.

According to Salehi (2010), the need for auditing stems from the possibility of a conflict of interest between stakeholders and managers.

Beyanga (2011) stated that an effective audit process would help reduce overheads and improve efficiency. It is significant to note that the audit services, whether internal or external have a positive effect on financial performance. The auditor's report, recommendations, disclosures, and final opinion have an immense impact on the current and future financial performance indicators. Audit service influences short-term corrective actions to conform to approved processes, policies, and strategic plans. Ado, Rashid, Mustapha,

and Ademola (2020), examine the effect of audit quality on the financial performance of firms in Nigeria. Their results show that auditor size and auditor independence have significant impacts on the financial performance of cement firms in Nigeria. Ado, Rashid, Mustapha & Ademola (2020) researched the direct influence of audit quality on the financial performance of listed companies in Nigeria. They found a positive and significant relationship between audit services and financial performance.

Amahalu (2020) studied the effect of audit quality on the financial performance of quoted conglomerates in Nigeria. They found that at the 5% level of significance, the results demonstrated that audit committee size, independence, and financial expertise positively affect the return on assets. Finally, Hazaea, Tabash, Zhu, Khatib, and Farhan (2021) examine Yemeni commercial banks' Internal audit and Financial Performance. They found a significant and positive relationship between audit services and financial performance.

Agbaje, Bojuwon, and Abidoye, (2017) studied the impact of financial accounting and Auditing on SMEs' financial performance.

Olasupo, (2016) examined the inadequacy of financial records and its effect on the Auditing of Small and Medium Scale Enterprises. Findings from the study reveal that the lack of a standard accounting system and detailed financial records has been a significant impediment to the Statutory Auditing of many SMEs. The above researchs have not researched into the effect of auditing on the financial performance of SME. These create a research gap and this study intend to fill that gap. The remainder of the study is structured as follows. The next section reviews the relevant theory and empirical literature which support the study. This is followed by the formulation of a conceptual framework. The subsequent section explains the methodology of the study. The subsequent part consists of the presentation of empirical findings and discussions. The implication of the study and conclusion form the final sections.

## **2 Literature Review**

Understanding the nature of exchange rate volatility and its impact on various economic indicators has been the subject of study for a long time, especially since the floating exchange rate era. For example, Hodrick and Srivastava (1984) study the risk and return characteristics and the existence of risk premia in the foreign exchange markets of several currencies. They find evidence of heteroskedasticity in their model and find that the expected risk premium is a nonlinear function of forward premium. Aghion, Bacchetta, Ranciere and Rogoff (2009), Habib, Mileva and Stracca (2017), and others find that exchange rate volatility can have a significant impact on the productivity growth of an economy. Mees and Rogoff (1983) study various empirical exchange rate models of the seventies and investigate if those models fit out of sample data. Edwards and Levy-Yeyati (2003) report countries with more flexible exchange rates have higher growth rates, while Ghosh, Gulde, and Wolf (2003) find little evidence to support the claim. Using only 12 countries with very long data sets Eichengreen and Leblang (2003) find an inverse relationship between the two. There are good reasons for foreign exchange volatility to affect economic growth. As is well established in the finance literature, volatility causes uncertainty and uncertainty causes a reduction in investments and an increase in the required rate of return. Kappler, Reisen, Schularick and Turkisch (2012) find a very limited effect on productivity when they studied the effect of real and nominal appreciations of foreign currencies of 128 developing and advanced economies between 1960 to 2008.

There have been many studies on this subject from various perspectives. Some more recent studies find a significant relationship between exchange rate volatility and economic growth. Schnabl (2008) studies the exchange rate volatility and growth in 41 small economies at the EMU periphery and finds a negative relationship between exchange rate volatility and growth for those countries. Using the firm-level data set, Demir (2013) examines the effects of exchange rate volatility on the growth of domestic versus foreign and publicly traded versus non-trade manufacturing firms and finds a significant growth reducing effect on manufacturing firms. Another study (Sabina, Manyo and Ugochukwu, 2017) looks at the impact of

exchange rate volatility on the economic growth of Nigeria during the period of 1981-2015 and finds that the volatility has negative and significant impact on the Nigerian economy.

Using a panel data of 194 countries for the period of 1995-2019, Ramoni-Perazzi and Romero (2022) investigates the effect of exchange rate volatility on the economic growth and find a significant negative effect of exchange rate volatility on the economic growth. Another study by Barguelli, Ben-Salha and Zmami (2018) investigates the impact of exchange rate volatility on economic growth. Using a sample of 45 developing and emerging countries over the period of 1985-2015, the study finds that nominal and real exchange rate volatility has a negative impact on economic growth.

Many recent studies also investigate the effects of exchange rate volatility on exports, imports and trade balances in different countries and regions. We look at the literature on the effect of exchange rate volatility on exports, imports and trade balances because exports, imports and trade balances have direct and indirect impact on the economic growth of a country. For example, Bahmani-Oskooee and Arize (2022) study the effect of exchange rate volatility on U.S. bilateral trade of 20 African countries. They find a significant short-run effect of exchange rate volatility on almost all U.S. exports to and imports from each of the 20 countries. They also find a significant long-run effect on exports to 15 countries and imports from 12 countries. Bosupeng, Athula and Su (2024), find a significant influence of exchange rate volatility on international trade. Their results show that exchange rate volatility reduces the positive effect of appreciation on the trade balance while it increases the negative effect of depreciation on the trade balance. Lal, et al (2023) also study the effect of exchange rate volatility on international trade and find that exchange rate volatility has significant impacts both exports and imports. However, the impacts are different on different exporters, sectors, and regions.

### **3 Literature review and Hypothesis Development**

#### **3.1 Agency Theory**

An agency is any connection in which one party, the agent, represents the other, the principal, in day-to-day interactions. The principal or principals have hired the agent to provide a service on their behalf (Bendickson, *et al.*, 2016). Jensen and Meckling (1976) characterise an agency relationship as an agreement under which at least one person (the principal(s) contracts with someone else (the agent) to do some administration work for their mutual benefit. Both agent and principal seek to maximise the unique personal benefits. Inside this relationship, proprietors are enthusiastic about increasing the value of their benefits through their actions. At the same time, principals are keener on 'private utilisation of firm assets' and firm development. In this regard, the audit opinion expressed in the financial statement will to some extent, give assurance as to how the managers have executed their mandate about stakeholder's expectations. The principal ensures that the agent establishes systems and mechanisms for proper accountability and transparency. Some of these systems employ adequate accounting and auditing systems. When the appropriate accounting systems are in place, it will ensure that the necessary and relevant accounting books are kept and are correctly audited. When this is done, it can lead to financial performance. Therefore, the audit function supports the achievements of overall organisational goals and objectives. The audit service assists management in reviewing various strategic plans and policies to make recommendations for improvements as necessary. In this context, the auditor's services are employed to safeguard and ensure that the firm's stewardship is geared towards optimal financial performance. Amahalu (2020) used agency theory by considering the effect of audit quality on the financial performance of quoted conglomerates in Nigeria.

#### **3.2 Technology Acceptance Model (TAM)**

TAM is the most widely used technology adoption model (Rekha & Timothy, 2020). Davis (1989) presented a theoretical model aiming to predict and explain ICT usage behaviour, which causes potential adopters to accept or reject the use of information technology. Theoretically, TAM is based on the Theory of Reasoned Action (TRA). In TAM, two theoretical constructs, perceived usefulness and perceived ease of use, are the fundamental determinants of system use, and 15 predict attitudes toward the use of the

system, that is, the user's willingness to use the system. Perceived usefulness refers to "the degree to which a person believes that using a particular system would enhance his or her job performance", and perceived ease of use refers to "the degree to which a person believes that using a particular system would be free of effort" (Davis, 1989).

### **3.3 Audit services and financial performance**

The American Accounting Association (1973) defines auditing as "a systemic process of objectively obtaining and evaluating evidence regarding economic actions and events to determine the degree of correspondence between those assertions and established criteria and communicating the results to interested users." According to Arens et al. (1997), auditing is where "A competent, independent person gathers evidence concerning quantifiable information relating to a certain economic entity to determine and report on the degree of congruence between the quantifiable information and predefined criteria".

Mutisya (2018). This study aimed to determine the impact of audit services on the financial performance of commercial banks in Kenya. Audit services used were international auditing standards, professional competence, internal controls, auditors' independence, various audit services, bank liquidity, and reported fraud levels. The study used a sample of 20 respondents who were senior managers selected from 20 banks located in Nairobi. Research questionnaires were used to collect data from the respondents. The findings of this study reveal that changes in audit services result in changes in the financial performance of commercial banks.

Kings, (2018). This research is a critical study on the impact of auditing on small and medium scale enterprises in Nigeria (SMEs). The study was motivated due to the work of auditors in a business, the functions measures of internal auditors in a firm, and monitoring of the business's activities to avoid fraud or leakage of cash. The research instrument used in collecting the data was a questionnaire. Kizza (2019) investigated the relationship between Financial Literacy and Small and Medium Enterprises (SMEs) in Kampala. The study objective was to examine the relationship between financial knowledge and the financial performance of SMEs. Financial performance was measured in terms of Business survival, profitability, and growth. The study employed a correlational study design, and a total of 160 respondents from SME owners and employees took part in the survey. Data were collected using questionnaires and interview guides, and both descriptive and inferential statistics were applied to the collected data. It was thus concluded that financial literacy is vital in promoting SMEs' financial performance. It was thus concluded that financial literacy is crucial in promoting SMEs' financial performance.

Ruri (2018) examine the effects of equity capital, debt capital, and Retained earnings on the financial performance of SMEs. The study adopted a descriptive design. The target population was 95 SMEs, and he used the stratified random sampling technique to select a sample of 29 respondents. The study established that: Equity capital and Debt capital have a significant effect on the financial performance of SMEs.

### **III: There is a positive relationship between Audit services and SME financial performance.**

### **3.4 Information technology and financial performance**

Information technology (I.T.) has long been regarded as one of the most critical components in today's business climate, allowing businesses to leverage its advantages (Taherdoost, 2018) successfully. Although most enterprises have welcomed technological advancements of the past few decades, others have buried their heads in the sand. Tallon, Queiroz, Coltman and Sharma (2019) pointed out that Innovative technologies, particularly in the computing discipline, have evolved during the last few decades. As a result, business organisations rely on technology adoption models and theories to determine whether end users are ready for and accept new technologies. Therefore, information technology (I.T.) plays a crucial role in business. There are now software and applications available to simplify things for business and alleviate some of the challenges SMEs may regularly face. Some of these include accounting software packages and audit management software. Audit management software is a computer program that helps businesses leverage the power of technology to embed intelligence in audit services, advance quality, improve processes, and reduce risks. With the aid of I.T., the audit has become more effective and efficient.

Therefore, we need to turn our attention to the need for a blend of audit services and information technology by SMEs in Ghana. Hence the need for this study to find out the effect of audit services on the financial performance of SMEs and the moderating effect of information technology.

Abrokwah (2015) assesses the relevance of I.T. on accounting practices concerning financial reporting by Small and Medium Scale Enterprises (SMEs) in Ghana, determining whether or not I.T. systems have a better influence on accounting practices regarding organisational performances. His research showed a positive relationship between information technology (I.T.) and financial reporting. Accordingly, his study concluded that information technology (I.T.) positively impacts accounting practices that directly enhance businesses' performance. However, business organisations are encouraged to embrace I.T. systems in total capacity for their auditing practices to fast track their financial performance.

Chege, Wang, and Suntu, (2020) examine the relationship between the technology revolution and organisational Performance in Kenya. They found a positive relationship between technology firm performance. Khalil, and Belitski, (2020), investigate the role of dynamic capabilities in Information Technology (I.T.) and firm performance. Their findings show that information technology (I.T.) is directly associated with firm performance.

Mallinguh, Wasike and Zoltan (2020) examine the effect of the capital budget on acquiring new technology on sales performance. They found a significantly positive relationship between technology and sales performance. Namchul et al. (2001) empirically examine the contribution of I.T. to financial performance as measured by net profit and Return on Assets (ROA), focusing on the alignment of I.T. with business strategies such as vertical disintegration and diversification. Empirical analysis shows that I.T. does not directly improve financial performance. In conjunction with vertical disintegration and diversification, however, it does improve financial performance as measured by net profit. However, financial performance ratios such as Return on Assets (ROA) are not correlated with the alignment (or interaction) factor of information technology (I.T) with vertical disintegration and diversification. The results indicate that increased I.T. spending improves net profit, but not performance ratios such as Return on Assets (ROA) of firms with decreased vertical integration and higher diversification.

**H2: There is a positive relationship between information technology and SME financial performance.**

**H3: Information technology can positively moderate Audit service.**

### 3.5 Financial performance

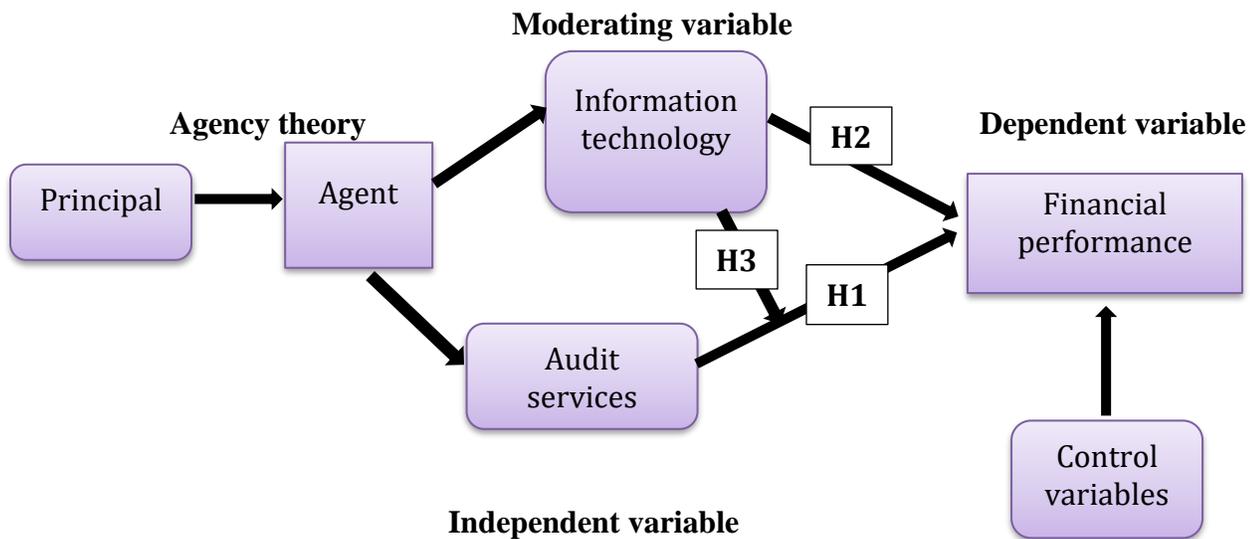
This study attempts to establish whether audit service affects SMEs' performance financially. Performance in financial terms is a measure that is subjective on how efficiently the SMEs apply their assets in their main businesses to generate revenues and present improved measurements of financial performance such as net profit margin and return on assets.

According to the Encyclopedia of Business (2011), performance measurements are divided into two categories: those that focus on the outcomes such as competitiveness or financial performance and those that focus on the factors that influence the results of the inputs such as quality, flexibility, resource utilisation, and innovation (Ganyam, & Ivungu, 2019).

In other words, it is a financial activity taken to increase a company's sales, profitability, and value for its stakeholders by managing the firm's existing and non-current assets, financing, equity, revenues, and expenses (Farah, Farrukh, & Faizan, 2016). Accountants who use financial statements assume that they can understand and interpret financial statements and make informed decisions based on financial performance. According to Ichsan, Suparmin, Yusuf, Ismal, and Sitompul, (2021), economic performance is a metric for determining how well a company's financial resources are deployed. However, those using financial statements, namely: present and potential investors, creditors, suppliers, and long-term creditors, employees and their representative groups, the government and its agencies, customers, and the general public, usually do not directly access the accounts records from which the financial reports are generally prepared. In addition, clients are essentially "prohibited from auditing" the financial statements themselves. Because of this remoteness, there is a need to depend on auditors' services that help evaluate financial statements' quality.

### 3.6 Conceptual framework

Audit services is an important concept which when implemented will bring about financial performance. The reason is that Audit services has a lot of principles. Transactions are supposed to be audited so that users of the financial statements can express confidence in the financial information. The conceptual framework below makes the assertion that the implementation of auditing services ensures financial performance. Information technology has become the economic driver of every business. The conceptual framework makes the assertion that if the SMEs make use of information technology in their use of accounting services, it will lead to an increase in financial performance.



**Figure 1: Theoretical/Conceptual framework**

Source: Author's construction (2023)

## 4 Research methodology

### 4.1 Research Design

In this study, a quantitative research design was used because the study's goal is to conduct an empirical examination of the effect of Audit service on the Performance of SMEs utilising information technology as a moderating variable. As a result, the study used a quantitative strategy and a survey method to collect the necessary data for the project.

### 4.2 Sampling Techniques and Sampling Size and Population

The study population comprises registered SMEs from the Registrar General's Department. A list of 6,000 registered small and medium firms was used to establish the sample size. The SMEs were selected using a systematic sampling approach and given questionnaires to complete.

### 4.3 Calculation of Sample Size

Our sample size is calculated using the Yamane 1967 formula with a 95 per cent confidence level plus or minus 5 per cent confidence intervals using the formula  $n = N/1+N(e)^2$ , where  $n$  is the sample size, with a 95 per cent confidence level plus or minus 5 per cent confidence intervals.  $N$  is the population, while  $e$  is the error margin. Although, based on a population estimate of 6000 people, a sample size of 375 was computed. Only 370 out of 375 surveys were returned, with 50

They were rejected since they were either small enterprises or did not use management accounting. As a result, the number of respondents who performed management accounting and owned medium-sized enterprises defined the sample size for the analysis (320). A larger sample size gives more accurate results than smaller samples in most research. According to Comrey and Lee's inferential statistics, a sample size of fewer than 50 respondents is a weaker sample, a sample size of 100 respondents is weak, a sample size of 200 respondents is adequate, 300 is good, 500 is very good, and 1000 is outstanding (1992). As a result, a sample size of 320 people is sufficient.

### **3.4 Variable Description and Measurement**

#### **3.4.1 Dependent Variables**

The primary dependent variable for this study is SMEs' financial performance, measured using financial ratios. Such as Return on Asset (ROA) and Net profit margin is vital measures in any organisation. They are ideal practices for controlling an organisation's financial activities such as procurement of funds, utilisation of funds, accounting, payments, risk assessment, and everything related to money. In addition, performance measures are ways in which the efficiency and effectiveness of actions may be quantified to provide meaning and indication of failure or growth (Neely et al., 2002).

#### **3.4.2 Independent Variables**

This study will focus on audit services (audit processes and the moderating effect of information technology of audit) that might affect the financial performance of SMEs in Ghana. Therefore, the variables investigated in this study are audit processes and the moderating effect of audit information technology. Audit services were measured by: 1. The audit environment (AUD 1) 2. Audit Control activities (AUD 2) Monitoring Audit controls (AUD 3) 4. Audit Operation (AUD 4)

### **3.5 Data analysis and results**

The PLS-SEM was used for analysing (Hair, Risher, Sarstedt, & Ringle, 2019). PLS-SEM comes with a lot of benefits. One of the benefits of using PLS for complex models is that the sample size requirements are likely to be significantly minimised (Sarstedt, Hair, Nitzl, Ringle & Howard, 2020). The researchers chose 320 valid responses for the study, with 48.4% representing males and 51.6 per cent representing females (see table 2). Fornell and Bookstein (1982) claim that PLS frequently provides component-based loadings and structural routes without using distributional assumptions. As a result, PLS-SEM has a high statistical power, which is advantageous to researchers (Hair, Risher, Sarstedt & Ringle, 2019). In addition, PLS-SEM has better statistical power, which means it is more likely to reveal essential population relationships (Sarstedt, Hair, Nitzl, Ringle & Howard, 2020). The current research relies on a two-step approach to reporting PLS-SEM results (Memon, Ramayah, Cheah, Ting, Chuah, & Cham, 2021). We first looked at the measurement model to analyse the instrument's reliability and validity. The structural model based on the hypotheses suggested in this study was then examined.

**Table 1: Demographics of Respondents**

DEMOGRAPHIC	CATEGORIES	FREQUENCY	PERCENTAGE (%)
GENDER	MALE	155	48.4
	FEMALE	165	51.6
AGE	20-29	139	43.4
	30-39	142	44.4
	40-49	22	6.9
	50 AND OVER	17	5.3
EDUCATION	HIGH SCHOOL	38	11.9
	DIPLOMA	74	23.1
	UNIVERSITY	126	39.4
	PROFESSIONAL	37	11.6
	POSTGRADUATE	45	14.1
SECTOR OF BUSINESS	TRADE	173	54
	SERVICES	70	21.9
	MANUFACTURING	77	24.1

The above table 1 present the demographic information about the respondents of the study.

### 3.6 Measurement model

The consistency of results obtained by independent but comparable measures of the same item or construct is referred to as reliability (Manley, Hair, Williams, & McDowell, 2021). Composite reliability (C.R.) and Cronbach's alpha scores were significant reliability indicators in this investigation. There are two types of validity tests: convergent and discriminant. Item or factor loadings greater than 0.5 on their respective constructs were used to determine convergent validity (Kock, 2020). The Fornell-Lacker Criterion and the Average Variance Extracted (AVE) values were used to determine validity. These results show that no significant factors were related to one another, indicating that the variables were independent and valid in predicting the outcome variable (Shmueli, Sarstedt, Hair, Cheah, Ting, Vaithilingam, & Ringle, 2019). The reliability of the three research construction assessments was examined using composite reliability and Cronbach's alpha values, as previously stated.

**Table 2: Loading, Reliability and Validity**

	Audit	Financial	Information	Moderating				
	Services	Performance	Technology	Effect	CA	rho A	CR	(AVE)
AUD1	0.684	0.450	0.009	0.032	0.708	0.783	0.819	0.536
AUD2	0.901	0.712	-0.020	0.143				
AUD3	0.711	0.472	-0.030	0.089				
AUD4	0.599	0.351	0.062	-0.031				
FP1	0.661	0.850	0.399	0.074	0.707	0.713	0.787	0.556
FP2	0.508	0.733	-0.062	0.160				
FP3	0.330	0.638	0.089	0.030				
IT1	-0.047	0.167	0.657	-0.030	0.702	0.814	0.0.732	0.560
IT2	0.039	0.192	0.754	-0.167				

The above table (2) present Reliability and validity of the constructs. The audit environment (AUD 1), Audit Control activities (AUD 2) Monitoring Audit controls (AUD 3). Audit Operation (AUD 4) (FP1) Operating profit, (FP2) Growth in sales, (FP3) Return on asset, (IT1) Perceived usefulness, (IT2) Perceived ease of use Cronbach's alpha (CA), Composite Reliability (CR).

The Cronbach's alpha (CA) and composite Reliability (CR) measures how reliable the data that has been used to carry the analysis are. There are standard acceptable measures which are between 0.6 to 0.7 (Nunnally & Bernstein 1994). In the current study, the Cronbach's alpha (CA) values varied from 0.631 to 0.708, while Composite Reliability (CR) values were between 0.666 and 0.819 (see Table 2). What it means is that the data used for measuring Auditing practices, financial performance, and information technology are reliable because the reliability measures of Composite Reliability (C.R.) and Cronbach's alpha (C.A.) were all higher (see Table 2) than the recommended threshold value of 0.6 to 0.7 (Nunnally & Bernstein 1994).

Convergent validity is measured by Variance Extracted (AVE) (Table 2) with a recommended threshold of 0.5 (Hair, Risher, Sarstedt, & Ringle, 2019). AVE measures how the individual variables come together to measure either the independent or the independent variable. For example, in this article, the independent variable is Audit services. The variables which come together to measure the Audit services are: The audit environment (AUD 1) Audit Control activities (AUD 2), Monitoring Audit controls (AUD 3), Audit Operation (AUD 4).

All Average Variance Extracted (AVE) were all acceptable (0.536) Audit services, (0.556) for financial performance and (0.560) for Information Technology (Table 2), they all exceeded 0.5 threshold (Hair, Risher, Sarstedt, & Ringle, 2019). Therefore, it is reasonable to conclude that most of the items used to assess the three research variables in this study accurately measured more than half of the Audit services, information technology, and financial performance factors. AVE is acceptable because it ranged from 0.500 to 0.536 in this study, as shown in Table 2 (Zeng, Liu, Gong, Hertogh, & König, 2021).

**Table 3: Heterotrait-Monotrait Ratio (HTMT)**

	<b>Audit services</b>	<b>Financial performance</b>	<b>Information Technology</b>
Audit Services		9.420	
Financial Performance	0.958	0.146	
Information Technology	2.867	9.420	
Moderating Effect 1	0.121	0.146	3.942

The above table (3) present Discriminant validity of the constructs.

**Table 4: Discriminant validity using Fornell–Larcker Criterion**

	<b>Audit services</b>	<b>Financial performance</b>	<b>Information Technology</b>	<b>Moderating Effect 1</b>
Audit Services	0.732			
Financial Performance	0.706	0.745		
Information Technology	-0.002	0.254	0.707	
Moderating Effect 1	0.099	0.116	-0.146	1.000

The above table (4) present Discriminant validity of the constructs.

Fornell-Lacker Criterion was used to determine discriminant validity (Table 4). The discriminant validity is a measure of how independent the variables are from each other (Amora, 2021). Discriminant validity was assessed using the Fornell-Lacker Criterion and Heterotrait-Monotrait Ratio (HTMT). Using suggested thresholds, the value of Fornell-Lacker Criterion should be lower than 0.85 or 0.9 (Rasoolimanesh, 2022). All the constructs are less than 0.85 (Table 4). Additionally, the other constructs under the first construct should be lower than the first construct. Example, looking at Table 4, audit service is 0.732 which is higher than the next construct which is financial performance 0.706. Therefore, it means there is discriminant validity among the constructs.

**Table 5: Path coefficients and their significance**

Hypotheses	Path	Standardised path coefficient	T Statistics	P Values	Result
H1	AUD -> F P	0.030***	23.112	0.000	Supported
H2	IT -> F P	0.049***	5.432	0.000	Supported
H3	ME1 -> F P	0.036*	2.162	0.023	Supported

The above table (5) present Path coefficients of the constructs. Audit service (AUD), Financial performance (FP), Information Technology (IT). Moderating analysis (ME).

### 3.7 Structure Model

The structural model and table 5 are discussed in this section. The structural model depicts the theorised paths of the study framework.  $R^2$  and  $Q^2$  are used to evaluate a structural model (Hair, Howard, & Nitzl, 2020). The strength of each structural path as measured by the  $R^2$  value is the coefficient of determination for the Endogenous variable.  $R^2$  must be more than 0.1 or equal to it (Sarstedt, Ringle, Cheah, Ting, Moisescu, & Radomir, 2020). The  $R^2$  value is more than 0.1, as seen in Table 5. That is, the  $R^2$  of the current model is 0.571. As a result, the model's ability to forecast is determined, and the independent variables can explain 57.1% of changes in the dependent variable.  $Q^2$  additionally establishes the endogenous concept's predictive usefulness. The  $Q^2$  value of the study is 0.282, which is more than zero (0) and indicates that the model is predictive. The findings indicate that the predictions made by the constructs are accurate (see table 5) (Falk & Miller, 1992). Further testing of the theory determined the significance of the association. H1: determines if AUD (Audit service) has a significant impact on F.P. (Financial Performance). The findings showed that AUD has significant effect on FP. ( $\beta = 0.030$ ,  $t = 23.112$ ,  $p < 0.000$ ). Hence H1 was supported. H2: evaluates whether I.T. (Information Technology) has a significant effect on F.P. (Financial Performance). The findings revealed that I.T. positively and significantly affects financial performance ( $\beta = 0.049$ ;  $t = 5.432$ ,  $p < 0.000$ ). As a result, H2 was supported.

### 3.8 Moderation Analysis

H3: Information technology can significantly moderate the relationship between Audit services and financial performance. I.T. (information technology) could increase financial performance (see figure 1). To assess the moderating role of I.T., moderation analysis was carried out. The results revealed a significant moderating role of I.T. on the relationship between AUD and F.P. ( $\beta = 0.036$ ,  $t = 2.162$ ,  $p < 0.031$ ).

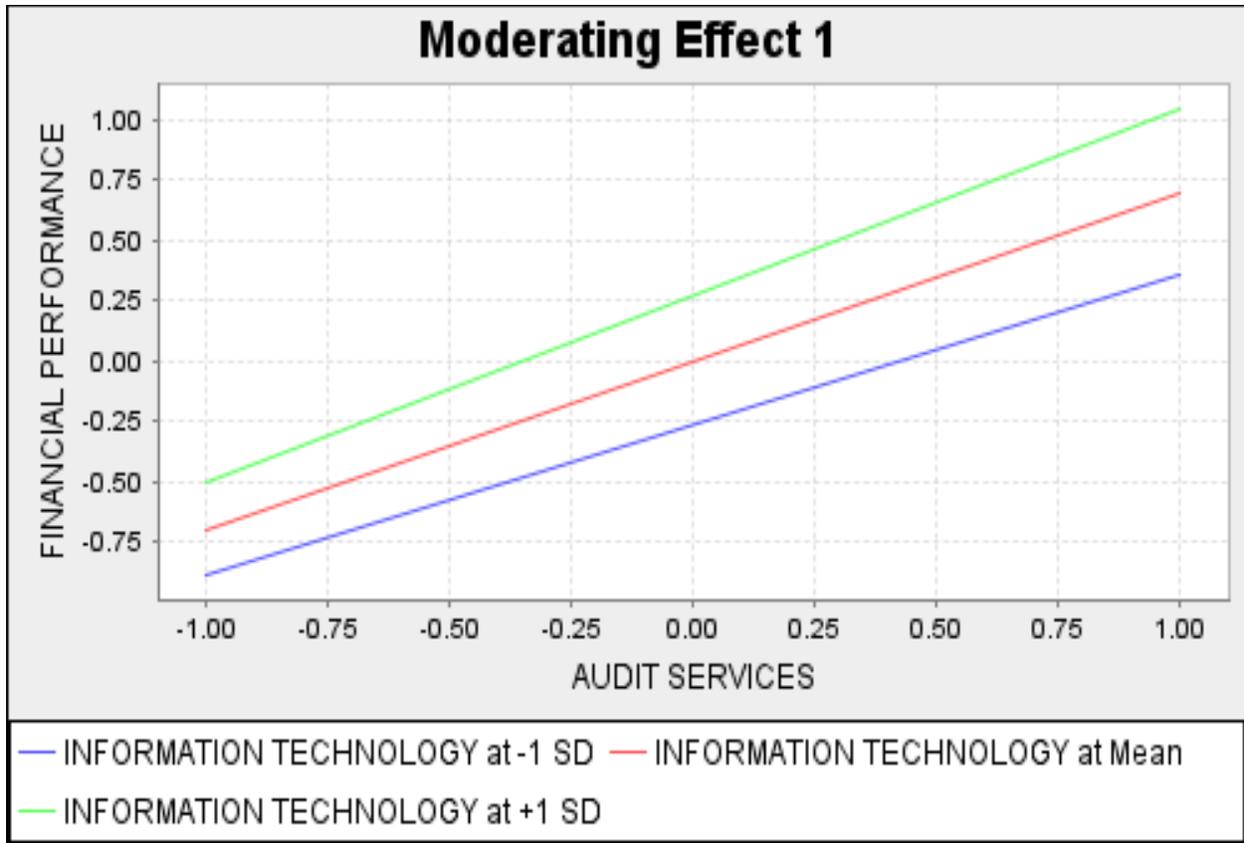
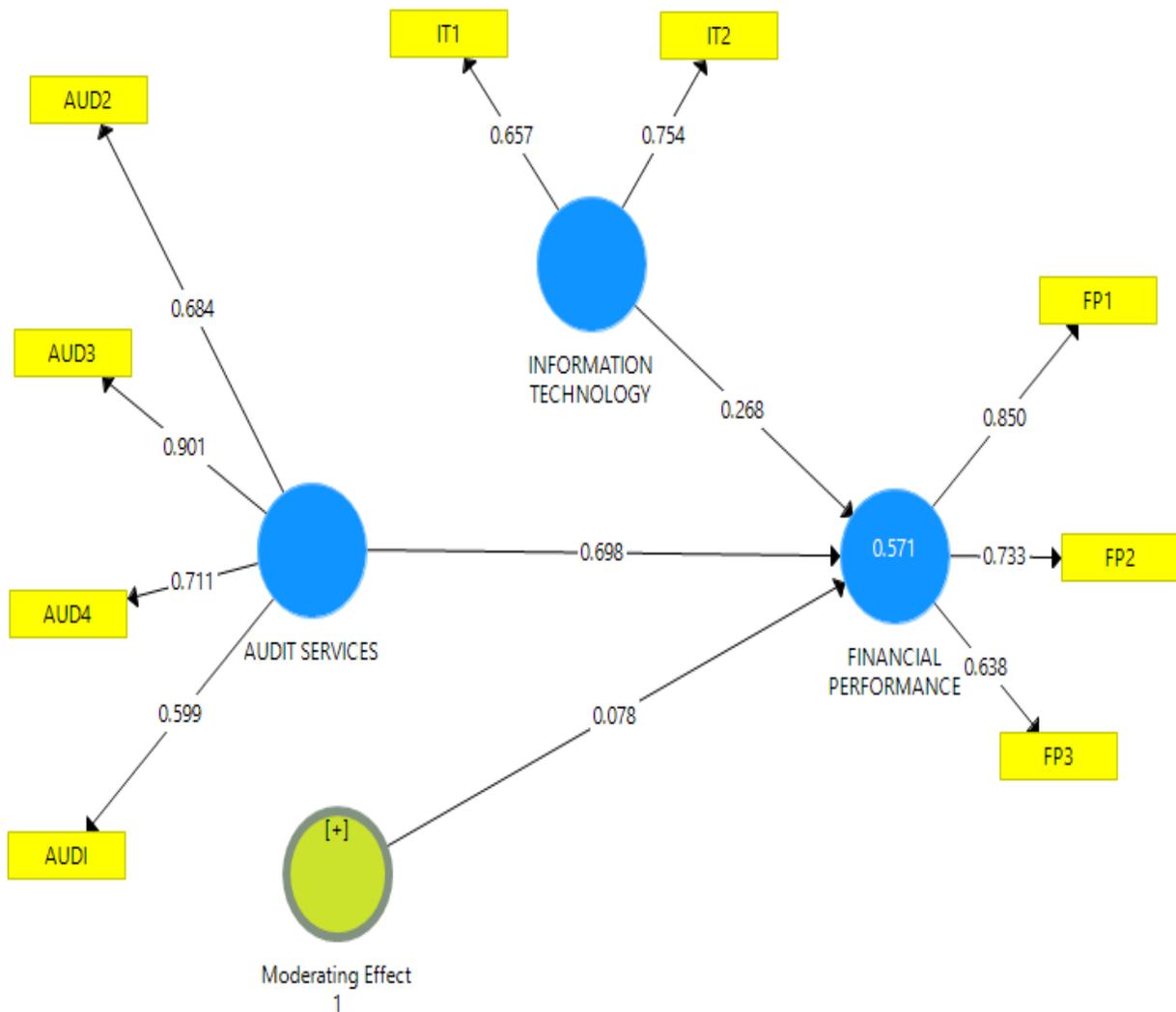


Figure 2: Moderating effect

Table 6: Control variables

	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
AUDIT SERVICES -> FINANCIAL PERFORMANCE	0.031	22.422	0.00
<b>Education level (control variable) -&gt; FINANCIAL PERFORMANCE</b>	<b>0.037</b>	<b>0.805</b>	<b>0.42</b>
INFORMATION TECHNOLOGY -> FINANCIAL PERFORMANCE	0.049	5.553	0.00
Moderating Effect 1 -> FINANCIAL PERFORMANCE	0.036	2.126	0.03
<b>Years of experience_(control variable) -&gt; FINANCIAL PERFORMANCE</b>	<b>0.041</b>	<b>1.2</b>	<b>0.23</b>



**Figure 3: PLS results for structural model**

## 5. Implications of the study

This research aimed to look into the impact of audit services on SMEs' financial Performance in Ghana. H1 suggested that there was a beneficial influence on SMEs' financial performance. These positions were supported by the findings of (Hazaea, Tabash, Zhu, Khatib, & Farhan, 2021; Agbaje, Bojuwon, & Abidoye, 2017; Ado, Rashid, Mustapha, & Ademola, 2020). An increase in the use of Audit services will lead to the prevention and detection of financial impropriety, ultimately increasing SMEs' financial performance. As a result, SMEs must incorporate Audit services into their operations to flourish. However, some SMEs may not use audit services due to financial constraints and a lack of technical skills. The government can assist SMEs by employing accounting companies to provide audit services through the Ministry of Trade and Industry. H2 also shows a positive and robust link between SMEs' financial performance and information technology. These positions were supported by the findings of (Chege, Wang, & Suntu, 2020; Khalil & Belitski, 2020; Slim, Sarah, Kadhim, Ali, Hammood, & Othman, 2021). The relationship suggests that

SMEs may apply information technology in various functions, including auditing activities, to improve their financial performance. H3 investigated if information technology could moderate Audit services and enhance financial performance. This position was supported by the findings of (Majidah, Isynuwardhana, & Anna, 2018). The results indicated a significant moderating effect between audit services and financial performance. In addition, SMEs using audit services may do so through information technology. However, some SMEs utilising audit services may be using it manually and, therefore, may not enjoy the full benefit. Consequently, it will be more appropriate to strengthen audit services using information technology.

## 6. Conclusion

Small and medium-sized businesses (SMEs) constitute the backbone of any economy, including Ghana. However, many of these SMEs fail within a few years of their establishment. A variety of reasons account for this. Lack of access to accounting, auditing, and management accounting services are possible factors leading to SMEs' demise. According to current studies, Auditing services have a good and considerable impact on SMEs' financial performance. Because of this, the government must step in to gain access to Audit services. In every area of progress, information technology has been a driving force. According to the current study's findings, it has a favourable and significant effect on SMEs' financial performance when it moderates the relationship between audit services and financial performance. As a result, it is recommended that SMEs use technology in their operations.

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