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DEPARTMENT OF ACCOUNTING AND FINANCE

TOPIC:

Bookkeeping Practices, Owners’ & Employee’s Accounting Skills, and Performance of Small and Medium Enterprises: Evidence from Oforikrom Municipal Assembly, Ghana

By

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DECLARATION

I hereby declare that this submission is entirely my work under the supervision of Dr. Kwadwo Appiagyei, and that to the best of my knowledge, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award of any other degree or diploma at Kwame Nkrumah University of Science and Technology, Kumasi or any other educational institution, except where due acknowledgment is made in the thesis.

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DEDICATION

This study is dedicated to my siblings, parents, and colleagues. They took it upon themselves to encourage and support me spiritually and emotionally.

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Finance. I appreciate you all.

ABSTRACT

The study was done to survey the Bookkeeping Practices, Owners' and employee's Accounting Skills, and Performance of Small and Medium Enterprises. The study was concentrated on the evidence from Oforikrom Municipal Assembly. The study utilized questionnaires as the principal instrument for gathering data. The implementation of Google Forms enabled the creation of digital surveys. The implementation of online surveys facilitates a faster and more cost-efficient method for collecting data from a sufficiently big sample. The study employed a quantitative research methodology. The results presented were based on a sample of 200 valid responses collected via an online survey. The study utilized the Smart Partial Least Squares (Smart-PLS) software inside a structural equation modeling (SEM) framework to examine the associations among owners' accounting skills, bookkeeping procedures, and the performance of small and medium-sized enterprises (SMEs). The research conducted revealed that the implementation of bookkeeping procedures has a notable and favorable impact on the overall performance of small and medium-sized enterprises (SMEs). Bookkeeping is perceived as a crucial aspect of decision-making and company changes by owners and managers of small and medium-sized enterprises (SMEs).

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INTRODUCTION

1.1 BACKGROUND TO THE STUDY

The significance of Small and Medium Enterprises (SMEs), also referred to as small enterprises, is evident in both advanced and emerging economies, encompassing both a global perspective and local circumstances. These budding companies are relevant in terms of employment creation, reducing the percentage of poor population, and the augmentation of government tax collections, among various other advantages. These startups are largely recognized for their significant contributions to economies. However, it is apparent that a considerable number of these enterprises have yet to establish a comprehensive accounting system that would enable the effective management of precise financial records (Buul & Omundi, 2017). Houdet et al. (2020) posit that there exists a prevailing belief regarding the potential influence of owners' accounting proficiency on their bookkeeping practices, which, in turn, may exert an impact on their overall performance. The objective for the research will be to give novel observed proof on the nexus of accounting skills and booking in the context of SMEs.

In the majority of countries, small and medium-sized enterprises (SMEs) are typically categorized as components of the informal sector. The inclusion of (SMEs) plays significant part with the growth of the less educated in our economies (Ajao, Oyeyemi, and Moses, 2016. A predominant characteristic of the global economies is the prevalence of small-scale enterprises. According to Dana and Ramadani (2015), it can be observed that small firms play a substantial role in the composition of Japan's industrial workforce, representing approximately 80% of the overall workforce. In Germany, a significant portion of the labor force, approximately 50%, is comprised of small enterprises. In the United States of America, small firms make up approximately 46% of the workforce. Rathnasiri (2014) conducted a study which revealed that a substantial share, precisely 75%, of the labor force in Europe is constituted by small and medium-sized firms (SMEs). According to Donkor, Donkor, KankamKwarteng & Aidoo (2018) the recognition of the significance of small and medium-sized firms (SMEs) the development of developed countries is progressively gaining traction.

The effective management of records and books of accounts is a critical determinant of organizational success (Ademola, James, & Olore, 2012). Despite the substantial economic contributions provided by small organizations, a notable proportion of these enterprises exhibit inconsistent incorporation of bookkeeping practices within their operational frameworks. According to Agbemava et al. (2016), a large percentage of these budding firms cannot maintain accurate accounting reports, often referred to as incomplete records.

The proper administration of organizations is heavily reliant on the keeping of financial records (Agbemava et al., 2016). The practice of bookkeeping involves a range of fundamental tasks, such as the identification, categorization, condensation, safekeeping, communication, preservation, documentation, and elimination of financial documents. The aforementioned efforts are conducted with the purpose of promoting the generation and delivery of financial information (Ikhtiari et al., 2021). According to Gyamfi et al., (2014), the meticulous documentation of financial information by owners of small and medium-sized enterprises (SMEs) is crucial and indispensable, as it facilitates the evaluation of performance. Ajao, Oyeyemi, and Moses (2016) provide a definition of bookkeeping as the methodical and rational procedure of documenting financial transactions. The relevance of bookkeeping for startups resides in its capacity to enhance organizational efficiency, enable efficient planning and management, and bolster effective leadership.

In addition, the utilization of accounting information, which is formulated by meticulous adherence to standardized principles, facilitates firms in performing comparative evaluations of their financial data in relation to another firm's data within a specific timeframe (Afang & Francis, 2021). Tax authorities, such as the Ghana Revenue Authority, tend to place greater trust in financial figures presented in financial statements that adhere to widely accepted accounting rules. Faccia et al. (2020) suggest that the inclusion of precise source documents and meticulously maintained accounting records might function as persuasive substantiation in judicial processes pertaining to cases of fraud or contractual violations perpetrated by diverse entities, including employees, clients, and suppliers.

According to academic literature, regardless of their level of importance, research indicates that 50% of these firms either maintain a stable status as minor organizations or undergo a substantial decrease in performance (Musah, 2017). Ntim, Evans, and Anthony (2014) assert that a considerable percentage of small businesses, roughly 60%, face closure during their early years of existence because of poor management stemming from insufficient record keeping. According to Williams and Schaefer (2013), a considerable proportion of these small businesses are encountering financial shortfalls without their knowledge as a result of an insufficient or non-existent financial record management system. Aladejebi and Oladimeji (2019) studied the nexus of accounting practices and the perceived advantages experienced by stakeholders with diverse interests inside a business. These budding firms frequently engage in the recruitment of personnel that lack adequate skills. The presence of these persons in the labor market does not enhance organizations' endeavors to record and assemble accurate and comprehensive financial information (Ropret et al., 2018). As a result, small and medium-sized firms (SMEs) have encountered a state of stagnation or, in some cases, have been compelled to cease their activities.

The importance of consistently and precisely recording all transactions should not be underestimated. Aremu and Adeyemi (2011) argue that the adoption of a meticulously crafted bookkeeping system can provide small and medium-sized firms (SMEs) with essential financial information, hence augmenting their capacity to make well-informed economic decisions pertaining to the future trajectory of their organizations. Small and medium-sized firm (SME) owners frequently have fear when it comes to the field of accounting and its associated bookkeeping processes (Abdul-Rahaman & Adejare, 2014). The implementation of a systematic process for documenting all sources of income and expenditures within a corporate entity enables proprietors to efficiently oversee and control the financial data relevant to the organization (Aladejebi & Oladimeji, 2019). According to Dawuda and Azeko (2015), the lack of or insufficient upkeep of records significantly affects the efficient administration of financial resources and assets. The lack of financial documentation has played a significant role in the downfall of many small and medium-sized firms (SMEs).

Aladejebi and Oladimeji (2019) assert that the systematic adoption of an accounting system that supports accurate record keeping allows organizations to efficiently achieve their goals. There is a group of business proprietors who lack awareness regarding the benefits linked to the maintenance of precise records (Olayiwola, Olaniyi, Ajayi, Abayomi, Adegoke, & Sarafa, 2016). According to Olayiwola et al. (2016), chances are certain small and medium-sized firms (SMEs) to prioritize obtaining a tax credit certificate over maintaining correct financial records. The attainment of this certification is considered essential in order to get more substantial contracts, particularly those that originate from governmental agencies. The authors also noted that some of these firms purposefully maintain precise financial documentation with the aim of securing loan facilities from banks and other financial institutions. The lack of proper recordkeeping presents a significant obstacle for businesses when it comes to differentiating between business transactions and personal or household activities of small and medium-sized enterprise (SME) owners (Aladejebi & Oladimeji, 2019).

The main aim of this study is to furnish small and medium-sized firm (SME) owners and policymakers with valuable insights pertaining to the influence of accounting abilities on the correlation between bookkeeping practices and the performance of SMEs. The research is purposed at studying the effect of accounting skills on the nexus of bookkeeping and success of SMEs.

1.2 PROBLEM STATEMENT

Many owners of small and medium-sized enterprises (SMEs) and managers, engage in the inappropriate usage of organizational resources for personal gain. Amoako (2013) posits that the primary factor contributing to banks' reluctance to provide loans to small and medium firms (SMEs) is the insufficiency bookkeeping processes. Small and medium-sized firms (SMEs) place persistent emphasis on the utilization of dependable accounting systems, in addition to adhering to legal requirements. As a result, the implementation of inefficient and insufficient bookkeeping techniques has led to the downfall of numerous small and medium-sized firms (SMEs). Based on the findings of Ibrahim (2015) and Al-Mohmed and Butler (2021), as well as other researchers in the field, it can be argued that the lack of effective record-keeping methods is a significant factor contributing to the failure of small and medium-sized firms (SMEs). The significance of small and medium-sized enterprises (SMEs) in economies cannot be emphasized. Hence, the continuous inability of small and medium-sized enterprises (SMEs) may have significant detrimental effects on the growth and advancement of an expanding economy, such as that of Ghana. In order to address this difficulty, it is imperative to do empirical analyses that investigate potential associations between bookkeeping methods and SMEs financial performance.

Plethora of literature pertaining to bookkeeping methods has predominantly concentrated on investigating the influence of bookkeeping on the viability of small and medium-sized firms (SMEs) (Ernest, 2018). Moreover, several scholarly investigations occurred to examine the effect of bookkeeping practices on organizational development and success. Noteworthy works in this area include the research conducted by Musah (2017), Alvarez, Sensini, and Bello (2021), Abdul-Rahamon and Adejare (2014), Aladejebi and Oladimeji (2019), Musah and Ibrahim (2014), as well as Musah, Gakpetor, and Poma. The primary focus of these studies has been on the utilization of means, frequencies, and correlation analysis investigating the nexus of small and medium-sized firms performance and record keeping. Nevertheless, it is crucial to recognize that these methodologies possess specific constraints, hence giving rise to apprehensions regarding the reliability and validity of the current discoveries and deductions.

Moreover, a dearth of empirical inquiry exists regarding the possible impact of additional variables, such as the accounting proficiency of proprietors, on the connection of bookkeeping techniques and the operational outcomes of small and medium-sized firms (SMEs). It can be inferred that a requisite level of accounting proficiency is essential for the implementation of efficient bookkeeping procedures. Nevertheless, the potential influence of bookkeeping procedures on the profitability of small firms may be hindered by the prevalent tendency of SMEs to refrain from employing untrained staff. Considering this there is a gap in the literature requiring investigating the effect of accounting methodologies on the correlation between bookkeeping and the performance of small medium-sized firms. In order to bridge the existing knowledge gaps, the primary aim of this research is to examine the impact of owners' accounting expertise on the relationship between bookkeeping procedures and small and medium-sized performance.

1.3 PURPOSE OF THE STUDY

The primary aim of this research is to examine the nexus of bookkeeping and small and medium-sized firms' performance with owner's accounting abilities moderating the relationship in the Oforikrom Municipal Assembly of Ghana.

1.4 OBJECTIVES OF THE STUDY

Specific objectives of this study are:

1. examine the effect of bookkeeping on performance of SMEs.
2. Analyse how accounting skills affect the performance of SMEs in Oforikrom Municipality.
3. determine the mediating role of owners' accounting skills on the nexus of bookkeeping and performance of SMEs.

1.5 RESEARCH HYPOTHESES

The study maintained the following hypothesis based on the study objectives and empirical literature.

1. H_{01}: There is a statistically significant relationship effect of bookkeeping methods on performance of SMEs. H_{A1}: The positive performance SMEs is highly impacted by their bookkeeping methods.

2. H_{02}: The accounting skills of owners have no major effect on the positive performances of SMEs.

H_{A2}: The accounting skills possessed by owners have a substantial effect on positive SMEs performance.

3. H_{03}: The accounting abilities of owners do not operate as a mediator in the connection in bookkeeping practices and performance of (SMEs).

H_{A3}: The accounting abilities possessed by owners play a mediating role in the connection in bookkeeping procedures and the positive performance of SMEs.

1.6 SIGNIFICANCE OF THE STUDY

This study offers analyses of the contribution of small and medium-sized firms (SMEs) in Ghana and the importance of bookkeeping practices. It is expected that small and mediumsized enterprise (SME) proprietors in Ghana will be provided with information pertaining to the influence of bookkeeping on the overall performance and prosperity of their enterprises. Furthermore, the outcomes of this research will provide valuable assistance to regulators and policymakers in their efforts to establish and enforce policies that encourage small and medium-sized enterprises (SMEs) to uphold the integrity of their financial documentation. This study will provide a valuable contribution to the current academic literature and knowledge base about accounting methods specifically within the context of small and medium-sized enterprises (SMEs).

1.7 SCOPE OF THE STUDY

The objective of this study was to evaluate the impact of bookkeeping practices on the financial performance of small and medium-sized firms (SMEs) located in the Oforikrom Municipality of the Ashanti Region in Ghana. The research primarily centered on growth and profitability as key metrics for assessing corporate performance. The present study specifically investigated the correlation between bookkeeping practices and performance outcomes, while also exploring the potential mediating role of accounting expertise in the nexus of bookkeeping and performance. It is imperative to acknowledge that the factors under consideration in this study are confined solely to those that have been expressly stated.

1.8 LIMITATIONS OF THE STUDY

The study is limited by its narrow scope, which only examines SMEs based in Oforikrom. Additionally, certain SMEs within the study area have been excluded from the analysis. Hence, it should be noted that the outcomes and inferences drawn from this study may not be universally relevant to all small and medium-sized enterprises (SMEs) in Ghana. Furthermore, it should be noted that this particular study did not include any qualitative assessments of small and medium-sized enterprises' viewpoints on the correlation between bookkeeping methods and their performance.

1.9 ORGANISATION OF THE STUDY

The research is made up of 5s distinct chapters. Chapter presents a thorough introduction is provided for the thesis, which includes background information, the research topic, objectives, research questions, the relevance of the study, scope, limitations, and the structure of the thesis. In Chapter two, provides literature on how accounting information systems is undertaken, encompassing both theoretical, empirical literature, and the conceptual literature that visually depicts the nexus of interest in this study, as well as the manner in which this association is shaped by the accounting proficiency of owners.

In the third chapter of this study, a thorough examination of the research methodology utilized is presented, encompassing a meticulous depiction of the research approach and design.

Furthermore, the present chapter provides an in-depth analysis of the study's demographic composition and the approach employed to derive the representative sample. Moreover, it encompasses a range of concerns related to the processing, estimation, and analysis of data. In the subsequent chapter, the attention is redirected towards the presentation and analysis of the principal outcomes obtained from the investigation. The aforementioned findings are given in accordance with the research objectives that were set previously. Additionally, this chapter also analyzes the results in reference to the current body of literature, thus establishing a correlation between the study's conclusions and the wider scholarly discussion. The concluding chapter functions as a comprehensive synthesis of the entire research endeavor, deriving deductions from the empirical observations. Moreover, it presents recommendations that are generated from these findings, offering practical insights for future implementations. Moreover, this chapter delineates prospective domains for future research, proposing pathways for additional discovery and inquiry.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This section of the research provides a thorough analysis of ideas and empirical studies pertaining to the topic of bookkeeping and its impact on the performance of small and mediumsized enterprises (SMEs) in the Oforikrom Municipality. The chapter provides a critical analysis of the theoretical underpinnings that form the basis of the study. Moreover, it critically evaluates pertinent empirical research and theoretical constructs in order to allow the construction of a streamlined conceptual framework for the investigation.

2.2 THEORETICAL REVIEW

The research employed information theory as a theoretical framework to provide justification for its investigation. The field of information theory involves the utilization of accounting statements to efficiently provide consumers with relevant information for making informed economic decisions. The subsequent section provides an overview of the theoretical framework.

2.2.1 Information Theory

The main purpose of accounting and bookkeeping is to enhance communication of financial matters to stakeholders. Financial statements play a crucial role in disseminating pertinent information regarding a company's performance, financial status, and cash flow. These statements serve as a valuable tool for informing both internal stakeholders inside the organization and external parties. Within the realm of stakeholders, specific individuals assume a crucial part in the decision-making process concerning a company's financial matters

(Freeman, 2008). Freeman (2008) asserts that financial data can be categorized as accounting information when it exhibits specific attributes, such as the inclusion of numerical values and adherence to traits such as objectivity, verifiability, relevance, and quantifiability.

Based on the tenets of information theory, businesses consider information as a valuable asset, and the processes of acquiring, manipulating, and disseminating it entail related costs. Expenses and the quantity of data available at a given point in time have a positive relationship. Therefore, it is imperative to establish a correlation between the process of obtaining and evaluating data and the associated costs. The primary factor that can aid in identifying the optimal level of information dissemination is through assessing the cost of providing information in comparison to its perceived value to the recipients.

This research uses the principles of information theory to investigate the strategies adopted by owners of SMEs in guaranteeing the attributes of objectivity, verifiability, relevance, and quantifiability in financial accounting information. Additionally, this practice assists in evaluating the impartiality, verifiability, pertinence, and measurability of the financial data or records upheld by SMEs.

2.3 CONCEPTUAL REVIEW

2.3.1 Small and Medium-Sized Enterprises (SMEs)

Plethora of scholarly inquiries have made efforts to build a complete comprehension of SMEs both within the wider academic conversation and particularly within the context of Ghana. The definitions utilized in this particular context rely on proxies, such as production volume and employee count, to characterize small and medium-sized firms (SMEs). A study by Chelimo and Sopia (2014) revealed that organizations that have employees below ten are regarded as micro companies while firms made up of employees above ten but below fifty are regarded as small firms.

Medium-sized firms are commonly defined as organizations that typically employ a workforce consisting of more than fifty employees but fewer than about two hundred and fifty individuals. The valuation of fixed assets is an additional criterion employed in determining the categorization of small and medium-sized enterprises (SMEs). Two primary criteria by National Board for Small Scale Industries in Ghana has formulated a comprehensive definition of SMEs as the size of the workforce employed by the organization and the monetary value of the firm's fixed assets. As per the classification standards established by the board, small and medium-sized enterprises (SMEs) are characterized as entities that employ more than nine individuals and possess equipment and machinery worth at a maximum of 10 million Ghana Cedis. Nevertheless, generally there is a significant difficulty in evaluating fixed assets, specifically within the Ghanaian setting (Kayanula & Quartey, 2000). Furthermore, the continuous depreciation of the Ghanaian Cedi when compared to other major trading currencies makes definitions related to fixed assets mostly obsolete (Kayanula & Quartey, 2000).

Abor and Quartey (2010) have categorized small and medium-sized enterprises (SMEs) into three primary classes, providing a point of differentiation. The survey classified micro enterprises as entities that employ fewer than six (6) individuals. In addition, the research presented a precise delineation for enterprises of limited size, classifying them as businesses employing more than six (6) individuals but not exceeding nine (9) personnel. It is important to highlight that within the survey, small firms were expressly categorized as organizations employing a staff of ten (10) to twenty-nine (29) employees. A recently published manufacturing survey conducted presents a modified conceptualization of enterprises, as put out by Abor and Quartey (2010). The study report classified businesses into four distinct categories according to their size: (i) micro-enterprise, which includes establishments with fewer than five employees; (ii) small enterprise, which encompasses establishments with 5-29 employees; (iii) medium enterprise, consisting of establishments with a workforce ranging from 30-99 employees; and (iv) large enterprise, which includes establishments with 100 or more employees. Furthermore, according to Amoako et al. (2014) and the Ghana Statistical Service (GSS), a small-scale firm have below ten individuals but medium-scale businesses have above ten workers.

2.3.2 Small and Medium-sized Enterprise (SME) Bookkeeping Procedures

Owusu et al. (2015, p. 84) posit that accounting processes can be characterized as a systematic and organized methodology for documenting the financial consequences of corporate operations in compliance with established Accounting Standards. The costs incurred in connection with the introduction of an record processes demonstrate differs depending on the unique attributes of the firm (Sibanda and Manda, 2016). Likewise, the selection of the bookkeeping methodology utilized by the firm also plays a role in this difference. The study was carried out in South Africa, and its findings offered empirical support for the hypothesis that inadequate record-keeping among SMEs led to substantial instances of failure.

Aladejebi and Oladimeji (2019) assert that double entry principles is mostly not used by SMEs in their accounting purposes. According to the findings of Aboagye-Otchere and Agbeibor (2012), Ghana opted to implement International Financial Reporting Standards (IFRS) with a specific focus on Small and Medium-sized Enterprises (SMEs) in the year 2009 targeting the year 2012.

Abdul-Rahamon and Adejare (2014) assert that the bookkeeping process encompasses multiple sequential stages. Initially, transactions are generated for the organization. Subsequently, these transactions are recorded and subjected to analysis through the utilization of journals. The financial transactions are subsequently recorded from the journal to their corresponding ledgers. The financial accounts are reconciled and a trial balance is generated. Any required modifications are implemented by means of supplementary entries. Ultimately, the financial accounts of the firm are prepared. Forkuoh and Li (2015) assert that a subset of small and medium-sized firms (SMEs) diverge from the recommended procedures for financial statement preparation and instead choose to employ single entry accounts, resulting in the production of inadequate data.

According to Aladejebi and Oladimeji (2019), it is crucial for proprietors and managers of small and medium-sized firms (SMEs) to conscientiously oversee fundamental financial operations to effectively foster the prosperity and expansion of their establishments. According to Muchira (2012, p. 13), it is essential to maintain and manage the key transactions pertaining to books of original entry within a dependable accounting framework.

2.3.2.1 Types of books kept by SMEs

In various nations, a considerable percentage of legal frameworks mandates that businesses must produce financial statements and subject them to periodic audits (Amoako, 2017). Primary stakeholders need to acquire a foundational understanding of bookkeeping and accounting. The research conducted by Ismail and King (2018) reveals a notable correlation between the accounting expertise possessed by owners and the production of reliable accounting information inside small company enterprises. The need of maintaining essential financial records for the performance of a small firm has been underscored by managers or owners, as highlighted by Ismail and King (2018) and Muchira (2017).

The roster of essential documents often encompasses the sales day record (sales journal), purchases day record (purchases journal), cash receipt record, check payments record, petty cash record, general journal, nominal ledger, debtors' ledger, and creditors' ledger. According to McMahon (2019), it is crucial to prioritize the preservation and upkeep of these components within a reliable accounting system. According to McMahon, it is crucial for an organization to uphold precise financial documentation. The aforementioned documents encompass a thorough collection of all commercial transactions, supplemented by duplicate copies of any invoices that have been issued. Furthermore, it is imperative to meticulously record all financial transactions related to business acquisitions and expenditures, accompanied by the relevant invoices. In addition, it is advisable to maintain a comprehensive record of all financial inputs and outflows pertaining to the firm, including preserving copies of business bank statements.

As stated by Muchira (2017), the aforementioned data is frequently employed by business owners or accountants in order to generate a profit and loss statement. This statement offers a comprehensive analysis of the revenue generated from sales, the expenses incurred, and the resulting profit or loss experienced by the organization. Nevertheless, it is imperative to acknowledge that not all small and medium-sized firms (SMEs) are required to preserve and handle all the aforementioned financial documents. The determination of whether to proceed with such action should be undertaken by each respective organization, with due regard to its distinct prerequisites and contextual factors. Organizations must consider the regulatory obligations set forth by institutions like the Ghana Revenue Authority (GRA) when deciding which financial documents to retain. These obligations pertain to the preservation of certain financial paperwork.

2.3.2.2 Classifications of accounting bookkeeping

Ademola (2017) argues that the specific form in which records are retained is not essential, as long as they effectively and accurately reflect the financial aspects of a firm, including its income, expenses, assets, and commitments. As per the definition presented by Olayiwola et al. (2016), records-keeping pertains to the systematic and structured procedure of recording business transactions. In contrast, accounting encompasses the categorization, examination, and comprehension of these corporate documents with the aim of expediting the process of making informed choices. The primary focus of this study pertains to two distinct areas, namely the system and the type of bookkeeping. The prevailing body of scholarly literature frequently classifies the accounting bookkeeping methodologies utilized by tiny enterprises into two primary systems: single-entry and double-entry.

2.3.2.2.1 Single-entry bookkeeping

Single-entry bookkeeping, sometimes known as "casual" accounting, necessitates the recording of a solitary entry for every transaction. The calculation of cumulative sums for both monthly and annual periods can be achieved by maintaining a comprehensive log of the daily income received. The procedure of documenting financial transactions involving the receipt and disbursement of funds is carried out. Eric and Gabriel (2018) indicated that the entering of one aspect of a transaction is a bookkeeping system which entails the documentation of a business transaction with a solitary entry. Accounting reports, such as checkbooks, cash receipts, and cash disbursements, serve the purpose of documenting financial transactions that occur at a specific point in time. Deposits and withdrawals are recorded as revenue-generating transactions, whereas expenses are documented through receipts. The aforementioned statement does not adhere to the principle of double-entry bookkeeping, which forbids the exclusion of both debit and credit entries. According to Abdul Rahamon (2018), the utilization of single-entry accounting method is deemed inadequate in accurately representing the financial standing of a firm. To provide precise and pertinent reporting, the conversion of accounting records into a double-entry system is deemed important, as proposed by Onaolapo et al. (2020).

2.3.2.2.2 Double-entry bookkeeping

Double-entry bookkeeping is a systematic approach to financial record-keeping wherein every transaction is documented in a minimum of two distinct accounts. This system is designed to assure the preservation of the accounting equation, which is a fundamental principle in accounting.

Bishop (2019) claimed that there existed a necessity for enhancement in the single-entry bookkeeping methodology employed during the aforementioned era. The double-entry accounting method was established by Luca Pacioli, an Italian monk, in response to the prevailing circumstances. The double-entry accounting methodology is founded upon the fundamental principle that every economic transaction yield two opposing effects. Debit and credit represent the exclusive possible outcomes of every transaction, and they consistently retain an equal magnitude. Therefore, it is crucial that, at year-end financial accounting entries balance. Thus, debits and credits sides of the account balances out.

The double-entry accounting system has been developed with the purpose of guaranteeing that each transaction's debit and credit entries are accompanied by pertinent information. According to Senzu and Ndebugri (2018), said the most common framework for keeping records of transactions is the double-entry principle. A skilled bookkeeper will methodically document all monetary transactions in a sequential manner by means of journalizing. Once the process of recording transactions in the general ledger accounts is finished, the bookkeeper is capable of producing a trial balance. This serves as a concise representation of the ledger balances at a specific point in time.

The utilization of a trial balance, supplemented with additional information, enables the generation of the two major financial statements being the income statement and balance sheet. These statements adhere to the guidelines set forth by the International Financial Reporting Standards. Therefore, it is crucial to give priority to the double-entry principle, which is a key accounting concept that ensures the accurate recording of all transactions. The significance of this emphasis is in the assessment of the impact of bookkeeping on the sustainability of a corporation, regardless of its size.

2.3.4 Nature of accounting bookkeeping

The nature of accounting bookkeeping refers to the inherent characteristics and fundamental principles that govern the practice of recording financial transactions and maintaining accurate financial records.

The essence of accounting accountancy pertains to the intrinsic attributes and core elements of the discipline.

The incorporation of both manual and digital methodologies for the maintenance of accounting records allows persons to analyze the fundamental attributes of record-keeping within the realm of accounting. Weber (2018) offers substantiation for this claim by proposing a categorization of accounting into two primary groups: manual accounting and automated accounting.

2.3.4.1 Manual records-keeping

The field of bookkeeping encompasses two separate methodologies: single-entry bookkeeping and double-entry bookkeeping, which serve as the basic approaches in this domain.

2.3.4.1.1 Problems with manual records-keeping

It is essential to possess a high level of skill in using a calculator and understanding the fundamental concepts of double-entry bookkeeping in order to efficiently oversee and maintain manual accounting records. Such records are more prone to errors, making proficiency in these areas crucial. One other concern pertaining to the activity of bookkeeping is the vulnerability of records to potential damage, which encompasses various dangers such as water damage, fire damage, and other related hazards (Amanamah et al., 2016). Moreover, it is important to acknowledge that the preservation of documents is often obligatory, especially in the Nigerian setting, where governmental bodies possess the power to request documentation covering a duration of six years. The implementation of a computerized accounting system (CAS) has been proposed as a solution to address these limitations. According to Akande (2017), the implementation of Computerized Accounting Systems (CAS) offers a solution to the challenges encountered while employing manual accounting techniques. Moreover, as Zhou (2019) posits, the incorporation of accounting software holds the capacity to enhance accounting procedures.

2.3.4.2 Computerised accounting system

As claimed by Gupta (2019), a computer is an apparatus which can be programmed to execute a specified series of command and demonstrate a specific response to a defined set of instructions. The adoption of computerized accounting systems (CAS) has led to the optimization of procedures, heightened productivity, and improved accuracy in the acquisition of financial data for corporate organizations. The implementation of Computerized Accounting

Systems (CAS) has had an effect on the accounting profession, causing growth of innovative accounting programs designed specifically for businesses (Burdick, 2019). In the present era, a significant proportion of small businesses demonstrate a tendency to adopt computerized software systems for the purpose of overseeing and controlling their financial operations, rather than relying on conventional manual techniques such as physically recording transactions in extensive ledger books.

One notable benefit of computerized accounting software lies in its ability to streamline many business processes, particularly those related to the management of a company's creditors and debtors. Moreover, it improves cognitive decision-making capabilities. According to a study by Amanah et al. (2016), it has been noted that Computerized Accounting Systems (CAS) demonstrate a notable degree of efficacy and accuracy in performing routine transactional tasks, as well as in conducting analyses and producing reports. Machera and Machera (2017) suggest that the adoption of accounting software offers numerous advantages. The aforementioned benefits include the streamlining of stock reconciliation and asset register maintenance, the facilitation of financial ratios and graphs, the enablement of cloud accounting, the expedited processing of transactions, and the improvement of overall completeness and accuracy. Based on the research conducted by Sam, Hoshino, and Tahir (2019), it has been noted that small enterprises frequently face limitations in terms of resources across multiple dimensions, including financial capability, availability of leisure time, and access to ITproficient personnel. These constraints impede their capacity to successfully implement complex adaptive systems (CAS).

2.3.5 Accounting Skills

In conjunction with the possession of professionalism, managerial and leadership competences, soft skills, and competency in information technology, the discipline of accounting requires specialized expertise in the domains of bookkeeping and external reporting. In order to ensure efficient corporate governance, it is imperative to possess a thorough grasp of accounting principles. Accounting professionals advises businesses on proper record keeping (Francis and Minchington, 1999) Based on a performed study about the anticipated skill requirements for aspiring accountants, it was noted that auditing training officers maintained the perspective that accounting skills possessed a somewhat significant level of importance. According to Barac (2009). There is a prevailing agreement among multiple studies that possessing a high level of competence in managerial accounting holds significant importance for Chartered Accountants (CAs) who are employed in sectors outside of the auditing sector. Nevertheless, the importance of accounting abilities is relatively less prominent for Chartered Accountants (CAs) who are specifically employed in the field of auditing.

A research study examining the discrepancy between theoretical knowledge and practical skills in South Africa reveals that management accounting and financial are crucial areas for small and medium-sized firms. This exemplifies the relevance of being exposed to management accounting and underscores the uneven distribution of practical experience opportunities among organizations, suggesting a potential necessity to address this issue at the university level. SAICA (2016) asserts that it is essential for students to receive education in important areas that are of importance in the accounting field.

2.3.6 Performance

Richard and his colleagues (2009) put out a conceptual framework that encompasses three unique elements for determining a firm's success. The initial dimension pertains to financial performance, encompassing metrics such as profits, ROA, and ROI. The second component pertains to product market performance, which is assessed using metrics such as sales and market share. Lastly, the third component pertains to shareholder return, which is evaluated using indicators such as total shareholder return and economic value added. Cetindere et al. (2015) proposed that success might be conceptualized as the assessment of all efforts made in the pursuit of organizational objectives. Alternative definitions of "firm performance" encompass the tangible outcomes derived from the firm's operational activities or the successful attainment of the firm's objectives (Maqsood, 2019).

The success of a company is dependent on its capacity to efficiently accomplish its objectives and meet the needs of its stakeholders. Maziriri and Chinomona (2016) assert, as stated on page 130. According to Vieira (2018), the assessment of business success may be characterized by two primary elements: the effective completion of duties and the subsequent accomplishments. In actuality, a dearth of globally acknowledged criteria exists that can function as a standard for assessing the achievement of a firm. As stated by Lussier (2017), prior to evaluating and overseeing organizational performance, it is vital to possess a clear comprehension of the notion of firm performance. The research conducted by Maziriri and Chinomona (2018) holds notable importance. Hove, Sibanda, and Pooe (2019) posit that the comprehensive evaluation of a business's performance entails the combined influence of technology-enabled performance across multiple facets of organizational activities.

In order to optimize its capacity to fulfill the requirements of its stakeholders, a corporation must endeavor to boost its performance, an objective that can be achieved through the use of performance evaluations. This action is carried out based on two main grounds (Okwo & Marire, 2019). Dixon, Nanni, and Vollmann (2018) believe that the effectiveness of performance metrics lies in their ability to facilitate enterprises in directing their endeavors towards the attainment of strategic objectives. Tangen (2017) asserts that metrics are utilized as a method for evaluating the effectiveness and efficiency of organizational endeavors.

According to the research conducted by Bourne, Neely, Mills, and Platts (2017), although the explanations provided are valid, they do not fully embrace the concept of performance assessment as it is currently understood in modern literature and practice. As per the authors' assertion, performance measurement encompasses the utilization of a broad array of performance measurements across several dimensions.

Fitzgerald and Moon (2018) suggest that multi-dimensional performance measures (MDP) comprise an extensive array of performance indicators. These could be financial or nonfinancial metrics of measuring performance. The growing adoption these measures in both academic research and practical applications can be linked to their capacity to enhance the benefits of measures that focus on a single dimension, while also addressing their inherent limits. Supporters of multi-dimensional performance assessments, as demonstrated by Cheng (2018) and Kotey & Meredith (2017), highlight the importance of incorporating a range of internal and external performance indicators to effectively measure present and future performance. Zuriekat, Salameh, and Alrawashdeh (2019) included the aforementioned indicators into self-assessment surveys by utilizing Likert scales. The application of the building block metaphor is a particularly effective strategy for understanding the concept of multi-dimensional performance indicators.

The Malcolm Baldrige Quality Award, a prestigious recognition inside the United States, has successfully established a comprehensive framework for measuring performance. This paradigm incorporates various dimensions, which include outcomes linked to product and process, outcomes centered around customers, outcomes associated with the workforce, outcomes related to leadership and governance, as well as financial and market outcomes. Dermibag et al. (2006) assessed the efficacy of a company by evaluating financial indicators, including profit, market share, earnings, and growth rate, commonly referred to as "past performance." Nonetheless, it is imperative to acknowledge that non-financial performance also holds significant importance in determining a company's success, as it endeavors to address potential deficiencies in conventional organizational performance.

2.3.6.1 Financial Performance

The evaluation of management techniques is contingent upon how financial performance is measured as it facilitates the appraisal of the influence of investments, technologies, and the company's strategy and execution on the value of the firm (Moballeghi & Moghaddam, 2011). The analysis of financial performance can be conducted through two approaches: subjective and objective. The subjective approach relies on individuals' perspectives, while the objective approach is based on quantifiable profit figures and metrics (Kober et al., 2012). Financial performance indicators, such as sales, market share, and profits, are deemed noteworthy owing to their correlation with other financial performance factors and the outcomes of efforts aimed at improving product efficiency, customer retention, and cost reduction in addition to revenue generation (York & Miree, 2004).

Several studies have demonstrated that financial performance may be evaluated by the utilization of measures such as profit, sales, growth, and market results (Nguyen et al., 2016; Kaynak, 2003). Demirbag et al. (2006) and other scholars have proposed the adoption of metrics of ROI, ROA, and revenue flows as valuable indicators. The accounting measurements discussed are often obtained from annual reports, which are usual for publicly traded corporations. This study utilizes two unique sets of variables to assess the financial performance of privately held Vietnamese enterprises. The initial set of metrics related to market outcomes, namely comprising market share, the increase of market share, and expansion into other markets or acquisition of new consumers. The second group of metrics pertains to profitability, comprising indicators such as revenue growth, sales growth, and profit growth. The parameters employed in this study were derived from the empirical research conducted by Nguyen et al. (2016).

According to Horngren, Datar, and Foster (2018), financial or quantitative performance metrics comprise a wide range of performance indicators. According to Garrison, Noreen, and Brewer (2017) and Khan and Jain (2019), the assessment of financial success can be carried out using both subjective and objective criteria. Relative financial performance measures, as defined by Horngren, Datar, and Rajan (2018), pertain to indicators that exhibit the relationship between profit or return and the resources utilized in its creation. One notable benefit of utilizing this specific methodology for performance assessment is in its ability to enable the juxtaposition of performance indicators inside and among diverse enterprises.

On the other hand, absolute financial performance assessments function as indicators of achievement by assessing the overall return or its equivalent. Multiple instances of comparable returns can be found, including PBIT, profit before inflation, EVA, and RI. Supporters of relative performance metrics argue that absolute performance measurements are inadequate in establishing a definitive relationship between the generated return and the resources utilized in its development. While evaluating performance often places significant emphasis on financial achievements, some argue that this measure mostly functions as a retrospective indication and has significant predictive abilities.

It is conceivable that managers and owners might demonstrate a proclivity for making decisions that favor immediate financial success, perhaps compromising long-term performance, in pursuit of the intended financial goal (Dallas, 2017; Kaplan, 2018). Moreover, the corporation's exclusive dependence on these shorter financial performance metrics confers limited benefits, as they insufficiently encompass the various factors that influence the long-term performance of commercial entities (Drury, 2019).

2.3.6.2 Non-financial Performance

The assessment of a corporation's operational performance transcends monetary measures and incorporates non-financial factors that hold equal importance. Quality performance indicators comprise a range of characteristics, including adherence to established product or service standards, levels of productivity, expenses related to scrap and rework, and the timeliness of delivery. There exists a substantial association between the performance of quality and nonfinancial aspects. Shaukat et al. (2002) propose that quality performance can be defined as a comprehensive measure that incorporates several aspects of a company's supplier, product, process, and service quality performance. Evaluating the levels of employee and customer satisfaction is widely regarded as the most effective method for measuring non-financial accomplishments. Nguyen et al. (2016), Hassan et al. (2013), Demirbag et al. (2006), Sadikoglu & Zehir (2010), and the framework for the 2017 Malcolm Baldrige Quality Award all agree on the importance of product and customer outcomes, process results, and workforce outcomes as essential elements of non-financial performance.

In contrast, Agyei-Mensah (2017) offers a definition of non-financial or qualitative measures as performance indicators that rely on non-financial data and are utilized by centers responsible for cost and profit to independently monitor and control their operations not relying on inputs from accounting. The inclusion of non-financial performance indicators, such as service quality, flexibility, resource utilization, innovation, and competitive performance, was driven by the building block approach as suggested by Kaplan (2018). Woolf (2017) asserts that the incorporation of these indicators into assessment systems can furnish managers with prompt and pertinent insights into the factors that impact performance. To facilitate this investigation, the performance indicators with many dimensions, as delineated in Oppong's (2019) study, were modified to align with the distinctive operational environment of small and medium-sized firms (SMEs). To exemplify, the dimension pertaining to the increase of sales volume and value in our firm was rephrased to be applicable to SMEss.

2.4 EMPIRICAL REVIEW

This chapter of the study provides summaries of previous on the subject matter of the research being examining the nexus of bookkeeping and SEMs performance. The review will be structured in accordance with the research objectives outlined herein.

2.4.1 Bookkeeping Practices and SMEs' Performance

The utilization of bookkeeping methodologies holds significant significance in the realm of business operations, as it assumes a crucial function in enabling efficient management and strategic planning within the organizational framework (Abdul-Rahamon & Adejare, 2014).
The study conducted by Maseko and Manyani (2011) firmly asserts the significance of bookkeeping and financial report production in the context of business operations and the development of economic judgements. According to Bekoe, Owusu, Ofori, Essel-Anderson, and Welbeck (2018), the utilization of bookkeeping allows owners and managers of small and medium-sized enterprises (SMEs) to assess the profitability of their individual organizations.

Abdul-Rahamom and Adejare (2014) assert that the principal purposes of record keeping encompass the augmentation of productivity and efficiency, the facilitation of innovation and growth, the mitigation of operational expenses, and the assurance of adherence to legislative mandates. In accordance with the Companies Act of 2019, specifically Act 992, it is a legal requirement for all businesses that have been registered under this particular legislation to consistently prepare financial statements and efficiently distribute the accumulated financial data to pertinent stakeholders. Notwithstanding the statutory need, a considerable proportion of businesses demonstrate non-adherence, primarily due to the insufficient enforcement of laws inside the nation.

Also, Eric and Gabriel (2012) examine this subject matter and found that the utilization of bookkeeping serves as a significant technique for financial management, facilitating managers in assessing the financial health of their organizations and implementing control strategies to improve overall performance. As per the authors' assertions, the practice of upholding financial records has a plethora of benefits. The data presented by the entity holds relevance and offers benefits to a range of stakeholders, encompassing investors, customers, managers, leaders, suppliers, and regulators. The authors believe that doing a comprehensive financial analysis of the financial data contained in financial statements can proficiently elucidate the inherent strengths and weaknesses of a corporation. Managers have the ability to employ this knowledge in enhancing the overall organizational success. To enhance the overall worth of a corporation, proficient administration must strategically exploit its fundamental capabilities while concurrently resolving any existing deficiencies. The profession of accounting facilitates the process of financial statement analysis, which includes doing a comparative assessment of a company's performance in respect to other firms operating within the same industry. This comparative analysis is a crucial component of evaluating a company's financial performance. The corporation's financial accounts can undergo study over a specific duration to evaluate the success of the organization.

The study undertaken by Abdul-Rahamon and Adejare (2014) aimed to examine the influence of bookkeeping procedures on the performance of small and medium-sized firms (SMEs) in Nigeria. This study made use of the mixed method of research design being both the quantitative and qualitative methodologies. Their findings show a significant nexus between the study constructs. Furthermore, Mutua (2015) undertook a study the aim of investigating the effect of bookkeeping on the growth and development of businesses in Chuka Town, a specific region located in Kenya. The study's findings indicate that a significant proportion of small and medium-sized firms (SMEs) demonstrated deficiencies in their record-keeping practices. Furthermore, the research findings indicate a strong positive association between the use of efficient bookkeeping procedures and the overall expansion of a company.

In a study Sibanda and Manda (2016) undertook an investigation to analyze the factors associated with accounting practices that aid in a decline of small and medium-sized firms (SMEs) in South Africa. The research was carried out utilizing a sample of 40 small and medium-sized firms (SMEs) located in South Africa. The findings of the survey indicate that a substantial percentage of small and medium-sized firms (SMEs) do not maintain sufficient bookkeeping standards, leading to negative repercussions on their overall performance and prospects for growth. Moreover, by employing suitable accounting procedures, firms may efficiently monitor their expenses, assess the outcomes of various financial decisions, and adopt corrective actions as required. In addition, Chelimo and Sopia (2014) used a sample size of 72 participants to study the relationship between bookkeeping and firm development and growth in Kenya and found a favorable relationship between adopting bookkeeping procedures and expansion of their business.

2.4.2 Owners' Accounting Skills and SMEs' Performance

The research conducted by Usama and Yusoff (2019) used a regression analysis to investigated the effect of firm's literacy in finance on the operational outcomes of small and medium-sized firms (SMEs) located in Bauchi, Nigeria. The research findings indicate that the level of accounting competence significantly impacts the performance outcomes of small and mediumsized firms (SMEs). Mutua (2015) also conducted research on the implementation of efficient accounting procedures plays a crucial role in enabling small and medium-sized firms (SMEs) to effectively manage their expenditures and expenses. Additionally, these practices empower SMEs by providing them with operational control. Mutua (2015) states that the process of choosing an accounting system that effectively fits small and medium-sized firm (SME) owners presents a considerable difficulty. The challenge stems from the significant expenses and permanent nature linked to the establishment and maintenance of a complete accounting information system for a small and medium-sized enterprise (SME). The research undertaken by Olarewaju and Msomi (2021) investigated the effect of accounting expertise on the longterm viability of companies. The research utilized data that was gathered from small and medium-sized firms (SMEs) situated in South Africa revealing a significant influence of accounting skills on the sustained survival and resilience of small and medium-sized enterprises (SMEs).

Usama and Yusoff (2019) assert that accounting skills among persons in managerial and ownership roles within the small and medium-sized firm (SME) sector led to improved resource management efficiency and more precise exploitation of financial information. Consequently, these competencies has a serious task in enhancing the overall performance and growth of the firms. According to Nunoo and Andoh (2011), there is a favorable correlation between a greater degree of financial literacy, namely in the area of accounting skills, and the level of involvement that firms have in financial markets. Consequently, this process increases the accumulation of assets and provides opportunities for accessing various sources of money.

According to Klapper, Lusardi, and Panos (2013), the acquisition of accounting skills by shareholders and those charged with governance of small and medium-sized enterprises (SMEs) plays a crucial role in the efficient processing of economic information. This, in turn, empowers them regarding decision making in terms of savings, financial planning, investment diversification, and debt management, ultimately leading to more effective outcomes. According to the research conducted by Fatoki in 2014, financial literacy plays an important function in equipping managers and owners of small and medium-sized firms (SMEs) with the essential knowledge and skills required to make well-informed financial decisions. These decisions, in turn, contribute to enhancing the financial stability and overall welfare of the organization. Ultimately, it was noted that firm proprietors and executives who exhibited a specific level of financial literacy shown a propensity to incorporate ideas and knowledge acquired through financial education. These individuals also have the ability to choose financial services that are in line with the goals of their organizations (Fatoki, 2014; Lusardi, 2015; Chepkemoi, Kanini, & Kahuthia, 2017).

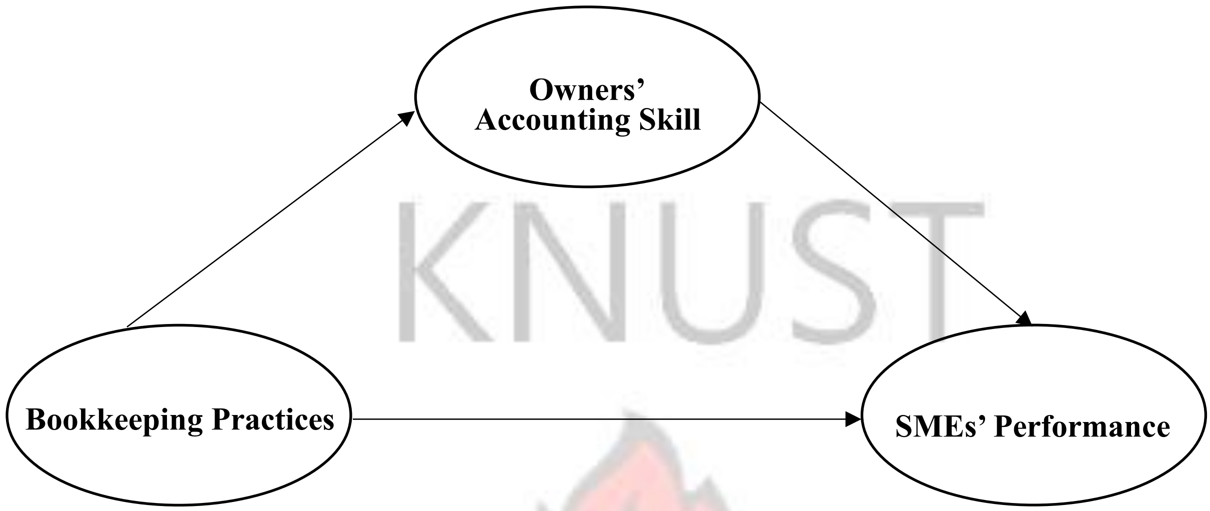
2.4.3 Bookkeeping Practices, Owners' and Employee's Accounting Skills, and SMEs' Performance

The study conducted by Afang and Francis (2021) was to investigate the association between recordkeeping practices and the financial performance of small and medium-sized firms (SMEs) with the moderating role of accounting skills in Kaduna Metropolis, Nigeria. The study gathered data from a sample of 1233 small and medium-sized firms (SMEs) and using analysis of variance (ANOVA) and ordinary least squares (OLS) regression techniques to examine the collected data. The results of the study demonstrate a statistically significant positive correlation between bookkeeping procedures and the performance of Small and Medium Enterprises (SMEs) in Kaduna Metropolis. Furthermore, the results suggest a significant inverse correlation between bookkeeping and financial performance in those with extensive accounting skills, as opposed to those with less accounting knowledge. Hence, the level of expertise in accounting significantly impacts the financial performance of small and mediumsized firms (SMEs) with regards to their bookkeeping practices.

2.5 CONCEPTUAL FRAMEWORK

The interrelationship among the variables being studied can be understood by applying the previously discussed principles and concepts, as illustrated in Figure 1. The conceptual framework postulates that the act of bookkeeping is influenced by the effect of financial performance, which can be evaluated through two principal dimensions: profitability and business growth. The framework also provides further clarification on the influence of accounting on the operational effectiveness of small and medium-sized firms (SMEs), taking into account the accounting expertise possessed by the shareholders and governing bodies of those enterprises.

Figure 1: Conceptual Framework



2.6 CHAPTER SUMMARY

The section presented a succinct overview of theories and empirical studies conducted in the field of bookkeeping and its effect on business performance. The Chapter concisely reviewed the theories that form the basis for the investigation. To provide a conceptual framework for this study, a comprehensive examination of empirical literature and relevant concepts was undertaken. The aforementioned procedure facilitated the acquisition of a thorough comprehension of the subject matter and the establishment of a streamlined conceptual structure.

CHAPTER THREE

RESEARCH METHODS

3.1 INTRODUCTION

This section of the study comprises an analysis of the fundamental philosophical framework of the inquiry, a clarification of the research design utilized, and an outlining of the approach undertaken for the study. The chapter provides additional clarification on the notions of population and sample size within the framework of the investigation. Moreover, this chapter highlights the instrument and methodology utilized for the collecting of data, the following processing and analysis of the gathered data, and the ethical considerations entailed.

3.2 RESEARCH PHILOSOPHY

The study utilized the philosophical paradigm of positivism. The philosophical framework of positivism allows researchers to observe social processes in an objective manner, measure social phenomena, and clarify the relationships between different variables (Patton, 1975). The idea posits that research is conducted in accordance with scientific procedures and principles, wherein results are obtained via the practices of observation and experimentation. It is imperative to reiterate that the outcomes of the investigation ought not to be swayed by individual emotions, perspectives, or interpretations. Positivist researchers utilize the principles of objectivity, dependability, and validity to evaluate quantitative studies and the relationships among variables.

3.3 RESEARCH DESIGN

Saunders et al. (2016) assert that the selection of a study design, be it descriptive, exploratory, or explanatory, is contingent upon the method in which researchers structure their inquiries, construct a hypothesis, and communicate their aims. The current study employed an explanatory research methodology to examine the interactive influence of bookkeeping methods and owners' accounting skills on the performance of small and medium-sized firms (SMEs). In select scholarly literature, the term "causal research design" is occasionally used as an alternative designation for explanatory design (Hair et al., 2012). The primary purpose of the researcher is to unravel the fundamental factors and assess their individual impacts on the obtained results (Ghauri et al., 2020). According to Saunders et al. (2016), the basic aim of explanatory research is to help researchers make sense of the causal relationship between variables. The main purpose of this study was to assess the mediating role of owners' accounting abilities in the relationship between bookkeeping practices and the performance of small and medium-sized firms (SMEs).

3.4 RESEARCH APPROACH

Every scholarly inquiry requires a unique methodology. According to Saunders et al. (2016), the research methodology encompasses the overall framework of the study, including the formulation of research questions or hypotheses, the selection of participants, the determination of data sources, and the analysis of data to generate findings or outcomes related to the aforementioned research questions or hypotheses. Creswell (2014) identified three principal research methodologies, specifically qualitative, quantitative, and mixed methods. This study employs a quantitative methodology as constructs are evaluated using a Likert-type scale.

The study employed a quantitative research methodology. Mathematical and statistical methodologies are utilized in this particular mode of investigation to scrutinize hypotheses (Creswell, 2014). Considering the objective of the study, which is to investigate the elements that have an impact on or provide the most precise forecast of a particular outcome, specifically the performance of subject matter experts, a quantitative methodology was judged suitable.

The present study investigates the impact of bookkeeping practices on the operational outcomes of small and medium-sized firms (SMEs) within the Oforikrom Municipality. The study aims to examine the interrelationships and impacts of one or more elements on each other. As a result, a quantitative research methodology was utilized.

3.5 POPULATION

The participants of the study are comprised of persons who occupy the roles of owners and/or managers within small and medium-sized firms (SMEs) based in the Oforikrom Municipality, which is located in the Ashanti Region of Ghana. The target demographic for this study comprises the proprietors and administrators of the chosen small and medium-sized firms (SMEs). The target population included of officially recognized small and medium-sized firms (SMEs) situated in the Oforikrom Municipality, which is located within the Ashanti Region of Ghana. The estimated number of small and medium-sized enterprises (SMEs) in this region was roughly 250.

3.6 SAMPLE AND SAMPLING PROCEDURE

Sampling is a methodical process that entails the deliberate choosing of a small group of individuals from a larger population, with the objective of drawing inferences or making predictions about the entire population. According to Kumar (2011), this specific methodology is utilized to determine the prevalence of secret knowledge, conditions, or outcomes within the larger community. Saunders et al. (2016) provide a definition of a sample as a subset of the population that is deliberately selected and analyzed for the purpose of conducting research. In this specific case, the researcher had challenges in accurately determining the exact number of small and medium-sized firms (SMEs) within the Oforikrom Municipality. As a result, the estimation of the minimal sample size was made by using Adam's (2020) chart for sample size determination.

The "Sample Size Determination Table" created by Adam (2020) is employed to calculate the necessary sample size for categorical data in order to achieve a statistically significant and representative sample. Based on the supplied data, it can be deduced that a population size of 250 individuals requires a minimum threshold of 152 individuals. The research study chose to include a total of 180 participants, which slightly exceeds the required sample size. This decision was made in order to minimize response bias and potential non-response.

3.7 DATA COLLECTION INSTRUMENT

A data collection instrument is defined as a tool or methodology that is used by researchers to collect data from study participants (Babbie, 2007). The research investigations include a diverse array of instruments for data collection, including questionnaires, surveys, interview guides, observation guides, focus group discussions, notes, pictures, and other tools (Ogah, 2013). The study utilized questionnaires as the principal instrument for gathering data. The implementation of Google Forms has enabled the creation of digital surveys. The implementation of online surveys facilitates a faster and more cost-efficient method for collecting data from a sufficiently big sample.

It is crucial to recognize that questionnaires provide the guarantee of maintaining respondent anonymity, hence fostering respondents' confidence in providing the requisite information needed for the study (Kamaloodien, 2006). The features in this study were evaluated on a 5point Likert-type scale, except for the demographic data of the participants. The study included the concepts of Accounting Skill (AS), Bookkeeping Practices (BK), and Performance (PFM) as primary variables. This study incorporated demographic variables such as gender, age, marital status, respondent rank/position, and length of operations. The researchers employed a set of questionnaire items that had been previously validated by Abdul-Rahomon and Adejare (2014) in order to assess the concept of "bookkeeping practices". Furthermore, the questionnaire items originally formulated by Akande (2011) were modified in order to evaluate the concept of "accounting proficiency among business owners". The performance of small and medium-sized firms (SMEs) was assessed in this study using a set of validated questionnaire items produced by Rehman and Muhammad (2019).

3.8 DATA COLLECTION PROCEDURE

The research utilized an online survey as the principal means of gathering data, with participation limited to participants who granted their consent. Prior to their engagement, the respondents were not personally solicited, thereby making the procedure entirely voluntary. The participants were clearly informed in the survey's introduction that their involvement in responding to the questions was fully optional and that they had the autonomy to withdraw from the survey at any given moment. The poll was conducted over a period of seven days.

The survey instrument was partitioned into four distinct portions. The introductory section consisted of an overview that introduced the background of the study and outlined the ethical considerations for data collection. The second section of the was to collect information from participants pertaining to their socio-demographic characteristics. The subsequent stage of the research involved the collection of data pertaining to the indicators of bookkeeping practices in small and medium-sized enterprises (SMEs), as well as the accounting competencies maintained by their owners. Following this, the concluding part of the research aimed at carrying out collection data regarding the operational effectiveness of small and medium-sized firms (SMEs). A 5-point Likert-type scale was utilized to assess the evaluation of bookkeeping processes, owners' accounting skills, and SME performance.

3.9 VALIDITY AND RELIABILITY OF THE INSTRUMENT

Data related to each of the measurement items is gathered by employing a self-administered survey. The questionnaire components are evaluated utilizing a Likert scale that spans from 1 to 5. A rating of 5 signifies a substantial degree of concurrence, while a rating of 1 signifies a significant level of disagreement with a specific statement. The inventory of prospective items underwent a revision process in order to exclude indicators that demonstrated low levels of validity and reliability. The evaluation of the reliability and validity of the factors is performed by employing composite reliability (CR) and Cronbach's alpha (CA) statistics, as suggested by Cronbach in 1951. Hair, Black, Babin, and Anderson (2010) conducted a study and discovered that all of the variables' CA and CR values exceeded the recommended threshold of 0.70.

Divergent validity, also known as discriminant validity, is utilized to establish the lack of a correlation between two constructs that are not anticipated to be interconnected. In order to evaluate the average variance explained (AVE) of the latent variables, the squared correlations between the latent variables are calculated and arranged in a correlation matrix.

3.10 DATA PROCESSING AND ANALYSIS

The data collected for this research was processed and analyzed with Smart-PLS version 3.3.3, a software developed by Ringle, Wende, and Becker (2015). The survey responses undergo a data cleansing process utilizing Microsoft Excel 2019. The study incorporated additional inquiries that were not directly linked to the topic at hand, with the intention of reducing the potential impact of the common procedural bias. The regression analysis produced outcomes using a sample of five thousand bootstrap samples, with the hypotheses being examined at a significance level of 5%. Prior to doing the regression analysis, a series of diagnostic tests are conducted to assess the accuracy and dependability of the path coefficients, model fit, and the possibility of common method bias.

3.10.1 Goodness-of-Fit Test

The adequacy of the measurement model was evaluated by employing the Tucker-Lewis Index (TLI) and Comparative Fit Index (CFI), two widely recommended statistical measures with a recommended threshold of 0.90. In addition, the appropriateness of the model was evaluated using the Root Mean Square Error Approximation (RMSEA) and Standardized Root Mean Square Residual (SRMR). Based on the research conducted by Hair et al. (2010), it is advisable to ensure that the Root Mean Square Error of Approximation (RMSEA) and the Standardized Root Mean Square Residual (SRMR) do not surpass the threshold value of 0.8. The current investigation did not include the results of confirmatory tests, such as the coefficients of determination (R2), predictive relevance (Q2), and effect size (F2), as suggested by Ringle et al. (2015) in their Smart-PLS research. However, the results obtained from the Smart-PLS analysis were integrated into the current study.

3.10.2 Common Method Variance/Bias

This concerns the assessment of errors that arise due to constraints in the selected research methodology. A potential occurrence of change in perspective (CMV) may arise when all survey items utilize a standardized 5-point Likert scale, as exemplified. Podsakoff, MacKenzie, Lee, and Podsakoff (2003) put forth various potential approaches to tackle the problem of common method variance (CMV) within this particular setting. Each of these approaches offers unique benefits and drawbacks. The research utilised Herman's single component test, a commonly used methodological approach. The current research utilized a particular methodology to conduct an exploratory factor analysis (EFA), in which the items of the questionnaire were loaded into a single latent factor. The maximum allowable value for the average variance extracted (AVE) of a single factor is constrained by a threshold of 50% (i.e., 0.50).

3.11 ETHICAL CONSIDERATIONS

The research was carried out in adherence to ethical protocols, encompassing principles such as confidentiality, informed consent, plagiarism prevention, voluntary involvement, and other pertinent ethical factors. The study did not require participants to disclose personal identifying information, such as names, email addresses, or any other specific data. Also, participants were informed of their right to not undertake the survey if they so wish, especially if they had any difficulty while responding to the inquiry.

3.12 CHAPTER SUMMARY

This section of the study presented a thorough explanation of the key theoretical frameworks that guided the study, the structure of its content, and the research methods utilized for examination. In addition, the chapter provided information pertaining to the demographic characteristics and sample size of the study. This chapter also covered the instrumentation and procedures utilized for data gathering, along with their subsequent processing and analysis.
The chapter also discussed the ethical considerations pertaining to the study.

CHAPTER FOUR

DATA PRESENTATION AND DISCUSSIONS

4.1 INTRODUCTION

This part of the study presents the results of the analysis and discussions. Specifically, the chapter presents a comprehensive examination of the descriptive summary, measurement model, structural model, model diagnostics, and regression findings obtained from the analysis of the data. The results derived from empirical investigation were thoroughly discussed. The results presented in this chapter are based on a sample of 200 valid responses collected via an online survey. The approach utilized in presenting the outcomes of Partial Least Squares (PLS) analysis followed the recommendations established by Chin (2010).

The present study involves the examination of data in two separate categories: (a) the assessment of results obtained from the measurement model (MM), and (b) the assessment of results obtained from the structural model (SM). The primary aim of the measurement model (MM) is to assess the reliability and validity of the manifest variables. On the other hand, the structural model (SM) evaluates many parameters such as path coefficients, coefficient of determination (R2), predictive relevance (Q2), and moderation analysis to establish the relationship between latent variables (constructs). The chapter is ended by presenting a concise overview.

4.2 BACKGROUND CHARACTERISTICS OF RESPONDENTS

Descriptive statistics were calculated in order to provide a comprehensive understanding of the statistical distribution among the participants involved in the study. The present study entailed an analysis of the 200 valid replies obtained from the online survey administered to small and medium-sized enterprises (SMEs). Table 1 succinctly presents the demographic characteristics

Figure 2: Conceptual Framework

of the participants.Source: Author's Construct (2022)

Table 1: Descriptive Statistics

Variable	*n*	%
Gender		
Male	124	62.0
Female	76	38.0
Age		
Less than 26	150	75.0
26 – 35	42	21.0
36 – 45	4	2.0
46 – 55	4	2.0
Above 55	150	75.0
Educational Qualification		
Primary	5	2.5
Secondary	16	8.0
Tertiary	179	89.5
Position		
Owner	53	26.5
Manager	60	30.0
Senior employee	87	43.5
Nature/Class of Business		
Manufacturing	32	16.0
Construction	24	12.0
Services	144	72.0
Length of Years in Operation		
Less than 5 years	148	74.0
5 – 9 years	35	17.5
10 – 14 years	10	5.0
15 years and Above	7	3.5
Number of Employees		
1 – 5	93	46.5
6 – 49	69	34.5
50 – 100	38	19.0
Accounting Qualification		
Yes	98	49.0
No	102	51.0

Accounting Records		
Yes	176	88
No	24	12

Source: Field Survey (2022) N = 200

Based on the descriptive summary provided in Table 1, it can be observed that among the 200 respondents who took part in the survey, a considerable number (n = 124) were identified as male, accounting for 62% of the total sample. In contrast, the remaining 76 participants were identified as female, accounting for 38% of the total sample. A sample size of 285 individuals contributed their comments, with a notable majority belonging to the age group of under 26 years. It is worth noting that all responders were below the age of 55. This discovery implies that a considerable proportion of young adults engage in activities related to small and mediumsized enterprises, which can be seen as a signal of a noteworthy level of unemployment. Several small and medium-sized firms (SMEs) emerge as a consequence of persons migrating from a state of unemployment. Among the 200 participants included in the study, it was found that 42 individuals, constituting 21% of the entire sample, belonged to the age group of 26 to 35 years.

Among the entire sample of responses, a subset of four persons, representing a proportion of 2%, were found to fall between the age brackets of 36 to 45 years or 46 to 55 years.

Additionally, it is important to highlight that a considerable percentage of the respondents in the study (n = 179, 89.5%) held bachelor's degrees or higher. This discovery implies that a significant proportion of small and medium-sized firms (SMEs) are overseen by persons who have attained a higher level of education. One may make a valid argument that individuals in this situation, who encounter a scarcity of job prospects upon completing their education, might be motivated to establish their own businesses. Among the entire pool of participants, a subset of 16 individuals, constituting 8% of the sample, exhibited educational achievement at the Secondary level. In contrast, a total of five participants, representing 2.5% of the surveyed population, held educational credentials at the Primary level. Given the notable percentage of respondents who had completed higher education, it is reasonable to argue that they have the ability to understand and assess the questions offered in the survey questionnaire. Among the entire sample, 96 participants (48%) self-identified as owners, whilst 82 participants (41%) occupied managerial roles. The remaining 22 individuals, comprising 11% of the total, were categorized as other senior personnel. The study included a substantial number of participants (n = 178; 89%) who were owners or managers, individuals who hold influential roles in tax compliance decision-making. This deliberate inclusion of participants with significant authority helped to ensure that the study's findings and conclusions were unbiased.

In relation to the classification of business activities within the context of small and mediumsized companies (SMEs), a substantial majority of the surveyed population (n = 144, 72%) were found to be involved in industries primarily focused on providing services. In contrast, a lesser percentage of small and medium-sized enterprises (SMEs), specifically 32 (16%), were engaged in the manufacturing industry, while 24 (12%) were functioning within the construction sector. The clarity of this assertion stems from the fact that service-oriented industries are often the most viable option for small and medium-sized enterprises (SMEs) to establish their presence, in contrast to sectors like manufacturing and construction which often require significant initial investments or specialized knowledge. Service-oriented small and medium enterprises (SMEs) possess the inherent benefit of being capable of efficiently concluding their operations without incurring substantial financial losses. This may attract unemployed individuals who are eager to engage in entrepreneurial pursuits, thereby increasing their appeal.

As a result, a substantial majority of the aforementioned firms (n = 148; 74%) had a length of operation that was less than or equal to 5 years. Only seven establishments, representing a measly 3.5% of the total, had been in operation for a duration of 15 years or longer. On the other hand, a total of 35 establishments, accounting for 17.5% of the whole number, had been in operation for a period spanning from 5 to 9 years. Furthermore, a total of 10 enterprises, accounting for 10% of the overall sample, had been operational for a duration ranging from 10 to 14 years. A significant majority of firms (n = 93; 46.5%) had a workforce size below 5 in a proportional manner. A cohort of 69 participants, constituting 34.5% of the surveyed population, indicated that their organizations employed a comparatively limited workforce, with staff numbers ranging from 6 to 49. Furthermore, a total of 38 participants, including 19% of the surveyed population, reported that their enterprises had a workforce size ranging from 50 to 100 employees. Although a minority of the participants had an accounting qualification (n = 98; 49%), a significant majority of small and medium-sized firms (SMEs) in the survey were found to maintain accounting records (n = 176; 88%). Hence, despite the lack of accounting certification among many owners and managers of small and medium-sized firms (SMEs), they nonetheless diligently maintain records of their business operations.

Overall, it was evident from the demographics of the participants and the surveyed enterprises, specifically small and medium-sized enterprises, that a considerable number of respondents had attained higher education qualifications. This factor contributed to their ability to provide dependable responses to the inquiries posed in the survey. The majority of the sample population comprised persons occupying managerial positions or owning firms, making them appropriate candidates for surveying in order to accomplish the research objectives.

4.3 Findings and Analysis

The data collected from the online survey were originally analyzed using the Statistical Package for the Social Sciences (SPSS) software, as outlined by Ringle et al. (2022), to conduct the primary estimations in Smart-PLS. To ensure the optimal utilization of Smart-PLS, it is crucial to convey the results of data processing in a manner that effectively highlights the fundamental elements of partial least squares structural equation modeling (PLS-SEM). The results were then documented by utilizing both the structural model and the measurement model. The researchers applied the measurement model to assess and diagnose the proposed model and research paths. Additionally, the structural model was utilized to gather data for the aim of analyzing the hypotheses and making inferences and conclusions.

The measurement model, also known as the construct validity model, is a statistical framework used in academic research to assess the validity and reliability of measurement instruments. It involves the examination

4.4 Measurement Model

4.4.1 Indicator Factor Loadings

The factor loadings, which span from -1.0 to 1.0, offer insight into the extent of the relationship between items in a correlation matrix and a particular principal component. Pett et al. (2003) propose that a stronger association with a specific factor is denoted by a greater numerical magnitude when presented in absolute terms. Table 2 presents the factor loadings associated with each indicator included in the study.

Table 2: Factor Loadings for Indicators

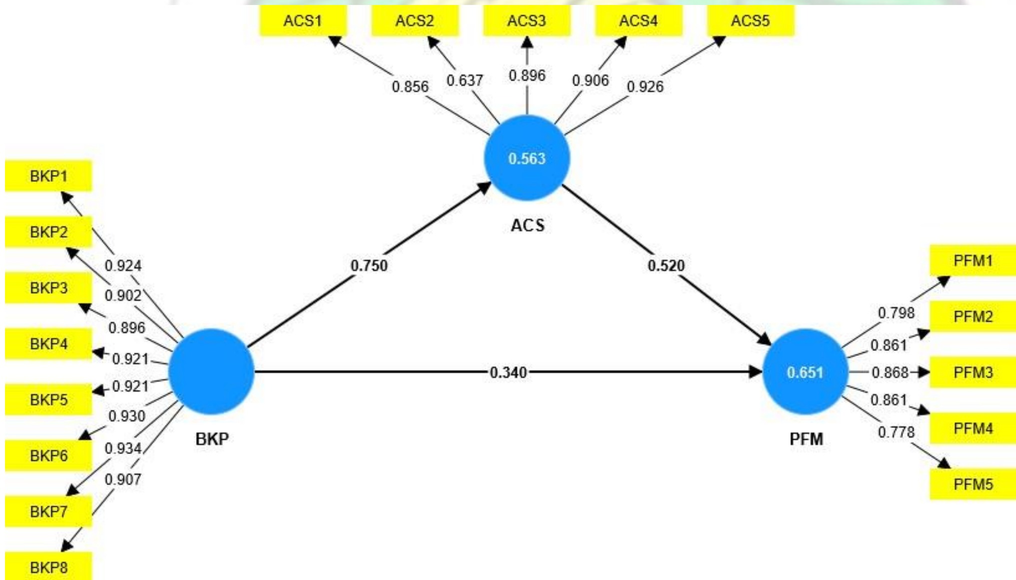
	ACS	BKP	PFM
ACS1	0.856		
ACS2	0.637		
ACS3	0.896		
ACS4	0.906		
ACS5	0.926		
BKP1		0.924	

BKP2	0.902	
BKP3	0.896	
BKP4	0.921	
BKP5	0.921	
BKP6	0.930	
BKP7	0.934	
BKP8	0.907	
PFM1		0.798
PFM2		0.861
PFM3		0.868
PFM4		0.861
PFM5		0.778

Source: Field Survey (2022)

According to the research conducted by Hair et al. (2010) and Hair, Sarstedt, Matthews, and Ringle (2016), it can be asserted that indicators may be deemed credible when their loadings fall between the range of 0.5 to 0.7. The validity of the study's indicators was confirmed, as evidenced by factor loadings over 0.5, ranging from 0.637 to 0.934. The chosen threshold of significance was established at a p-value of 0.001. As a result, none of the indicators were eliminated for the chosen structures. The factor loadings are clearly depicted in Figure 2.

Figure 2: Factor Loadings



Source: Field Survey (2022)

4.4.2 Multicollinearity of indicators

The researchers utilized the variance inflation factor (VIF) statistic to evaluate the presence of collinearity among the indicators, following the approach outlined by Fornell and Bookstein (2018). The VIF criterion is seen as high when it is set at 10 (Alauddin & Nghiemb, 2010; Asthana, 2020; Gómez et al., 2016), while it is deemed conservative when set at 5 (Hair et al., 2016). According to Asthana (2020), the presence of multicollinearity can be identified when the Variance Inflation Factor (VIF) surpasses the critical threshold of 10. Based on the VIFs presented in Table 3, none of the indicators exhibited multicollinearity at either the 5 or 10 level.

Table 3: Variance Inflation Factor of Indicators

	VIF
ACS1	2.375
ACS2	1.422
ACS3	3.322
ACS4	3.796
ACS5	4.524
BKP1	5.478
BKP2	4.403
BKP3	4.571
BKP4	5.400
BKP5	5.906
BKP6	6.271
BKP7	6.463
BKP8	5.737
PFM1	2.225

PFM2	4.537
PFM3	4.333
PFM4	2.646
PFM5	2.261

Source: Field Survey (2022)

4.4.3 Reliability of constructs

A reliable signal is characterized by its consistency, reproducibility, and ability to yield consistent outcomes across many conditions. The present study largely employed Cronbach Alpha (CA) and composite reliability (CR) to establish the reliability of latent variables. The final results for the two reliability measurements are presented in Table 4.

Table 4: Reliability Indicators of Constructs

	Cronbach's alpha	Composite reliability
ACS	0.901	0.928
BKP	0.973	0.977
PFM	0.890	0.919

Source: Field Survey (2022)

Based on the findings presented in Table 4, the CR statistics exhibited a range of values between 0.919 and 0.977, whereas the CA data displayed a range of values between 0.890 and 0.973. Hence, it can be shown that both reliability metrics yielded reliability statistics over the threshold of 0.70, as suggested by Hair, Ringle, and Sarstedt (2014).

4.4.4 Validity of constructs

In the context of Partial Least Squares Structural Equation Modeling (PLS-SEM), the assessment of a construct's validity is conducted through the utilization of tests for convergent and discriminant validity. Convergent validity and discriminant validity serve to substantiate the validity of constructs when employing the PLS-SEM estimator. Subsequently, the two tests were administered in the study for the purpose of validating the construct.

4.4.4.1 Convergent validity

Convergent validity refers to the extent to which different items demonstrate consistency or agreement in measuring the same constructs. Bagozzi, Yi, and Phillips (1991) argue that in order for many indicators to be considered reliable measurements of a concept, it is essential for there to be a substantial level of covariance between them. The approach employed in this research to assess convergent validity aligns with the methodology proposed by Fornell and Larcker (1981), who assert that convergent validity is deemed satisfactory when the average variance extracted (AVE) reaches a minimum threshold of 0.50. Table 5 presents the findings on convergent validity as inferred from the Average Variance Extracted (AVE).

Table 5: Average Variance Extracted

	Average Variance Extracted
ACS	0.724
BKP	0.841
PFM	0.696

Source: Field Survey (2022)

Convergent validity was not a concern in this investigation because all AVE numbers were higher than the suggested cut-off of 0.50. According to Table 5, the latent variables' AVE statistics ranged from 0.696 to 0.841.

4.4.4.2 Discriminant validity

Bagozzi et al. (1991) coined the term "discriminant validity" to describe the extent to which measurements of multiple constructs are distinguishable from one another. Due to the fact that constructions encompass several ideas, it is imperative for them to exhibit distinct characteristics. Two or more constructs are considered independent when there is a minimal correlation observed between them. Various techniques can be employed to assess the discriminant validity of distinct constructs, such as cross-loadings, the Heterotrait-Monotrait (HTMT) ratio, and the Fornell and Larcker Criterion. The assessment of these measures was conducted to establish the discriminant validity of the constructs employed in this study.

4.4.4.3 Fornell and Larcker criterion (1981)

The authors proposed that the square root of the average variance extracted (AVE) for a construct ought to exceed its correlation with all other constructs within a given model. Table 6 presents the data of the Fornell and Larcker criterion, which is derived from the square root of Average Variance Extracted (AVE), along with its associations with other parameters.

Table 6: Square-Root of AVE and Indicator Correlations

	ACS	BKP	PFM
ACS	***0.851***		
BKP	0.750	***0.917***	
PFM	0.775	0.730	***0.834***

Source: Field Survey (2022)
Note: Numbers in **bold** represent the square root of AVE for the given construct.

The findings in Table 6 of the Fornell and Larcker criterion test indicate that the square root of the average variance extracted (AVE) for each construct is higher than its co-movement with other constructs. This demonstrates the presence of convergent validity among the constructs utilized in the study.

4.4.4.4 Cross loadings

Cross loadings refer to the examination of the relationship between observed variables and latent factors in a confirmatory factor analysis (CFA). In CFA, latent factors are defined

Cross-loadings is a statistical technique used to assess the extent to which an indicator for a particular construct demonstrates a higher loading on its corresponding parent construct compared to other constructs within a given model. This method serves as an additional means to quantitatively evaluate the discriminant validity of constructs (Wasko & Faraj, 2005). Hence, while assessing other constructs, it is expected that a factor would have a lower loading compared to its performance on the principal construct. Table 7 presents the various loadings.

Table 7: Cross Loadings

	ACS	BKP	PFM
ACS1	0.856	0.678	0.733
ACS2	0.637	0.291	0.498
ACS3	0.896	0.608	0.627
ACS4	0.906	0.776	0.689
ACS5	0.926	0.721	0.719
BKP1	0.685	0.924	0.682
BKP2	0.688	0.902	0.631
BKP3	0.636	0.896	0.670
BKP4	0.672	0.921	0.638
BKP5	0.699	0.921	0.691
BKP6	0.718	0.930	0.678
BKP7	0.729	0.934	0.719
BKP8	0.674	0.907	0.642
PFM1	0.588	0.548	0.798
PFM2	0.596	0.613	0.861

PFM3	0.616	0.573	0.868
PFM4	0.757	0.695	0.861
PFM5	0.649	0.596	0.778

Source: Field Survey (2022)

According to the cross-loadings from Table 7, it was seen that the indicators exhibited superior performance when assessed against their respective underlying constructs compared to when they were assessed against alternative constructs in the study. The utilization of cross-loading statistics in this study demonstrated the discriminant validity of the concepts employed.

4.4.4.5 Heterotrait-Monotrait (HTMT) ratio

The foundational basis for evaluating discriminant validity in a study is established by the estimated correlations between different constructs, as indicated by the HTMT. Conclusive determinations pertaining to the threshold have not yet been established utilizing this methodology. For example, Teo et al. (2008) proposed a threshold of 0.90, whereas Kline (2011) suggested a threshold of 0.85. The HTMT statistics were presented in Table 8 in this investigation.

Table 8: Heterotrait-Monotrait Ratio

	ACS	BKP	PFM
ACS			
BKP	0.774		
PFM	0.855	0.779	

Source: Field Survey (2022)

Based on the findings of Teo et al. (2008) and the HTMT results presented in Table 8, it can be observed that none of the correlations above the critical threshold of 0.90. As a result, the HTMT data also provided support for the discriminant validity of the components in the study.

4.4.5 Goodness-of-fit tests

The study employed many metrics, namely the coefficient of determination (R2), effect size (F2), predictive relevance (Q2), and the standardized root mean square residual (SRMR), to assess the predictive capabilities of the model. Except for F2, which is displayed in Table 10, all the data, together with the regression coefficients, are supplied in Table 9.

Pealver, Conesa, and Nieto (2018) argue that the coefficient of determination (R2) can serve as a useful metric for evaluating the magnitude of the structural route in relation to a dependent variable. The results indicated that the R2 values for ACS and PFM were 0.563 and 0.651, respectively. Based on intuitive reasoning, it is seen that the ACS and PFM predictors have the potential to explain approximately 56% and 65% of the differences in owners' accounting skills (ACS) and small and medium-sized enterprise (SME) performance (PFM), respectively. According to Falk and Miller (1992), in order to achieve a satisfactory level of prediction accuracy, the coefficient of determination (R2) should exceed 0.10, or 10%. The study found that the endogenous variables, specifically owners' accounting abilities (ACS) and SME performance (PFM), exhibited strong predictive accuracy in the model, as indicated by R2 values of 0.562 and 0.651, respectively.

This analysis focuses on the effect size, specifically investigating the impact of removing or eliminating an exogenous variable on the change in R2 of the endogenous variables. The F2 statistics are presented in Table 9.

Table 9: Effect Size for Predictor Variables

	β	*SD*	T Statistics	*p*-values
ACS -> PFM	0.338	0.084	4.040	**0.000**
BKP -> ACS	1.290	0.248	5.193	**0.000**
BKP -> PFM	0.145	0.059	2.448	**0.014**

Source: Field Survey (2022)
Note: bolded *p*-value indicate statistical significance.

According to Hair, Ringle, and Sarstedt (2013), the F2 statistic is used to assess the impact of removing an independent variable from a model on the prediction accuracy (R2) of the dependent variable. The findings from the F2 analysis indicate that the dependent variable (COMP) would experience a substantial influence in the event that the independent variable (REF) is eliminated. The F2 statistics provide evidence that the effect size of each variable is statistically significant within the scope of this study.

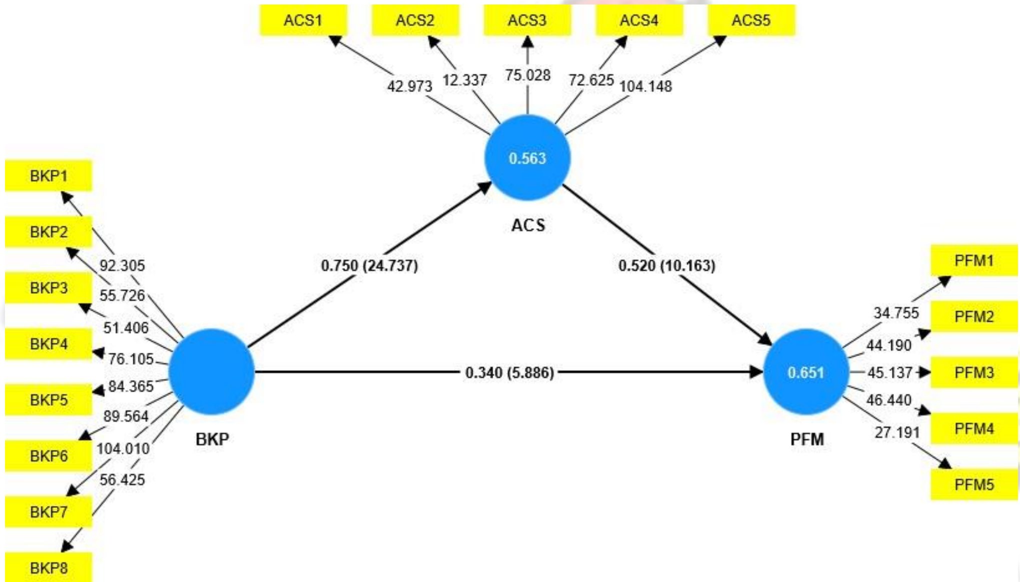
Furthermore, Q2 evaluates the prediction efficacy of endogenic variables. Hair, Risher, Sarstedt, and Ringle (2019) assert that Q2 statistics exceeding 0, 0.25, and 0.50 indicate low, middle, and substantial levels of predictive significance, respectively. The second quarter (Q2) values for the endogenous variables in this study were reported as 0.560 for ACS and 0.529 for PFM, respectively. According to the findings of Hair et al. (2019), it was seen that both ACS and PFM had a significant level of predictive relevance. The present study employed the SRMR statistic to evaluate the adequacy of the proposed model, as it has recently gained popularity as a metric for assessing model fitness. According to the study conducted by Hu and Bentler (1999), it is said that a model is deemed to be fit if its SRMR statistic is below the threshold of 0.08. The investigation yielded an SRMR score of 0.069, indicating that the estimated model fit was achieved as it falls below the designated threshold.

4.4.6 Structural Model

The structural model, also known as the theoretical model, is a conceptual framework that represents the relationships between variables in a research study. It provides a visual representation of how different

The present study examined the postulated associations in order to provide empirical evidence for the presented research hypotheses, after an evaluation of the measurement model's adequacy. Figure 3 visually depicted the construction of the structural model using t-statistics.

Figure 3: Structural Model with T-Statistics



Source: Field Survey (2022)

4.4.7 Hypotheses Testing

The present study aims to investigate the association between individuals' perceived value for tax and their compliance with tax regulations. Additionally, this study takes into account the potential moderating influence of tax reforms on this relationship. The examination of multiple hypotheses derived from direct correlations is succinctly presented in Table 10. The findings given in this research were derived from a cumulative of 5,000 bootstrap samples. The aforementioned samples were employed in the construction of a two-tailed confidence interval

(CI) with a 95% level of confidence, which was appropriately adjusted to account for bias. A statistically meaningful correlation is characterized by a confidence interval that exhibits a deviation from zero subsequent to a confidence interval.

Table 10: Results of Direct Relationships

					CI	
	β	*SD*	*t*-stats	*p*-values	2.5%	97.5%
BKP -> PFM	0.340	0.058	5.886	0.000	0.224	0.450
ACS -> PFM	0.520	0.051	10.163	0.000	0.416	0.618

	R^2	Adjusted R^2	Q^2	SRMR
ACS	0.563	0.562	0.560	
PFM	0.651	0.649	0.529	0.069

Source: Field Survey (2022)

H_{01}: The impact of bookkeeping methods on the performance of small and medium-sized enterprises (SMEs) is not statistically significant.

H_{01} aimed to investigate the potential impact of bookkeeping practices (BKP) on the performance (PFM) of small and medium-sized enterprises (SMEs). The alternative hypothesis to H_{01} is H_{A1}, which posits that the presence of BKP has a major impact on PFM. Based on the findings of the data analysis, it can be concluded that BKP exhibits a statistically significant positive impact on PFM ($\beta = 0.340$, $t = 5.886$, $p < 0.001$). As a result, the null hypothesis H_{01} was rejected, while the alternative hypothesis H_{A1} was upheld.

The rationale for the positive correlation between bookkeeping procedures and small and medium-sized enterprise (SME) success can be substantiated as follows. According to

AbdulRahamon and Adejare (2014), the implementation of bookkeeping procedures plays a vital role in the effective management and strategic planning of business operations. According to Maseko and Manyani (2011), the importance of bookkeeping and financial report preparation cannot be overstated in the context of corporate activities and economic decision-making. Hence, when executed proficiently, it is anticipated that the practice of bookkeeping will enhance the operational efficiency and overall outcomes of small enterprises. The main aims of bookkeeping encompass various aspects, including enhancing productivity and efficiency, managing innovation and growth, minimizing operational expenses, and guaranteeing compliance with regulatory obligations (Abdul-Rahamon & Adejare, 2014).

The results obtained in the current study support the conclusions drawn in previous research conducted by Owusu et al. (2015), Sibanda and Manda (2016), and Sibanda and Manda (2016), which all found a statistically significant positive correlation between bookkeeping practices and the performance of small and medium-sized enterprises (SMEs).

H_{02}: The accounting abilities possessed by owners have no substantial impact on the success of small and medium-sized enterprises (SMEs).

The aim of the study was to investigate the relationship between owners' accounting skills (ACS) and the performance (PFM) of small and medium-sized enterprises (SMEs). The hypothesis H_{02} posits that Acute Coronary Syndrome (ACS) exerts a substantial influence on Pulmonary Function Measures (PFM). The findings of the study revealed a statistically significant and positive association between ACS and PFM ($\beta = 0.520$, $t = 10.163$, $p < 0.001$). The study presented ample data to substantiate the substantial impact of ACS on PFM, hence confirming the alternative hypothesis H_{A2} and rejecting the null hypothesis H_{02}.

The correlation between accounting skills and small and medium-sized enterprise (SME) performance is in line with both theoretical frameworks and empirical evidence. According to Mutua (2015), possessing advanced accounting skills empowers managers and owners of small and medium-sized enterprises (SMEs) to exercise authority over their operations and effectively manage costs and expenditures. However, Mutua also contends that many SME owners encounter challenges when it comes to choosing an appropriate accounting system that aligns with their firm's requirements. The findings of this study align with the research conducted by Usama and Yusoff (2019), which demonstrated a notable impact of accounting skills on the performance of small and medium-sized enterprises (SMEs). In a recent study conducted by Olarewaju and Msomi (2021), the authors investigated the influence of accounting skills on the sustainability of small and medium-sized enterprises (SMEs) in South Africa. The findings of their research indicated a noteworthy association between accounting skills and the sustainability of SMEs.

4.4.8 Analysis of Mediation

H_{03}: The association between bookkeeping procedures and SMEs' performance is not mediated by owners' accounting skills.

$H_{03:}$ aimed to investigate the potential mediating role of owners' accounting skills (ACS) in the association between bookkeeping practices (BKP) and (SME) performance (PFM). The alternative hypothesis to H03 is H_{A3}, which posits that the link between BKP and PFM is considerably influenced by the mediating effect of ACS. From the data, the study determined that ACS plays a noteworthy role in mediating the relationship between BKP and PFM, with a positive influence ($\beta = 0.390$, $t = 9.060$, $p < 0.001$). As a result, the null hypothesis H03 was rejected, whereas the alternative hypothesis HA3 was upheld. The findings pertaining to the mediation analysis were displayed in Table 11.

Table 11: Mediation Analysis

	Total Effect	T Stats	P Value	Direct Effect	T Stats	P Value		Indirect Effect	T Stats	P Value
BKP-PFM	0.730	22.110	0.000	0.340	5.866	0.000	BKP-> ACS-> PFM	0.390	9.060	0.000

Source: Field Survey (2022)

The findings shown in Table 11 highlight the significance of both the direct and specific indirect effects. These results suggest that the mediating effect observed is only partial.

Therefore, it may be inferred that the link between BKP and PFM is partially mediated by ACS. The findings of this study underscore the presence of an indirect correlation between bookkeeping procedures and the performance of small and medium-sized enterprises (SMEs). The aforementioned discovery has shed light on the discourse presented by Afang and Francis (2021), who conducted a study examining the interactive influence of accounting skills on the correlation between recordkeeping and the financial performance of small and medium-sized enterprises (SMEs) in Kaduna Metropolis, Nigeria. Their findings indicate that the association between bookkeeping and financial outcomes is notably more adverse for individuals possessing advanced accounting skills compared to those with limited accounting skills. Therefore, the proficiency in accounting has a substantial influence on the financial performance of small and medium-sized enterprises (SMEs) in relation to bookkeeping.

4.4.9 Summary of Hypotheses and the Mediating Effect

Table 12 presents a comprehensive overview of the hypotheses and their corresponding mediating effects as outlined in the study. The executive summary suggested that all three hypotheses were maintained in their various configurations.

Table 12: Summary of Hypotheses and Implied Mediations

Direct relationships	β	p-value	Comment/Decision
H_1: BKP -> PFM	0.340	0.000	H_{A1} Maintained
H_2: ACS -> PFM	0.520	0.000	H_{A2} Maintained
Mediation analysis			
H_3BKP -> ACS -> PFM	0.390	0.000	H_{A3} Maintained (Partial Mediation)

Source: Field Survey (2022)

4.4 CHAPTER SUMMARY

This discussed the demographic characteristics of respondents, assessed the measurement and structural models – which included regression analysis of direct relationships and a moderating relationship – and concluded with a discussion of the study findings.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

The chapter provides a concise overview of the findings, conclusions, and suggestions that have been developed throughout the course of the study. The findings elucidate the primary difficulties that were uncovered in the course of this investigation. The chapter additionally includes a set of recommendations and proposals for future research.

5.2 SUMMARY OF FINDINGS

This study employed a descriptive survey design to gather data from a sample of 200 small and medium-sized enterprises (SMEs) located within the Oforikrom Municipal Assembly. The study utilized the Smart Partial Least Squares (Smart-PLS) software inside a structural equation modeling (SEM) framework to examine the associations among owners' accounting skills, bookkeeping procedures, and the performance of small and medium-sized enterprises (SMEs). The study unveiled the subsequent significant discoveries.

The research conducted revealed that the implementation of bookkeeping procedures has a notable and favorable impact on the overall performance of small and medium-sized enterprises (SMEs). Bookkeeping is perceived as a crucial aspect of decision-making and company changes by owners and managers of small and medium-sized enterprises (SMEs).

Additionally, the findings of this study indicate that the accounting proficiency of owners has a notable and favorable impact on the performance of small and medium-sized enterprises (SMEs). Therefore, the enhanced accounting skills possessed by owners have a positive impact on the overall operation of the organization.

The findings of the study also highlight the presence of an indirect correlation between bookkeeping practices and the performance of small and medium-sized enterprises (SMEs). Specifically, the accounting skills possessed by owners have a positive partial impact on the relationship between bookkeeping practices and SME performance.

5.3 CONCLUSION

The findings of the study indicate that bookkeeping procedures play a crucial role in corporate operations, as they are necessary for effective management and strategic planning inside the organization. Therefore, the practice of bookkeeping and the generation of financial reports play a crucial role in facilitating business operations and informing financial decision-making. Therefore, it is expected that the implementation of effective bookkeeping practices will positively impact the performance of small businesses. The findings of the study indicate that managers and owners of small and medium-sized enterprises (SMEs) need to possess advanced accounting abilities in order to effectively oversee their operations and effectively manage expenditures and expenses. Ultimately, the study reached the determination that the correlation between bookkeeping and the performance of small and medium enterprises (SMEs) will be further enhanced in the presence of improved accounting abilities possessed by the owners.

5.4 RECOMMENDATIONS

The study proposes that it would be beneficial for small and medium-sized enterprise (SME) owners to undergo training regarding the importance of maintaining comprehensive records of their business activities. This is due to the fact that effective bookkeeping or recordkeeping plays a critical role in facilitating informed decision-making and business adaptations, detecting instances of internal theft, reducing operational expenses, and enhancing overall productivity and efficiency.

Furthermore, it is advisable for small business owners to proactively obtain a certain level of accounting knowledge and expertise in order to effectively manage fundamental financial records and strategize for the prosperity of their enterprises.

Also, it is imperative for the National Board for Small Scale Industries to implement mechanisms that guarantee the appointment of competent individuals to oversee the operations of registered SMEs. This is crucial in order to assure compliance with essential standards pertaining to record-keeping and financial management.

The objective of this study was to examine the associations between bookkeeping practices, owners' accounting skills, and the performance of small and medium-sized enterprises (SMEs) in the Oforikrom Municipal Assembly. Therefore, the findings are constrained in their scope and cannot be applied universally. Future studies could consider targeting a larger sample size. Furthermore, future research endeavors may involve conducting qualitative evaluations of the subject topic.

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APPENDIX: Questionnaire

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

Questionnaire on: Bookkeeping Practices, Owners' and employees' Accounting Skills, and Performance of SMEs in Oforikrom Municipal Assembly, Ghana.

Introduction

Dear Participant,

This research, on the above topic, is being conducted by a graduate student of the aforementioned institution. The purpose for the study is solely academic. So, please, answer each item as frankly as possible. You are assured of absolute confidentiality. Please, do not provide your name or any detail that personally identifies you.

SECTION A: Background information of participants Please, tick [√] where applicable.

1. Gender of respondent:
   a. Male [ ]

b. Female [ ]

2. Age of respondents:

1. Less than 26 years [ ]
2. 26 – 35 years [ ]
3. 36 – 45 years [ ]
4. 46 – 55 years [ ]
5. Above 55 years [ ]

3. Highest level of education of respondents:
1. Primary [ ]
2. Secondary
3. Tertiary [ ]

4. What is your current position in the Organisation?
1. Owner [ ]
2. Manager [ ]

Others (specify)…………......

5. What is the nature of the business?
1. Manufacturing [ ]
2. Construction [ ]
3. Services [ ]

Others (specify)……………

6. How long have you operated this business?
1. 5 – 9 years [ ]
2. 10 – 14 years [ ]
3. 15 years and Above [ ]

7. How many people does your business employ?
1. 1 – 5 [ ]
2. 6 – 49 [ ]
3. 50 – 100 [ ]
4. Above 100 [ ]

8. Do you have any qualification in Accounting?
1. Yes [ ]
2. No [ ]

9. Do your firm maintains accounting records?
1. Yes [ ]
2. No [ ]

SECTIONS B-C: Bookkeeping Practices and Accounting Skills

Please, indicate the extent you agree or disagree to the following statements on bookkeeping and accounting skills. Section B represents the construct of bookkeeping whilst Section C represents construct of accounting skills. Please, tick [√] against the box which applies to your choice of response, where 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; and 5 = strongly agree.

SECTION B: Bookkeeping practices	**1**	**2**	**3**	**4**	**5**
1. Bookkeeping is essential for decision making and business adjustments					
2. Bookkeeping reduces operating costs, improves efficiency and productivity.					
3. Accounting records support business audit and research.					
4. Complete accounting records are essential for the preparation of financial statements.					
5. Accounting records assist in resource allocation and performance planning.					
6. Accounting records keeping increase the chances of the firm operating and achieving success.					
7. Records keeping provide information to enable the control of cash in the business.					
8. Records keeping help in detecting thefts within the business itself.					
SECTION C: Accounting Skills	**1**	**2**	**3**	**4**	**5**
1. Knowledge on budgeting means a proper budget will be prepared.					
2. No accounting skills is needed to maintain proper records.					
3. Higher accounting skills means higher performance.					
4. Knowledge on accounting increase the rate at which firms operate and achieve success.					
5. Accounting skills ensure efficient utilization of cash.					

SECTION D: SMEs Performance

Please rate the performance of the firm compared to your major competitors since the last three years on the basis of return on assets, sales growth, profitability etc. Please tick [√] against the box which applies to your choice of response, where 1 = extremely declined; 2 = declined; 3 = neutral; 4 = improved; and 5 = extremely improved.

SECTIONS D: SMEs Performance	**1**	**2**	**3**	**4**	**5**
1. Return on Assets					
2. Sales Growth					
3. Profitability					
4. Improvement in work productivity					
5. Improvement in production cost					