DETERMINANTS OF BOOK-KEEPING PRACTICES OF SELECTED SMALL AND MEDIUM ENTERPRISES IN KADUNA STATE

By

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BEING A DISSERTATION PRESENTED TO THE DEPARTMENT OF ACCOUNTING AHMADU BELLO UNIVERSITY ZARIA, NIGERIA IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF MASTERS OF SCIENCE DEGREE IN ACCOUNTING AND FINANCE

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DECLARATION

I hereby declare that the work titled "DETERMINANTS OF BOOK-KEEPING PRACTICES OF SELECTED SMALL AND MEDIUM ENTERPRISES IN KADUNA STATE" has been done by me under the supervision of Dr. A. Bello and Mall. A.A Aliyu of the Department of Accounting, Ahmadu Bello University Zaria. The information gathered from literatures has been duly acknowledged in the text and a list of references provided. No part of this dissertation was presented elsewhere for award of any certificate. I take the sole responsibility of all errors therein.

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CERTIFICATION

This is to certify that the dissertation titled "DETERMINANTS OF BOOK-KEEPING PRACTICES OF SELECTED SMALL AND MEDIUM ENTERPRISES IN KADUNA STATE" by HARUNA, Maarufah Auwalu (M.Sc/ADMIN/29403/2012-2013) meets the regulations governing the award of the degree of Masters of Science (M.Sc) Accounting and Finance in Ahmadu Bello University, Zaria and is approved for its contribution to knowledge and literary presentation.

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DEDICATION

This dissertation is dedicated to my late father, Malam Abdulmalik Mohammed. (May Allah have mercy on him, Ameen).

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My gratitude first goes to Almighty Allah for His mercy that saw me through this programme. The memory of the love and caring of our late father had impacted positively to my growth. Ably acknowledged, is the love and perseverance of the pillar that kept us together, that is, our dear mother.

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ASTRACT

The main objective of this work is to analyse the determinants of book keeping practices of selected Small and Medium Enterprises in Zaria. The population of this study comprised all the Small and Medium Enterprises in Zaria as at 31 December, 2015. The methodology adopted by this research is the survey research design with two stage analysis approach. The first stage is the questionnaire method which helped in identifying the determinants while the second stage of binary logistic regression analysis is employed to identify the most significant determinants of Book-Keeping by the SMEs. The findings revealed a strong positive relationship between Book-Keeping practice and knowledge and skill as well as source of finance; while ease of application, business performance and Management competence had a negative and insignificant effect on Book-Keeping practice. It is recommended that the owners and managers of the small and medium enterprises should embrace proper Book-Keeping practices for effective financial performance in their business. And for them to be able to keep their business financial records they have to be educated and have the knowledge of simple accounting or on the other hand they can hire professional accountants to do the job for them and also their financial records will also help them in accessing loan from various financial banks. The study concluded that the explanatory variables of this study can be expanded and further research can be conducted.

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CHAPTER ONE
INTRODUCITION

1.1 Background to the Study

Small and Medium Enterprises (hence forth, SMEs) have significant role in the economic development of emerging economies Nigeria inclusive. With just a little investment, they are important contributors to the achievement of general business growth and employment in the economy. According to Kadiri (2012), SMEs in both the formal and informal sector of Nigeria employ over 60% of the labour force. More so, 70% to 80% of the daily basic necessities in the country which are not high-tech products but basic materials produced with little or no mechanization, also come from SMEs (Peterise (2003) as cited in Kadiri (2012)).

SMEs started to gain recognition in Nigeria in the early 1970s after the oil boom (Osotimehim and Jegede, 2012). This recognition started from small agricultural holdings but now extended into different kinds of services such as food processing and restaurant business, retail and wholesale of phones and computer software, metal and furniture assembling, sachet water business, soap and room freshener, tailoring and fashion designing, printing press, making of blocks, among others.

The capacity, experience and organizational abilities of SMEs as entrepreneurs are central to the success of their businesses. The interest on SMEs entrepreneurial capacity has acquired its intensive level almost everywhere in the world. In the developed economies SMEs are viewed as a revitalizing socioeconomic agent, a way of coping with unemployment problems, a potential catalyst and incubator for technological progress, product and market innovation. In most of the developing countries also, SMEs act as catalysts of economic activity in general, and business performance in particular through their roles of job creation and social adjustment.

Performance of a business, that is, how well or poorly a business is doing vis-à-vis owner-manager objectives is crucial to its success. One important way good business performance is reported, is through effective and efficient record keeping. When a business is not performing well, certain danger signals such as systematic capital erosion through, say, personal drawings and/or poor profitability, will exhibit themselves and are only detectable if there are up-to-date financial records. Most business owners that do not have adequate or standard Book-Keeping system would not be able to track the signals for these warnings and may tend to optimistically believe that things are getting better in the business flow.

Book-keeping is of central importance to any business, be it large or small. Entrepreneurial qualities are evidently established in organized businesses largely through their ability to organize their financial records. Adequate book-keeping practices are in maintaining accurate set of accounting books delineating assets, liabilities and income structures. This is necessary for every business if it is to take any vital business decisions and be able to ascertain how much profit the business is making.

The double entry system of record keeping is the standard way to record financial transactions in business. Every entry involves both debit and credit transaction, which is the basic rule for any accounting practise. That is, for every debit entry there must be a corresponding credit entry and vice visa. It involves the use of journals and ledgers to keep track of profit and loss and balance sheet items. The organized large scale enterprises seem to have accepted this practice.

The system of double entry compared to single entry is more complicated to apply and maintained but allows for more flexibility and standardization. It helps to minimise errors and identify problems like fraud within the organisation. It appears that most SMEs have not generally imbibed this form of record keeping culture as the standard practice. Most of the

SMEs that develop the attitude of record keeping choose the single entry system which is easier to keep, however, very limiting for information, auditing and accuracy checking purposes.

Performance is considered to be the major goal of business enterprises whose tracking may be difficult if there is no sound book-keeping. Poor business performance has long remained unsolved especially for the most part of developing countries like Nigeria where SMEs take up the large part of the economy. It is also among the developing countries with the highest number of this type of businesses that perform poorly and close up before the end of the first five years in business largely attributable to ignorance of keeping books of accounts (IMF, 1999) and lack of sound financial culture (Sejjaaka, 1996 and Wabwire, 1996). Problem of monitoring economic growth is increased in an economy like Nigeria where financial records are not available concerning this growth sector of the economy. Furthermore, financial reporting is not commonly practiced in SMEs raising the question on the relevance and reliability of the financial information from this important sector of the economy.

It is evident, therefore, that application of Book-Keeping system in the SMEs is very significant to the accounting practice especially as it encourages and contributes to the availability of quality financial information of business activities. Although various stakeholders continue to engage in activities aimed at ensuring survival of SMEs, research has shown that effective adoption of Book-Keeping systems by these firms is relatively low in most developing countries as compared to developed countries (International Monetary Fund, 1999).

Thus, poor Book-Keeping culture by the SMEs presents the need to investigate factors that are perceived to influence their attitude towards record keeping. Factors generally considered in this regard are knowledge and skill, ease of application, business performance,

management competence and source of finance. SMEs like any other profit-seeking establishments need to strive for the survival of their business through employment of performance enhancing tools like Book-Keeping in their business strategies.

1.2 Statement of the Research Problem

As stated in Chapter 1.1 above, it has been observed that the practice of Book-Keeping by SMEs in developing countries including Nigeria has been below expectations. It appears that based on attitudes exhibited by SMEs in Nigeria, they do not consider Book-Keeping fundamental to their survival and business performance as compared with the SMEs in the developed countries (Kadiri, 2012). Nonetheless, a good number of them have started imbibing the culture of Book-Keeping. As such efforts to find the determinants of business characteristics amongst the SMEs that are likely to lead them to adopt Book-Keeping should be topical in developing countries like Nigeria.

Furthermore, out of the number of studies conducted on the accounting practice of this very important sector in Nigeria, little significance has been given to what motivates their accounting practice. It is expected that such information should help turn around the poor performance exhibited within SME domain in Nigeria. Subsequent to adopting this culture, they should be able to reveal the accurate financial position of their business operations which could help them obtaining loans or raise other forms of finance from financial institutions.

It is relevant, therefore, to ask the following questions in terms of what are the factors that determine the SMEs' accounting practice:

1. How does knowledge and skills of entrepreneurs determine book-keeping practice by SMEs in Nigeria?

2. How does ease of application of the accounting procedures and computer packages is influenced by the SME book-keeping practice in Nigeria?
3. How business performance by SMEs does influence the attitudes Book-Keeping practice in Nigeria?
4. How does level of business management competence influence SMEs Book-Keeping practice in Nigeria?
5. How does source of finance by the SMEs determine their attitude towards book-keeping practice in Nigeria?

1.3 Aim and Objectives of the Study

The aim of this research is to determine Book-Keeping practiced by the SMEs in Nigeria with a view to identify the significant factors shaping their attitude towards application of Book-Keeping in their businesses. The specific objectives are:

i) To investigate the extent to which knowledge and skills of the entrepreneurs determines Book-Keeping practice among SMEs in Nigeria.

ii) To investigate the extent to which ease of application of Book-Keeping processes determines Book-Keeping practice among SMEs in Nigeria.

iii) To ascertain the extent to which business performance determines Book-Keeping practice among SMEs in Nigeria.

iv) To evaluate to what extent management competence determines Book-Keeping practice among SMEs in Nigeria. .

v) To evaluate to what extent financing choice/mix determines Book-Keeping practice among SMEs in Nigeria.

1.4 Research Hypotheses

In line with the above stated objectives of the study, the following hypotheses are formulated in Null form:

Ho_1: There is no significant relationship between knowledge and skills of the entrepreneurs of the SMEs and their Book-Keeping practice in Nigeria.

Ho_2: There is no significant relationship between ease of application of Book-Keeping procedures by the SMEs and their Book-Keeping practice in Nigeria.

Ho_3: There is no significant relationship between business performance of the SMEs and their Book-Keeping practice in Nigeria.

Ho_4: There is no significant relationship between management competence within the SMEs and their Book-Keeping practice in Nigeria.

Ho_5: There is no significant relationship between financing mix in the SME businesses and their Book-Keeping practice among SMEs in Nigeria.

1.5 Scope of the Study

The study "Determinants of Book-Keeping Practices of Selected Small and Medium Enterprises in Kaduna State" is limited to Small and Medium Enterprises in Zaria- Kaduna State with a focus on commercial activities of manufacturing, trading and services. The period in which the study was conducted was 2015. Given the wide disparity about what constitute SME as analyzed in sub-chapter 2.2.1, this study sets its boundaries to be the following peculiarities of SME structure, vis: those that relatively have some record keeping structure and capital not exceeding N500,000,000 within the trading, manufacturing and services sectors.

1.6 Significance of the Study

The outcome of this study is sought out to provide information to researchers in accounting and business towards understanding what motivates Book-Keeping and potential good performance in SMEs. It should also be useful to regulatory agencies and other partners (for instance Central Bank of Nigeria, Securities and Exchange Commission, Federal Inland Revenue Service and so on) for effective monitoring and policy formulation. It would also enable owners and managers of small businesses to appreciate the value of quality Book-Keeping as a pillar for sound decision-making, better planning, high level of profitability and access to finance.

Other value adding outcomes are easy tax assessment and good performance in business enterprises. Furthermore, this research will be of benefit especially to the policy makers by reducing the rigid laws attached to SMEs such as high cost of compliance and levies, revenue collectors of Kaduna State by providing easy way to assess tax from the SMEs through formalized records.

Thus, seeking the response of SMEs to financial accounting should be of interest not only to the owners and managers of the businesses, but to the regulatory authorities as well as the general stakeholders.

1.7 Organization of the Study

This work is presented in five chapters with chapter one containing the general introduction. The chapter articulates the research problem and presented the research objectives, hypotheses and the significance of the study. Chapter two contains a review of the relevant literature relating to SMEs, relevant accounting theories and relevant empirical studies to establish the literature gap and find the theoretical framework for the research. Chapter three presents the methodology adopted by presenting the description of the data and the empirical

techniques and methods used in conducting the research. Data presentation and analysis is presented in Chapter four. Summary, findings, conclusion and recommendations are contained in Chapter five.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter provides critical as well as analytical review of the existing theories and empirical studies that are relevant to Book-Keeping practice. There are three major sub-chapters: conceptual analysis, theoretical review and empirical review. Attempt is made to review various definitions of SMEs. A sub-chapter also provides the significance of Book-Keeping to SME's and problems of Book-Keeping to SME's. Literature on policies on SMEs is also reviewed.

2.2 Conceptual Literature

2.2.1 Concept of Small and Medium Enterprises

It is important at this junction to define small-scale industry. This definition varies from one country to the other, from one ministry to the other. In a study carried out by International Labour Organization (2005), over 50 definitions were identified in 75 different countries. In most of the countries of the world, the criterion for defining an SME is related to the size of employment. For instance, in the USA, small business is one, which has employment of less than 500 people. In the U.K., it is less than 20 skilled workers and both USA and UK do not have restrictions in terms of the investment limits. In Sweden and Italy, employees of less than 50 and 500 respectively, define an SME. In Germany all enterprise employing less than 300 employees are considered as SMEs, while in East Africa all firms with less than 100 employees are considered as SMEs.

In some other countries both employment and investment are taken into account in determining the class of an enterprise. In Japan, the investment in industrial undertaking should not exceed 100 million Yen employing not more than 300 employees. In South Korea, investment limit is 500 million won dollars and employment being 300 people, Malaysia

investment of 250,000Us and no restriction of numbers of employees. In Philippines it is an investment of 1million Peso and employees should not exceed 99; India investment limit is 3.5 million Rupees and Indonesia 150 million Rupiah, both do not have restriction on their employees.

In Nigeria, the Federal Government Small and Medium Scale Industry Development plan, 1980 as cited in Ogujiofor 2005 defined SMEs as any manufacturing process or service, with a capital not exceeding N15 million in working capital and equipment. Again, the Federal Ministry of Industries defined SMEs as those businesses that have not more than N15 million including working capital to set up. The Central Bank of Nigeria (CBN) in 1990 defined SMEs as any business with an annual income/asset of less than N5 million. In 1995 CBN redefined the SMEs as those whose total cost of operations including working capital, does not exceed N10 million.

Following the Nigeria's National Council for Industry (NCI, 2002 as cited in Ukeje 2003) classification, SMEs were categorized as business with capital outlay of between N1.5million and N50million including working capital but excluding cost of land and workforce of between 11-100 employees. Furthermore, according to Association of National Accountants of Nigeria (ANAN 2014), SMEs are classified under three definitions. First in terms of assets and personnel, an enterprise is classified as SME if its asset base (excluding land) is between N5 million and N500 million and with labour force between 11 and 300. The second category is in terms of business turnover; a business with turnover of less than N100 million is an SME. The last definition is solely based on assets footing. A business is thence defined as SME if it has a maximum asset base of N1.5 billion (excluding land and working capital) with no lower or upper limit of staff.

From the review so far, first, it can be said that SME has no specific or clear definition across the world. Secondly, the evidence shows that in defining small scale business, reference is

usually made to some quantifiable measures such as number of people employed by the enterprises, investment size, the annual turnover (sales) and the asset value of the enterprise or a combination of these measures. Thus, there is no single criterion for classifying business enterprises as small or medium scale globally.

However, generally these enterprises engage in the production of light consumer goods that are primarily related to food and beverages, clothing, electrical parts, automotive parts, manufacture, leather products, soap and detergents, woodworks. SMEs usually operate in informal and semi-formal sectors (EUROPA, 2003). Small scale businesses in Nigeria are divided into three sectors: 1, Production sector including agricultural processing, manufacturing, and mining 2,Service sector and 3,Trading sector including wholesales and retails (Fabayo,2009).

In 2010 a definition proposed by the International Development Centre of Stand for Research Institute, University of Kelaniya,Sri Lanka (as cited by Yusuf 2010), was considered more universal in application as far as small scale industries are concerned. Instead of using the traditional quantitative approach, it devised a functional approach. Hence they define small and medium scale industries as that segment of manufacturing industry that carries on a relatively small establishment having not necessarily all but some of the following characteristics:

(i) Little or no specialization in management.

(ii) Close contact between the manager and those involved in the enterprise.

(iii) Lack of access to capital through organized security market.

(iv) Close integration with the local community in which it depends for both

market and labour.

(v) No dominant position in major markets.

This definition appears to be more useful because it lays emphasis on problems faced by small scale industries, while implicitly capturing the quantitative conditions. However, for the current study, we further enhance this definition by including two key items seem to be missing in this definition. Firstly, the bulk of this segment is dominated by trade and services which are not included in this definition; and secondly, the well pronounced character of poor record keeping.

These two important characteristics cannot be ignored in the Nigerian context and are central to the problem of the current research. Any progress in this direction will have a very important impact on the growth and development of small scale industries. In this regard we adapt the definition of University of Kelaniya, Sri Lanka in 2010 as cited by Yusuf (2010) by including trade and services, and absence of structured accounting records.

It is important to note that emphasis is paid on the definition of small scale industries, in most studies of this nature because it helps determine the eligibility for assistance, as well as policies map out by government or the private sector. Definitions are also bound to be revised from time to time to enable more and more units of small scale industries to modernize with the trend within the economy. There are many small scale industries in Nigeria today and many of them in the commercial sector of the economy; there is also a trend now towards the service sector.

2.3 Small and Medium Enterprises Characteristics

2.3.1 Characteristic of SMEs

The SMEs are characterized by easy management structure, which results from the fusing of ownership and management by one or very few individuals; hence SMEs lean strongly around the owner managers rather than operates as separate corporate entities (Ukeje, 2003).

This leads to greater subjectivity in decision-making and the prevalence of largely informal employer-employee relationships.

They have very limited access to long-term capital and their access to short-term financing is often limited. The unavailability of funds often result in the non- adoption of modern technology and these resort to labour intensive production process. Thus, very poor inter and intra-sectoral linkages do not allow the enterprises to take advantage of the benefits of economies of large scale production. However, SMEs are more widespread and durable as a result of the greater use of local resources.

Adekunle (2003) itemized the characteristics of SMEs as follows:-

i) Their ownership and management are usually held by an individual or some few individuals.

ii) Decision making is exclusively the responsibility of the owner and most a times subjective and not based on quantitative analysis.

iii) They have complexity in out-sourcing for external funds, which hinders their expansion.

iv) They are found in virtually all areas of the economy e.g. agriculture, communication, manufacturing, transportation etc.

v) Their technology is mostly simple and less flexible although modern SMEs are increasingly embracing more complex equipment.

vi) They make use of local resources and as a result have low import content with reference to capital or raw material input.

vii) They are labour intensive with low productivity and high employee turnover.

viii) They have limited access to capital because of inadequate or non-availability of collaterals. This affects their capability to undertake effective marketing programme, adapt modern technology changes and attract skilled labour.

2.3.2 Significance of Book-Keeping to SMEs

Book-Keeping has become the bedrock on which today's businesses depend upon. This is because without good and sound Book-Keeping, it will be impossible to determine the levels of financial worth, profitability as well as ability to trace, track and prevent fraud in the business. Book-Keeping and good record management is also vital for any SMEs to function effectively.

Most SME entrepreneurs do not keep record of how much money comes in and goes out of their business. They keep everything in their head. This means they do not keep records of all their transactions or they do not know how to do a proper Book-Keeping and they do not know that it can help their business. As a result they do not really know how much they buy and sell on credit, if they are making profit or loss and how they could improve their business. However, proper Book-Keeping is important and necessary because it is difficult to keep the memory of all transactions.

Book-Keeping is very crucial in any business and with its regular use, it provides information to the management and chart the course for the business survival and provide some advantages. According to Mbroh and Attom (2012), some of these advantages are as follow: firstly, there is need to provide information or data for future reference and comparison purpose. Providing accurate records of the business can aid in it routine continuity and effective growth planning. It helps in providing financial information of the business and assists the business owner to make a rightful decision. Proper Book-Keeping also, helps the owners to minimize risk of loss from bad debts by restricting credit to customers who can pay back. Credit control made possible through analysis of debtors' historical records also increases the quality of sales revenue. The fourth point is that cost control enables a business owner to detect variance of actual cost from the budgeted cost. Therefore with the help of

Book-Keeping it will be more easier to identify those variances associated to the actual cost. Furthermore, it is an essential source of evidence to detect business losses, internal fraud and theft.

More so, if the business is performing fine, the owner of the business will want to expand his/her business and, therefore, with a good record of the business he/she can source funds from financial institutions. Another point is that Book-Keeping helps the owners to assess their business performance. If the business is really doing well the record of the business will surely show.

Book-Keeping helps the business owners to budget and at the same time plan for future needs. It helps to achieve quantified objectives, measure performance and is a device used to cope with foreseeable adverse situation. And finally, for tax assessment and purpose, it is very important that every business keeps and maintain a clear and accurate financial record of the business, reflecting the true financial position of all their transaction.

2.3.3 Book-Keeping within the SME Sub-Sector

For many small business entrepreneurs, they fail to keep records because the biggest problem is that they do not know from where to start recording their business transactions (Syracuse, 1994). Keeping accurate and up-to-date financial records is for many people the most difficult and boring aspect of the business operations. According to Stover (1997) most SMEs do not even keep the most basic books such as cash book, sales day book and purchase day book and are thus contented with mental records about their costs, revenue and debt.

Banks in Nigeria have therefore attributed that the inability of small businesses to access loans to expand their businesses is due to either poor or complete lack of financial records. They conclude that when the small businesses apply for loans and they are asked to bring their books for examination, they fail to turn up again. The banks say they expect every small

business owner to be able to keep simple records of cash book, sales day book and purchase day book.

Though there are numerous challenges facing the Small and Medium Enterprise industries, the most frequent and common that affect all are: access to capital to start-up and/or expand their business, access to markets and information, access to appropriate and cheap technology, access to raw materials or resources access to electricity supply and finally access to good constructed roads.

Isimoya (2005) identified some problems that seem to pose threat to the survival of small scale businesses in Nigeria. First, is the limited access to short and long term funding through organized capital and money markets like the stock exchange, commercial and merchant banks. These delimit their ability to grow or expand to other forms of operations or service delivery. They are also affected by lack of managerial ability generally due lack of formal education. This constrain the ability to adopt new ways of doing things or see long term opportunities.

Another problem itemized by Isimoya (2005) is the inability to attract qualified and skilled personnel due to the obvious fact of lack of assurance of job security and/or progression. They also face the lack of business connection consequent upon which the entrepreneur becomes unable to foster good relationship with customers and creditors leading to possible collapse of a business.

Poor financial control is manifest through their inability to maintain proper accounting records and control, which often results in fraudulent practices that affects the survival of the business. Finally, even with qualified manpower, they also lack employee satisfaction due to poor working conditions.

2.4 Empirical Review

There are numerous studies x-raying the SMEs' attitude towards quality Book-Keeping. Review of some of this works help give good perspectives as to the extent of culture of keeping financial records among the SMEs and possible gaps for improvements. The review in this chapter is conducted in two parts, general overview and the specifics on the chosen variables.

2.4.1 SMEs and Book-Keeping Practices

SMEs taken in most researches consist of three types of businesses: service, trading, and manufacturing (Kurniawati, Kurniawan and Kristiani, 2013). Most of SMEs, they say, are proprietorship businesses owned by a single individual with many of them being around for 2-30 years. Majority of the findings of the studies also indicate that the number of SMEs that do not keep records of their business transactions far outweigh those that keep records. Maseko and Manyani (2011) showed that in 40 of the 61 SMEs that participated in their study, owner-managers were personally preparing their accounts and financial statements, 12 used hired consultants while the remaining 9 employed full-time accounting officers.

Ademola, Samuel and Ifedolapo (2012) stated that the failure of the SMEs to record their activities arises from two problems: ignorance of how to keep the records and knowing the importance of the records. It is equally acknowledged that by their nature, the educational and accounting backgrounds of the SMEs would influence their success or failure in adopting formal record keeping (Mbroh and Attom, 2012).

Mbroh and Attom (2012) further explained that some of the strategies adopted by SMEs who do not undertake any form of formal accounting are keeping personal notes of transactions in ascertaining the true position of purchases and sales on a continuing basis. This situation, though convenient, eliminates the opportunity of accounting which seeks to relate business to

the external environment for investment and other funding opportunities. The results show that 59% of the SMEs studied practice formal accounting with 65% of those who do not practice Book-Keeping, found to be keeping personal notes and jotters. They also discovered that 52% seek external assistance in keeping books of accounts.

Kurniawati, Kurniawan and Kristiani (2013) exposed a very important aspect of the SMEs attitude towards record keeping: that record keeping is partially not done for the purpose of capturing accounting information for performance measurement but for security and control. This finding is supported by only 27% of SMEs preparing financial statements to report financial performance.

Book-Keeping is clearly essential to good administrative decision-making, consistency and fairness, impartiality, continuous learning and improvement, and effective risk management (Tracy, 2004). Quality of Book-Keeping is critical and important for any kind of enterprise (Premaratne, 2002; Kegie, 2004). Gregory and Jeannot (2000) asserts that financial information should be accessible and with quality. However, quality notion is relatively ambiguous and is potentially problematic (Krishnamoorthy, Wright and Cohen 2002). Quality is often a subjective goal and its measurement is not an exact science but a continual process of discovery that emerges as a top competitive priority within the firms (Mangiameli and Reolthlein, 1999; Voehl and Adams, 2003).

Keeping accurate and up-to-date financial records is for many people the most difficult and uninteresting aspect of the business operations. Most Small and Medium Enterprises do not even keep the most basic cashbook and are thus contented with mental records about their costs, revenue and debt (Stover, 1997). International Monetary Fund Mission (IMF, 1999) being in agreement with the aforesaid statement affirms that many SMEs in Uganda appear ignorant about keeping books of accounts. Wabwire (1996) states that there is almost complete absence of accounting record in SMEs in Uganda.

Empirical studies have also given indicators that shade light towards the main drivers of SMEs attitude towards quality Book-Keeping. The following are identified in this study:

2.4.2 Knowledge and Skills of the Entrepreneurs and Book-Keeping Practice

SME entrepreneurs' ability or eagerness to apply accounting in their business is empirically established that it is partly a function of their level of education, knowledge and the extent of their level of awareness about the importance of accounting (Kurniawati, Nugroho, and Setiawati, 2011). Ismail and King (2007) concluded that the development of a sound accounting information system in SMEs depends on the owners' level of accounting knowledge. Ademola, Samuel and Ifedolapo (2012) opined that majority of the SMEs they interviewed did not keep records because they do not know how to keep the records. Many of them are merely conducting the business without any indicators for establishing growth trends.

Mbroh & Attom (2012) acknowledged that by their nature, the SMEs' levels of educational backgrounds influences their application of Book-Keeping method in their operations. Their research showed that consistent with the level of education, about 12% were maintaining adequate book-keeping, 73% used either personal notes or jotters, while 21% sought external assistance.

Todd (1990) posited that one of the problems associated with auditing small scale business is the lack of experience of small-business managers. Nwokike (2010) discovered that accounting education is the type of education that provides individuals with skills and knowledge in accounting, computing and data processing, which are important for success of businesses.

2.4.3 Ease of Application of Accounting Procedures and Book-Keeping Practice

The considerations here are that cost and complexity of procedures and/or computer packages. According to Kurniawati, Nugroho, and Setiawati (2011), SMEs have document, which is useful for transaction record, but the document is not used as a basis for making a report. Based on the results of the study, Kurniawati, Kurniawan, and Kristiani (2013) stated that most of SMEs studied (69.33%) have no problems in recording because they made simple records according to their needs. However, a good number of SMEs (80%) have obstacles in reporting, given the type of methods adopted. Respondents argue that reporting is time-consuming and very complicated, whereas their ability is limited.

A study conducted by Idowu (2004) in Kwara State of Nigeria, indicates that owners of SMEs adopt different accounting procedures in transacting their businesses with little or no consideration for the basic principles of accounting. Holmes and Nicholls (1998) concluded that most owners and managers of SMEs engage public accountants to prepare required information due to somewhat perceived difficulties in the process.

Keasy and Short (1990) and Bohman and Boter (1984) reported that small firms use professional accounting firms for preparation of annual reports and for other accounting needs. While Marriot and Marriot (2000) argued for more complexity in accounting services to SMEs in form of graphic information, Everaert, Sarens and Rommel (2006) and Jayabalan and Dorasamy (2009) however argue that the high cost of hiring professional accountants leaves SME owner-manager with no option but to relegate accounting information management. Corroborating the argument of Wichman (1983) that owners/mangers of SMEs are directly responsible for the preparations of their accounts, Everaert et al. (2006) said the owners may have been driven to this due to exorbitant professional fees of hiring accountants. Zhou (2010) proposes the use of accounting software by owner managers in

SMEs to improve accounting practices but laments that developers of accounting software are yet to produce the medium-sized software for SMEs.

2.4.4 Business Performance and Book-Keeping Practice

Reported profits reflect changes in wealth of owners and this can explain why major economic decisions in business are centred on financial performance records. In this regard, Nandan (2010) argued that failure or underperformance of SMEs is in part due to their failure to utilize appropriate management accounting tools that easily indicate success or failure. Consequently, failure to appreciate the importance of such tools that are responsible for pushing performance up, results into failure of many SME firms during their first years of operation or they are just struggling to survive (Wiklund, 1999).

Performance measurements are used to measure progress towards goals and individual performance, assess performance systems and procedures, and assess conformance to policies. The measures should be robust, simple and reliable, be limited to controllable factors and cover an appropriate period (Stainer and Heap, 1996). Lewis and Pendril (1994) state that accounting performance measures help users to filter out information relevant for decision making from the financial information. However, Cole and Priesmayer (1995) argue that though performance measures based on financial information such as ratios may be used to assess the performance of a business, their analysis fails to provide sufficient management information because it requires some sophistication on the part of the owner to interpret.

Thus, this buttresses the relationship between performance and application of standard accounting principles in record keeping. Alastair (1999) contended that financial performance measurements in the commercial world are actually just a one-dimensional view with numerous measures of performance. However, Hvolby and Thorstenson (2000) argued that selection of suitable measures ought to be in the light of the firm's strategic intentions to

suit the competitive environment in which it operates and the kind of business it engages in. this strategic approach, however, is generally lacking within the SMEs.

Some empirical studies on SMEs (Avlonitis and Gounaris, 1997; Berryman, 1983; Deshpande , 1993; Gaskill, Van Auken and Manning, 1993; Jowarski and Kohli, 1993) have focused on various performance measures as indicators of performance such as sales growth/profit level and satisfaction with profits that reflect the competitiveness of a business. These tools are simple may be attractive to the SMEs. Stover (1997) on the other hand states that most business owners are interested in increasing profits.

To date, limited research has been carried out into the accounting systems in use within small firms (Mbroh and Attom (2011). Financial management systems have been analysed for micro businesses of less than 10 employees (Nayak and Greenfield, 1994), of less than 20 employees (Holmes and Nicholls, 1998), whilst Mitchell, Reid and Smith (1999) focused their attentions on new small businesses. On their part, Perren and Grant (2000) considered how management accounting routines developed within small businesses focusing on growth-orientated organisations.

As stated earlier, majority of the SMEs do not prepare formal books of accounts, they do not embrace information technology which, is reflected in their performance (Briggs, 2009). From the study of Wanjohi and Richard (2010), most small and medium enterprise owners in Uganda consider financial management as an issue relevant only to large companies. According to Peel and Wilson (1996), financial management practices most particularly working capital management has a strong effect on the firms' profitability. This means SMEs would only be able to present good performance if they are current in terms of record keeping.

2.4.5 Management Competence and Book-Keeping Practice

Studies have shown that sound financial management is crucial to survival and growth of small business (Gorton, 1999). It has also been recognised that appropriate accounting information is important for a successful management of any business entity, be it large or small (European Commission, 2009). Mitchell and Reid (2000) and Nandan (2010) have suggested that SMEs are often failing to leverage adequately the potential of management accounting for helping them achieve their financial objectives, including profitability and liquidity. This suggests a need for research into the management accounting practices of SMEs. Preparers of financial statements in SMEs are dominated by owners and/or managers most of whom are not literate in finance. Confirming the findings, Everaert, Sarens and Rommel. (2006) said the owners may be resorting to this practice to avoid the cost of hiring accountants.

Good record keeping, can greatly improve many of the management decisions a business owner should make, including decisions about borrowing, pricing and inventory. The Private Sector Foundation (PSF, 2000) and Chen & Reinikka (1999) affirmed that financial accounting in Uganda is characterised by poor quality, hence making access to credit difficult.

Managerial competence and decision making on record keeping, according to Berryman (1983), Gaskill , Van Auken and Manning (1993) and Ojala (2002), poor quality accounting records is as a result of managerial incompetence that hinders the growth of the SMEs. This same point is maintained by Elkan (1998) and Olson and Bokor (1999), that poor managerial experience underpins most of the poor performance prevalent in SMEs. Stover (1997) argueed that record accounting is a nightmare and causes great confusion to SMEs owners. IMF (1999) affirmed that SMEs owner-manager's failure to acknowledge the value that accrues out of the accounting system leaves them to be contented with mental records.

Hence, Fluscheal and Kilgore (2001) found that 14.6 percent of SMEs fail due to managerial incompetence.

Therefore, for a firm to perform well and to be successful, it should set clear objectives, aim at quality management and be able to compete both in the short-run and long-run. Long-term liability of a firm calls for measure of performance, which recognizes that the proper control of the firm requires a comparison of the current performance to the predetermined plans or objectives thus the need for comprehensive measures. Such measures would see indissoluble link between the performance standards and the control of the firm by the owner-manager (Bernadette and Gavin, 2001).

Hussein (1983) noted that, a good accounting system is not only judged by how well records are kept but by how well it is able to meet the information needs of both internal and external decision-makers. In his view, Clute and Gitman (1980) maintained that it is common for qualified accountants to do a good job of keeping records up to date but they fail to provide information needed by decision-makers.

Regarding accounting control procedures for small and micro business enterprises, Sathyamoorthi (2001) observed that, it is important to have a system of control over all business activities, as a well-designed and properly implemented control system, which can ensure protection of resources against waste and fraud, accuracy and reliability in accounting data; and success in the evaluation of the performance of the business. Accounting controls are measures that relate to protection of assets and to the reliability of accounting and financial reports.

In all forms of business units, financial management systems are of crucial importance. In fact, they are of significance to business success. Indeed, prior research has asserted that the quality of accounting information utilized within the SME sector has a positive relationship

with an entity's growth (Lybaert, 1998). Similarly, it has been emphasized that there is the need for financial information for small and micro business units due to the volatility normally associated with their situation such as unstable cash and profit positions, and reliance on short-term debt (McMahon and Holmes, 1991; and Dodge, Fullerton and Robbins, 1994).

2.4.6 Sources of Finance and Book-Keeping Practice

Broadly, businesses seek for funding from either formal or informal sources. Unlike the informal sources, the formal sources require some information about the financial conditions of the borrowing firm. Banks all over the world have shown that accounting information is the main source for evaluating loan requests of businesses including the SMEs (Ohachosim, 2009).

Financial Accounting Standards Board (1980) cited in Esaete (2005) deemed that financial reporting, which covers the mechanism for providing information about the financial condition, performance and importantly, risk profile of firms to all potential users, portrays relevance and reliability. Relevance is defined as the capacity of the information to make a difference in a decision by being predictive about the future and giving feedback values about the past performance (McDaniel, Martin and Maines, 2002). Lewis and Pendril (1994) noted that information is relevant if it is able to make confirmatory and corrective decisions.

Reliability, on the other hand, is depicted when information is reasonably free from error and bias and faithfully represents what it purports to represent, thus embraces verifiability, neutrality, representational faithfulness as well as comprehensiveness of disclosure (FASB, 1980). It has variously been noted that financial reports (statements), often the basis for quality measurement, are not prominent documents in SMEs. As such, all SMEs seeking to have a relationship with banking sector are likely to take accounting practice seriously.

Obstacles of SMEs' access to funds in Nigeria remain a major hindrance to the growth of the sector because of the SMEs' inability to generate and use quality accounting information (Richard, McMahon and Holmes, 1991). This view is supported by Hans and Valeri (2010) who reported that when accounting information provides comfort to the lending institution in terms of credit risk, firms can easily meet their external financing needs. It could be argued, therefore, that the financial challenges faced by the SMEs in Nigeria today, is in part as a result of poor record keeping (Aremu and Adeyemi, 2011). This is similar to other developing markets like in Zimbabwe, the SMEs have the potential to turn around the country's economy but the major challenge remains that of having poor access to finance (Gono,2013).

2.5 Theoretical Framework

A theoretical framework can be seen as that network of reasoning that embodies theories, concepts and assumptions about some observed event or phenomena and explanation as to how these event and phenomena are related to each other (Imonitie 1996).

Therefore, there is need to state and explain the theoretical base on which this study rests. Information theory that explains how business owners gather data from their recorded day-to-day business transactions forms the theory of this study. The information theory which is fundamental to book keeping provides useful and helpful information to the owners, managers, creditor, potential investors and other users with the basic information needed. It also enables effective decision towards the growth of the business. However, information kept should therefore be understandable, relevant, reliable and complete in order to aid the decision making for the business.

From the foregoing, therefore, knowledge & skills becomes very relevant in information synthesis. Low knowledge would likely make the SME business owner think that the

information provided through the formal accounting procedure is no different from traditional means. The tendency, therefore, is to de-emphasize the need to keep formal accounting records as practiced through Book-Keeping procedure.

The value put on the information provided to the business entrepreneur will also determine his/her perception of its cost of continued application. The level of knowledge and skills becomes further intertwined with value perception of the business owners regarding the information content of the financials. The higher the value put on the information content on financial information, the more the entrepreneur would be willing to absorb cost of acquisition.

Management competence level also has a great bearing on the value put on financial information. There are businesses that have off site outlets managed by senior members of the organization and in some instances power is delegated to staff within the premises that the owners reside. Such authority delegation is a function of management competence and the level of competence positively relates to increased reliance on formal financial information.

The value of the information content of the Book-Keeping practice is further driven by how easy is the procedure and how simple is it to be understood at the SMEs' level. The more cumbersome the procedure or the more difficult to understand the concepts and/or reports, the more averse the investor would be to imbibe the Book-Keeping culture.

On external linkage with finance sector, formal accounting information is basic to access any financial or even venture capital support. Hence, all investors be them big or small, are induced to keep formal financial records as long as they need external financial support.

Other theories worthy of mention are the stakeholder's theory and the stewardship theory. The stakeholder's theory which is also information based, is more applicable to better organized and high-end of the business pyramid but can also be useful and important to Small

businesses. It posit that most stakeholders need to be well informed about the happenings going on in the business, hence, accurate Book-Keeping and procedures that are easy to comprehend and apply help them to know whether to invest or not, on one hand. And on the other it enables them to understand the business whether it is performing or not and to also know their claims. Thus the theory appears more suitable to situation of separation between ownership and management, which is not a characteristic of the SMEs.

However, there are some businesses that even though they are on small scale levels, they delegate some responsibilities to pseudo-managers or sell outlet attendants. Here, the driven force is the management competence which necessarily should see the importance of formal accounting information as proxy of his/her absence across time and locations.

The stewardship theory if applied, would try to explain the relationship between the principal, agents and other parties whose characteristics do not fit SME structure. Stewardship theory is a theory that managers, left on their own, will indeed act as responsible stewards of the business they control. This means the quality of their stewardship will rely heavy on the quality and reliability of the financial information they provide to their principals. Book-Keeping is adjudged the most reliable financial recording system that could make this theory thrive in business management.

The stewardship theory is an alternative view of agency theory, in which managers are assumed to act in their own self-interests at the expense of shareholders. It specifies certain mechanisms, which reduce agency loss including the executive compensation, levels of benefits and also manager's incentive schemes by rewarding them financially or offering shares to motivate them for better performance.

2.6 Summary

In this chapter attempt is made to present the status of Book-Keeping as practiced by the SMEs. Effort is also made to identify factors that are stimulants to effective record keeping within the SMEs.

The chapter that follows shall discuss the methodology of the research. It will examine the research design, population of the study, sampling and sampling size, methods of data collection, techniques of data analysis and variable specification.

CHAPTER THREE
METHODOLOGY

3.1 Introduction

This chapter presents and discusses the research methods and instruments used in this study. The chapter provides explanation and justification of the research design, population description, sampling design and sample size. Variables studied and their measurements are explained and justified. Methods of data collection, data processing, data analysis and justification for the limitations of the research are articulated. Finally, the details of the techniques and package used to conduct the analysis are explained.

3.2 Research Design

The research is a survey research with the study is aimed to identify the factors influencing record keeping culture by SMEs and subsequently find which among those factors is (are) more important. The study is conducted on a two-stage analysis; the first stage led to collection of data on the determinants through the questionnaire. And since the questionnaire outcome will lead to identification of the most important determinants of record keeping by the SMEs in a causal form, the questionnaire is the regression type. Thus, the design entailed separation of each predictor variables from the response variable.

The questionnaire is designed in close ended patterns and was administered directly on the operators of the SMEs. Furthermore, in order to ensure a reduced possibility of questionnaire missing in transit or misplacement, the administration of the questionnaires was done face-to-face.

To set the basis to pretest the questionnaire for the expected possible determinants for Book-Keeping behavior of the SMEs, some unstructured interviews as well as field pilot testing were conducted. The decision variables so identified are Knowledge and skills; ease of

application; business performance; management competence; source of finance (see questionnaire as Appendix II for details of composite items of each variable and their structure).

Since the response for the DV is dichotomous in the second stage analysis, binary logistic regression analysis is employed. This model is appropriate when the response takes one of only two possible values representing the presence or absence of an attribute of interest; in this study the attribute of interest is 'adequate record keeping'. Otherwise stated, the logistic regression type as binary (or binomial) rather than multinomial means dealing with a situation in which the observed outcome for a dependent variable has only two possible types. The outcome in this research is coded as "1" for the success (or a case) of 'adequate record keeping' and "0" for the failure (or non-case) of 'inadequate record keeping'.

Based on the literature, the logistic regression is used to predict the odds of being a case based on the values of the independent variables (predictors) generated from the questionnaire. The odds are defined as the probability that a particular outcome is a case divided by the probability that it is a non case. Since binary logistic regression estimates the probability that a characteristic is present, probability of success will depend on levels of the causative factor.

3.3 Population of the Study

The population of the research is the collection of small-scale businesses within Zaria metropolis as limited by the scope in Chapter 1.5 and as captured by the Federal Inland Revenue Service (FIRS) Zaria branch. As at November 2015, 1,078 cumulative totals of both micro and small taxpayers were recorded from the field operations of the FIRS Zaria Branch. If this number is shared 50:50 between the micro and the small enterprises, assuming a

population of 500 for the SMEs in Zaria is realistic. This is consistent with Dikki (2015) where the population is generated from records of funded women by microfinance banks within Zaria. The population of this study is, therefore, assumed to even be near 50% at five hundred (500) SMEs within Zaria metropolis and since it is less than fifty thousand it is a finite population.

3.4 Sampling and Sample Size

The growing demand for research has produced a need for an efficient method of determining the sample size necessary to be representative of a given population. According to Krejcie and Morgan (1970) the following formula is used to determining sample size:

$$S = \chi^2 NP(1-P) \div d^2 (N-1) + \chi^2 P(1-P).$$

Where S = Sample size required.

χ^2 = the table value of chi-square for 1 degree of freedom at the desired confidence level (1.96x1.96=3.841)

N = the population size

P = the population proportion (assumed to be 0.5 since this would provide the maximum sample size)

d = the degree of accuracy expressed as a proportion (0.05).

In this research, we require to establish an adequate sample size to be representative of the SMEs in Zaria, Kaduna state. Using the above formula, Appendix I is generated for different sizes of population. The relationship between sample size and total population is shown in the table. It should be noted that Appendix I is applicable to any defined population be it finite or infinite. So to obtain the required sample of the SMEs in Zaria at N=500, the table indicates a representative sample size of 217. As a rule of thumb in the collation of field data using primary data 5% of the total sample size was added for questionnaire that might miss

during distribution and 10% was also added to improve the quality of the result. There the total of 15% was added to the actual sample size which was 217 plus 33 making the total to be 250.

As stated in chapter 1.5, the target business segments are manufacturing, trading and services. However, the population sourced did not provide sizes of the area\cluster, as such selections were done randomly according to the businesses encountered on the field. Nonetheless, this gave adequate representation of each of these segments which assured the quality of the research results.

3.5 Sources and Method of Data Collection

For the purpose of data gathering, the study employed primary data method through a structured questionnaire using a six point Likert scaling (see the attached questionnaire as Appendix II). The type of questionnaire used is close ended where the alternative answers are provided as a solution to the questions being asked to the respondents. It was structured to help the respondents answer the question easily as well as assist the researcher to code information easily.

As stated earlier, the work has sampled the opinion of three segments of the Zaria SMEs strata; vis. manufacturing, trading and services. To enhance the quality of the result, 250 questionnaires were distributed.

3.6 Techniques of Data Analysis

The questions in the questionnaire are coded using the indices of a six (6) point Likert's scale. In the first stage of the analysis, the data collected through the questionnaire is presented in tables and analyzed using non-parametric simple percentages.

The Statistical Packages for Social Science (SPSS) version 20.0 was used in running the data. The data analysis therefore went through the following steps:

1. To establish the structure of the data, the analysis commenced with the descriptive statistics**.** Here the average value and central tendencies through the mean for continuous variables were considered; which the averages could also be used to set benchmarks. The standard deviation (s.d.) analysis helped measure dispersion and variability. The higher the s.d., the higher the dispersion or variability. Any data that has high s.d. is experiencing high level of variability or dissimilarity.
2. Correlation analysis for the first stage of the research to measure the extent of the association between the response and the predictors. To see how they are moving together without taking into consideration the impact of one over the other, until the second stage. Correlation tells the degree of association; from strong to weak correlation. The interest is in the correlation to establish the direction and extent of their relationship.
3. Regression Analysis: here the desired impact analysis was conducted between the variables using binary logistic regression.

3.7 Data Quality Control

The questionnaire was pre-tested to check for reliability and validity before being administered to ensure that the information therein adequately tapped the concept in question. The pre-testing exercise resulted in Cronbach's alpha coefficient of 0.807, well above the accepted average of 0.8 as recommended by Field (2005). This indicates that the instrument used is reliable enough to yield results that are useful for drawing inferences when the data collected is used for the regression analysis.

3.8 Research Variables and Their Measurements

The research response and predictor variables are as per the attached questionnaire in Appendix II. Book-Keeping practice as the response variable is measured by adopting composite items comprising cash sale receipts, sales invoices, payment vouchers, stock cards, ledgers (cash book, sales ledger, purchases ledger, creditors' ledger and debtors' ledger), payroll/wages records, bank reconciliation statements and cheques. While on the other hand, the predictor variables (knowledge and skill, ease of application, business performance, management competence and source of finance) are measured as contained in the questionnaire.

The Likert scale was converted to a binary structure by instituting the following groupings: count under 3 which gives less than average representing a weak form of accounting practice is classified as 0, while 3-6 as strong indicators are classified as 1. 3 score which is the exact average is considered as qualification to make claim of accounting practice culture in a business set up.

3.9 Summary

This Chapter discusses the details of the research methodology adopted for the study. The research made use of the documentary observation and descriptive method. The population of the study comprises of all SMEs in Zaria, Kaduna State. Krejcie and Morgan (1970) sampling model was employed for the sample size and the source of the data collected was through primary source. Binary logistic regression was used to analyze the determinants of Book-Keeping within the SMEs.

CHAPTER FOUR
DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.0 Introduction

This chapter presents the data and its analysis to help in understanding the key drivers for Book-Keeping practice among the SMEs. First, the analysis begins with establishing the nature of the variables under study by exploring the descriptive statistics. Thereafter, the response variable was converted into a categorical variable for the required binary logistic analysis, the main technique of the research.

Multiple regression analysis is also conducted to give indicative confirmatory outcomes from the binary regression. Comparing the results gave some comfort in the statistical significance outcome of the research.

4.1 Preliminary Analysis/Descriptive Statistics

The statistics considered in the attempt to understand the nature of the data are descriptive statistics in the form of frequencies and range of scores for the categorical and nominal scales, and standard deviations, mean, skewness and kurtosis for continuous variables. Descriptive statistics have a number of uses that we hope to explore in this research, which include:

1) To describe the characteristics of the sample discussed in the method chapter of this research;

2) To check if any variable violates any of the assumptions underlying the statistical techniques (multiple regression analysis and binary regression) that is used to address the research questions; and

3) To specifically address research questions as the case may be.

See Appendix III for full list of descriptive Statistics.

4.1.1 Cronbach Reliability Test

The Cronbach Alpha's statistic of 0.897 for the accounting practice is suggesting very good internal consistencies reliability for the scale.

Table 4.1.1 Cronbach Alpha Reliability Test:

Case Processing Summary

		N	%
Cases	Valid	25	100.0
	Excluded[a]	0	.0
	Total	25	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.897	12

Source: Extracts from SPSS output 2015

4.1.2 Gender

The output shows the distribution of the different categories considered in this research. Table 4.1.2 shows how male and female respondents are distributed, with males constituting about 78%. The about 20% mark for female shows a below expected participation of the women gender given the fact that women are all over in the small businesses sector across cultures. However, that may be excused due to the fact that this work zeros on SMEs which have higher management and capital requirement than the general small businesses.

Table 4.1.2 Gender:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	196	78.4	78.4	78.4
	Female	54	21.6	21.6	100.0
	Total	250	100.0	100.0	

Source: *Result from SPSS software 20015*

4.1.3 Business Sector

The distribution of the response from the categories of the Business Sectors Engaged category studied is carried on Table 4.1.3 trading alone provides 58% of the respondents which is consistent with the expectation of what is the dominant business segment of the

SMEs. Services come second with 22% with Agro allied and manufacturing at 13% and 7% respectively.

Table 4.1.3: Business Sector Engaged:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Manufacturing	17	6.8	6.8	6.8
	Services	56	22.4	22.4	29.2
	Trading	144	57.6	57.6	86.8
	Agro Allied	33	13.2	13.2	100.0
	Total	250	100.0	100.0	

Source: *Result from SPSS software 2015*

4.1.4 Category of Business

Contrasting Table 4.1.3 with Table 4.1.4 that captures categories of business engaged, shows 59% of the businesses within the SME sector are individual business owners practicing sole proprietorship. With partnership at 21%, it indicates that the unstructured businesses constitute 80% of the SMEs business sectors, which is consistent with the expectations of the structure of SMEs.

Table 4.1.4 Category of Business:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sole Proprietor	148	59.2	59.2	59.2
	Partnership	52	20.8	20.8	83.6
	Cooperative	9	3.6	3.6	95.6
	Limited Liability	41	16.4	16.4	100.0
	Total	250	100.0	100.0	

Source: *Result from SPSS software 2015*

4.1.5 Amount of Capital Employed

And by capital employed, the bulk of the SMEs sampled (about 86%) are run with capital under N10 Million. 44% of this category of business enterprises employ less than N1, 000,000 capitals. Another 42% employ between N1, 000,000 to N10, 000,000. A median size of capital of up to N100 Million captures 6% of the total sample.

This result shows the likely reason why these business enterprises may not consider keeping business records as valuable. Mental records of performance as well as unstructured Book-Keeping could dominate the business practice as opined by Nandan (2010).

Table 4.1.5: Amount of Capital Employed:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than N1M	111	44.4	44.4	44.4
	N1M - N10M	104	41.6	41.6	86.0
	N11M - 100M	15	6.0	6.0	92.0
	N101 - N200M	4	1.6	1.6	93.6
	N201M - N500M	2	.8	.8	94.4
	More than N500M	14	5.6	5.6	100.0
	Total	250	100.0	100.0	

Source: *Result from SPSS software 2015*

4.1.6 Number of Employees

Finally, frequency by employees shows Individual Businesses categories are largely under 20 employees. This is also consistent with the fact that majority of the businesses are unstructured in forms of sole proprietors and partnerships. These types of businesses are generally run on informal basis whose main characteristic is informal record keeping.

Table 4.1.6: Number of Employees:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 20	211	84.4	84.4	84.4
	21 – 50	15	6.0	6.0	90.4
	51 – 100	2	.8	.8	91.2
	101 – 200	4	1.6	1.6	92.8
	201 – 500	2	.8	.8	93.6
	More than 500	16	6.4	6.4	100.0
	Total	250	100.0	100.0	

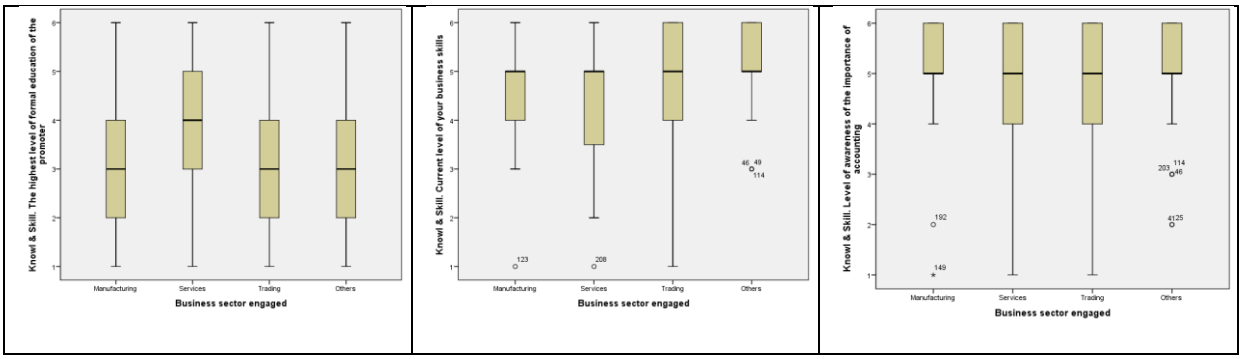
Source: *Result from SPSS software 2015*

4.2 Boxplots

The output from Boxplot provides a lot of information concerning the distribution of variables and the possible influence of the categorical variables. In this research, the most important categorical variable considered is the 'Business Sector Engaged'. This is so because the general expectation is that the nature of the business sector naturally brings different demands on financial record keeping. For instance, a trading outfit is considered less stringent in record keeping than a manufacturing, hence may not be at the same level with manufacturing in their record keeping attitude. As such the Boxplots are generated in response to this categorical variable influence on other variables.

Each box represent 50% of the distribution of scores with the whiskers providing the balance of 50% and going out to the variable's smallest and largest values. The scores that SPSS considers as outliers appear as little circles with the ID numbers attached. SPSS defines points as outliers if they extend more than 1.5 box-lengths from the edge of the box with extreme points (asterisked, *) as those that extend more than 3 box-lengths from the edge of the box.

Chart 4.2.1: Knowledge & Skills



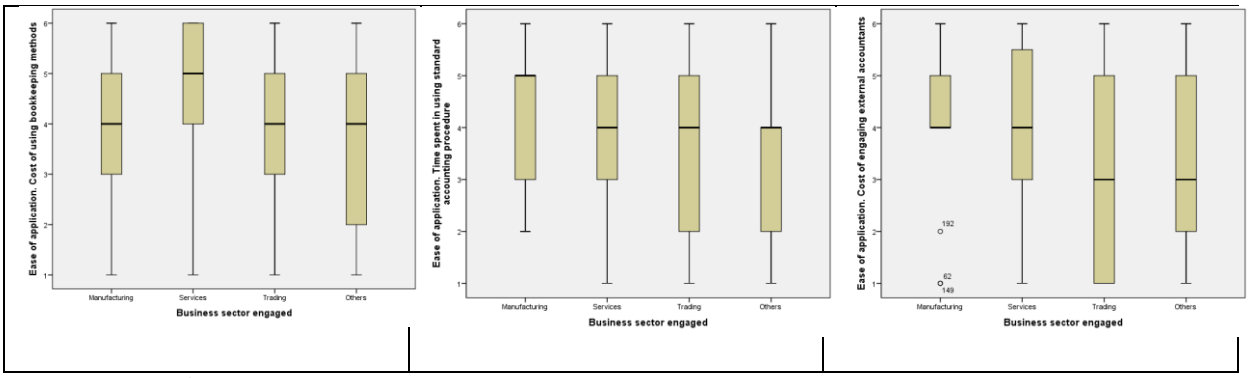
Source: Extracts from SPSS output 2015

When formal education of the promoter is plotted, the services concentration stands out at the higher level of scores with the least at 3 consistent with the type of entrepreneurs engaged in services business. The other three sectors show moderate spread between 2 and 4 scores with the median at exactly 3.

Current level of skills scores the least of 3.5 on the plot with all sectors' median at 5 a good indication that the business promoters believe they know their businesses well enough. Trading is more positive with all the scores ranging between 4 and 6. About 5 outlier points are noted and remain not very significant to affect the distribution.

The most positive scores are on the measure of 'Awareness of Accounting'. Minus the 5 outliers, least score starts at 4 with median at 5 and the sectors hitting 6 score in the majority.

Chart 4.2.2: Ease of Application



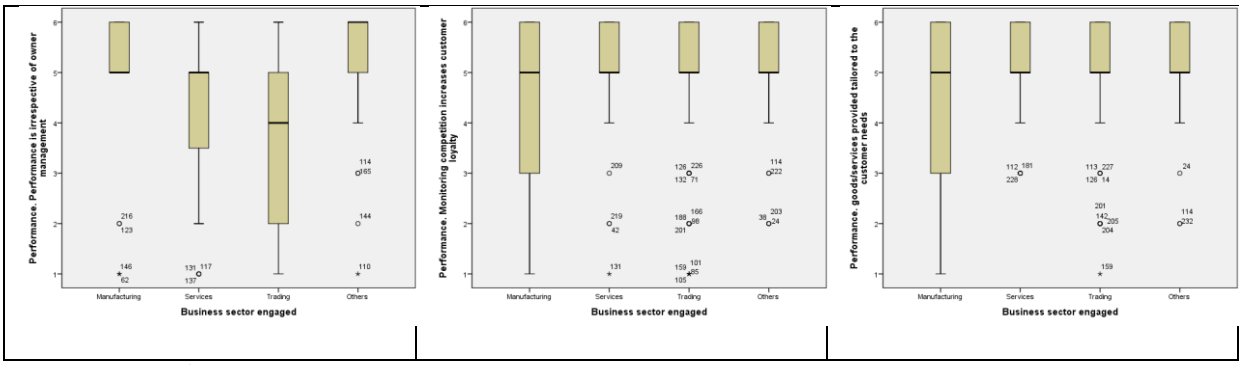
Source: Extracts from SPSS output 2015

Ease of application produced more diverse opinion from the outcome of the Boxplot. Manufacturing and Trading hold the same opinion in terms of 'Cost of Using Book-Keeping

Methods'. Moderately the median is at 4 with the least and highest at 3 and 5 respectively. While services are bullish with the median at 5 and the least and the highest at 4 and 6 respectively, others are very diverse ranging between 2 and 5 maximum.

The time factor and cost factor measures are more unstructured. Trading is the most unstructured followed by others. Services remain with high opinion while manufacturing excels with accepting the cost factor with ease.

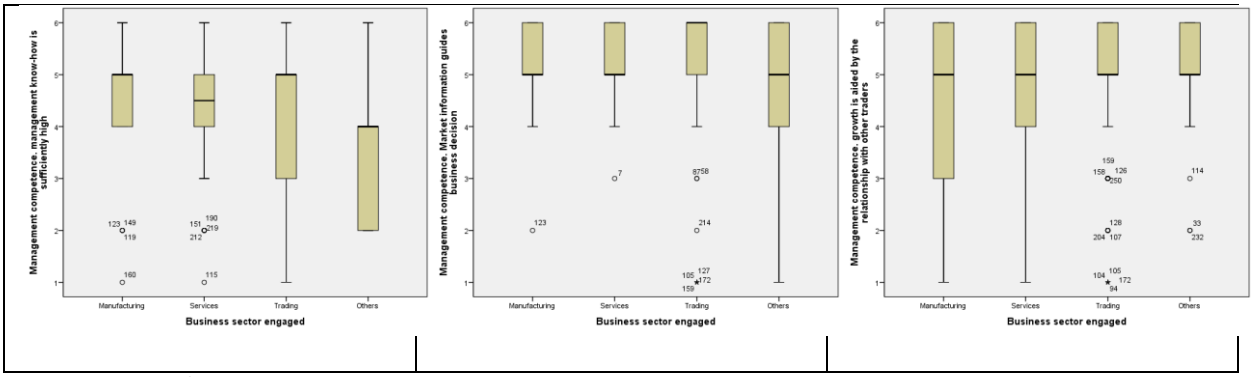
Chart 4.2.3: Performance



Source: Extracts from SPSS output 2015

The importance of business performance is reflected in the extent of high scores in its Boxplot. With the exception of trading in contract management and manufacturing in both competition and customer service measures, scores are extreme with 5 being the least.

Chart 4.2.4: Management Competence

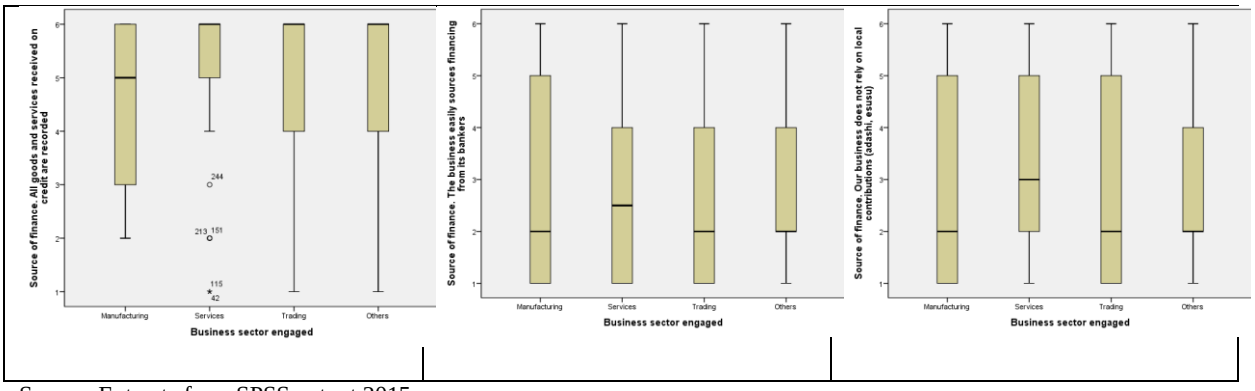


Source: Extracts from SPSS output 2015

The highest scores across board are recorded under 'Management Competence measures. Baring others under 'Management Know-how' where it has the highest at 4 with the lowest down to 2, the lower limits of the others have the least of 3. In fact the majority are at 5, a

good indication that majority of respondents are aware of the need of competence in management.

Chart 4.2.5: Source of Finance



Source: Extracts from SPSS output 2015

Evidence of recording credit transactions to reduce risk of bad debt is generally on a high score. However, and as anticipated, sourcing finance is a major challenge as indicated by the general poor scores across sectors. The diversity of opinion is more pronounced within the manufacturing rather than the Trading sectors. Both at different scale scores stretch between 1 and 5 with a 1 median threshold.

In furtherance of the analysis, the averages of each scale are calculated in readiness for regression analysis. This is necessary because it is the scale that serves as both the response and the predictor variables not the totality of their individual items. To achieve this, manipulation of the existing data is necessary.

First, before performance of the statistical analyses on data set, total scale scores for all the scales used in the study are calculated through three steps:

- Step 1: Reversing negatively worded items in each of the scales to avoid response bias; and
- Step 2: Instructing SPSS to add together scores from all the items that make up the subscale or scale.
- Step 3: From the Total scores to generate Averages as per the descriptive statistics on Table 4.6.

The negatively worded items on the questionnaire are: C1 and C3.

These have been reversed and the generated averages provide the information on Table 4.6 concerning their distribution. This is achieved by transforming the scales within the SPSS procedure and recalculate as follows:

$1 \rightarrow 6, 2 \rightarrow 5, 3 \rightarrow 4, 4 \rightarrow 3, 5 \rightarrow 2, 6 \rightarrow 1.$

With the exception of 'Average Total Ease of Application, the other average scores have negative values maintaining that, on average, the predictor variables are at high value chapter of the Likert's scale. This is clearly established by respective values of the mean scores. Unlike the individual scores that had two positive kurtosis values, the average has three measures (knowledge &skills, performance and management competence) with positive kurtosis values indicating that their distributions are rather peaked (clustered in the centre).

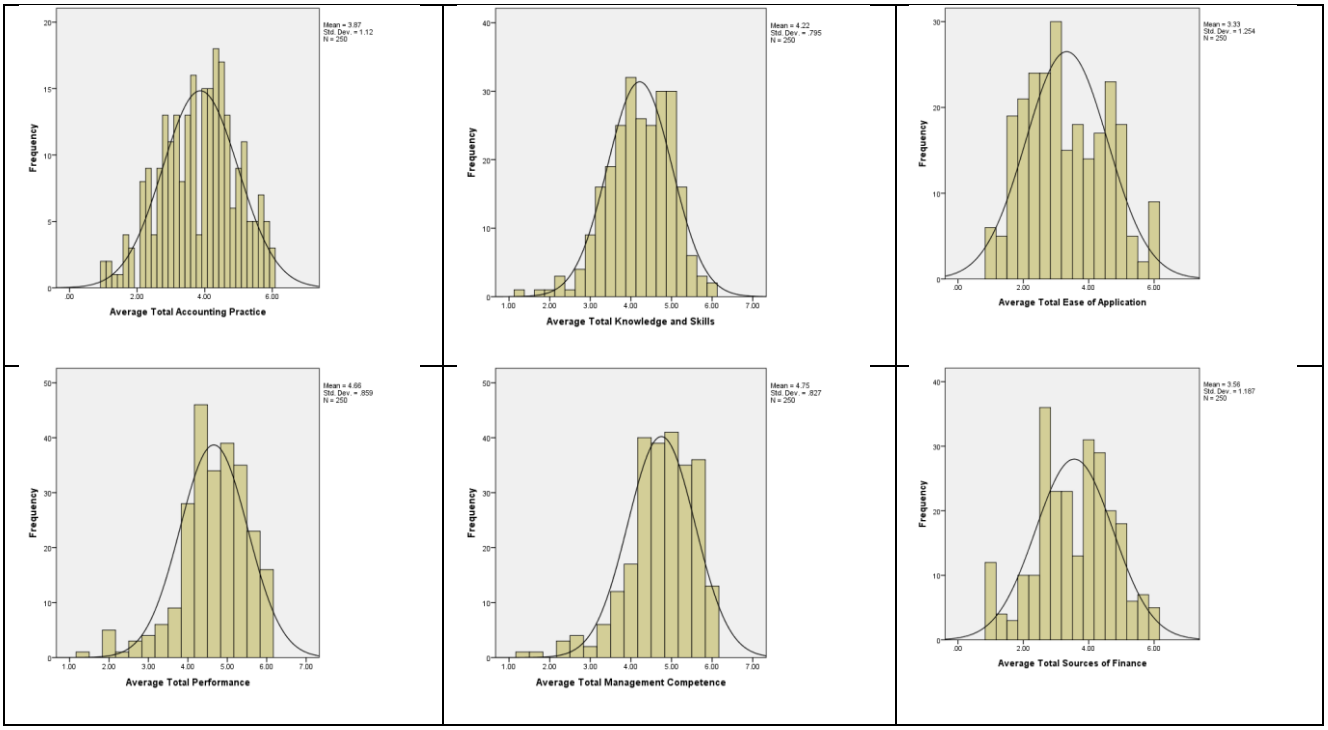
Table 4.2.6: Descriptive Statistics

	No	Min	Max	Mean	Std. Dev.	Skewness	Std. Err	Kurtosis	Std. Err
Average Total Accounting Practice	250	1	6	3.8697	1.12017	-0.25	0.15	-0.47	0.31
Average Total Knowledge and Skills	250	1	6	4.2170	.79479	-0.49	0.15	0.43	0.31
Average Total Ease of Application	250	1	6	3.3253	1.25433	0.24	0.15	-0.83	0.31
Average Total Performance	250	1	6	4.6587	.85907	-0.91	0.15	1.46	0.31
Average Total Management Competence	250	1	6	4.7507	.82658	-1.01	0.15	1.65	0.31
Average Total Sources of Finance	250	1	6	3.5587	1.18686	-0.20	0.15	-0.44	0.31

Source: *Extracts from SPSS software output2015*

For pictorial view of the normality transformation of the averages, the respective histograms are presented in Chart 4.2.7 below.

Chart 4.2.7: Histogram



Source: Extracts from SPSS output 2015

4.2.7 Results from Inferential Statistics

This chapter starts with correlation analysis to describe the strength and direction of the linear relationship between any two variables in the research. Two types of correlation coefficients are discussed: first, the bivariate Pearson product-moment correlation that is designed for interval level (continuous) variables and which is suitable for the parametric analysis conducted in this research. Then partial correlation which allows exploration of the relationship between two variables while controlling for another variable.

4.2.8 Correlation Analysis

Correlation between the response variable and the predictor variables is small with the result showing no relationship with ATMC at all. This is further inspected when the regression results are analysed. The correlation between the independent variables is also small with that between ATKS and ATEA being the highest at 0.328. This result gives a good indication of absence of multicollinearity as contained on Table 4.8 below.

4.2.8: Correlation

		ATAP	ATKS	ATEA	ATP	ATMC	ATSF
Pearson Correlation	ATAP	1	.240**	-.241**	0.07	0	.333**
	ATKS	.240**	1	-.328**	.209**	.135*	.138*
	ATEA	-.241**	-.328**	1	-.137*	-0.02	-.215**
	ATP	0.07	.209**	-.137*	1	.290**	0.099
	ATMC	0	.135*	-0.02	.290**	1	0.084
	ATSF	.333**	.138*	-.215**	0.099	0.084	1
Sig. (2-tailed)	ATAP		0	0	0.271	0.998	0
	ATKS	0		0	0.001	0.033	0.029
	ATEA	0	0		0.03	0.753	0.001
	ATP	0.271	0.001	0.03		0	0.119
	ATMC	0.998	0.033	0.753	0		0.184
N: 250	ATSF	0	0.029	0.001	0.119	0.184	

Source: *Extracts from SPSS output 2015*

** Correlation is significant at the 0.01 level (2-tailed).

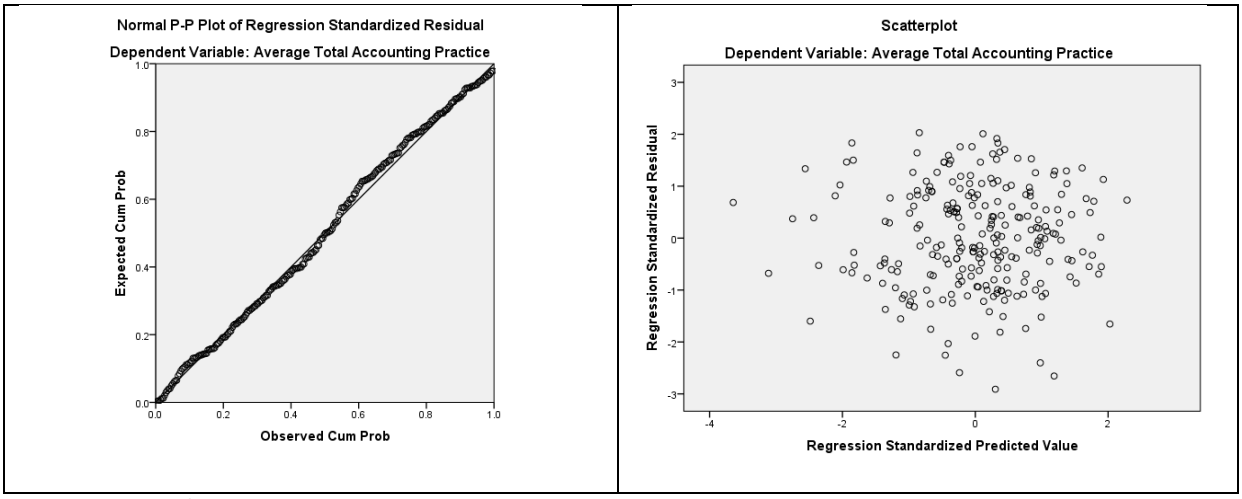
* Correlation is significant at the 0.05 level (2-tailed).

The collinearity diagnostics on the variables should help pick up on problems with multicollinearity that may not be evident in the correlation matrix. The results are presented in Table 4.11. Two values are given: Tolerance and VIF. Tolerance is an indicator of how much of the variability of the specified independent variable is not explained by the other independent variables in the model and is calculated using the formula $1–R^2$ for each variable (Pallant, 2005). If this value is very small (less than 0.10), it indicates that the multiple correlation with other variables is high, suggesting the possibility of multicollinearity. The other value given is the VIF (Variance inflation factor), is the inverse of the Tolerance value. VIF values above 10 would be a concern, indicating multicollinearity. All the independent variables show absence of multicollinearity.

In checking for normality, linearity and homoscedasticity, inspection of the residuals scatter plot and the Normal Probability Plot of the regression on Chart 4.7 is done. As is hoped in the Normal Probability Plot, the points lie in a reasonably straight diagonal line from bottom

left to top right. This suggests no major deviations from normality (Pallant, 2005). In the Scatter plot of the standardized residuals, the residuals are roughly rectangularly distributed, with most of the scores concentrated in the centre (along the 0 point), without a clear or systematic pattern. And since there are no deviations from a centralised rectangle, it does not suggest violation of the assumptions.

Charts 4.2.9: The residuals scatter plot and the Normal Probability Plot



Source: Extracts from SPSS output 2015

4.2.10 Regression Results

The Adjusted R Square value of 0.149 presented in Table 4.8 tells more on the variation in the dependent variable (Accounting Practice). As explained by the model (made up of all the other predictor variables). This means that the model explains 14.90 per cent of the variation in Accounting Practice. According to Pallant, (2005), this is quite acceptable result (particularly when you compare it to some of the results that are reported in the journals).

Table 4.2.10: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.407[a]	.166	.149	1.03363	2.048

Source: *Result from SPSS software 2015*

a. Predictors: (Constant), Average Total Sources of Finance, Average Total Management Competence, Average Total Knowledge and Skills, Average Total Performance, Average Total Ease of Application

b. Dependent Variable: Average Total Accounting Practice

The Adjusted R Square value helps reduce the optimistic overestimation of the true value in the population by providing a better estimate of the true population value. Further, in order to assess the statistical significance of the result, the ANOVA is presented in Table 4.10 below. This tests the null hypothesis that multiple R in the population equals 0. The model in this example reaches statistical significance (Sig = .000, this really means p<.0005).

Table 4.2.11: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	51.756	5	10.351	9.689	.000[b]
	Residual	260.685	244	1.068		
	Total	312.441	249			

Source: *Result from SPSS software 2015*

a. Dependent Variable: Average Total Accounting Practice

b. Predictors: (Constant), Average Total Sources of Finance, Average Total Management Competence, Average Total Knowledge and Skills, Average Total Performance, Average Total Ease of Application

We are now to compare which of the variables included in the model contributed to the prediction of the dependent variable, the size of the Beta under Standardised[1] Coefficients in Table 4.11 is relevant. The ranking by the largest to the smallest is as follows: ATSF (0.287), ATKS (0.165), ATEA (-0.126), ATMC (-0.05) and ATP (0.004). However, for a unique significant contribution, only the first three largest contributors (ATKS, ATEA and ATSF) make this contribution to the prediction of the response variable.

For completeness, a binary logistic regression analysis is also conducted in chapter 4.3. The dichotomous response values are 1,0 for accounting practice measured by a score of less than 3 and score from 3, respectively (see Pallant (2005) page 81).

Table 4.2.12: Coefficients

	Unstandardized Coefficients		Standardized Coefficients			95% Confidence Boundries for B		Correlations			Collinearity Statistics	
	B	Std. Error	Beta	T	Sig.	Lower	Upper	Zero-order	Partial	Part	Tolerance.	VIF
(Constant)	2.598	0.639		4.07	0	1.339	3.857					
A T K S	0.233	0.089	0.165	2.61	0.01	0.057	0.408	0.24	0.165	0.153	0.855	1.169
A T E A	-0.11	0.056	-0.13	-2	0.047	-0.224	-0.001	-0.241	-0.127	-0.117	0.857	1.167
A T P	0.006	0.081	0.004	0.07	0.944	-0.155	0.166	0.07	0.004	0.004	0.879	1.138
A T M C	-0.07	0.083	-0.05	-0.8	0.414	-0.232	0.096	0	-0.052	-0.048	0.905	1.105
A T S F	0.27	0.057	0.287	4.76	0	0.158	0.382	0.333	0.291	0.278	0.942	1.061

Source: *Extracts from SPSS output*

a. Dependent Variable: Average Total Accounting Practice

4.3 Binary Logistic Regression

The main interest in this research is to explore how well the group of predictor variables identified is able to predict or explain accounting practice by the SMEs in Zaria. Binary logistic regression is, therefore, used in the research to test which of the variable(s) predict or explain accounting practice among the respondents. The first step was converting the continuous values of the averages of the total scales to a (1,0) dichotomy. All values under 2.9 are converted to 0, while values from 3 to 6 are converted to 1. The rationale behind this is that 50% (3 in scale) is considered as qualification to make claim of accounting practice in a business set up.

Table 4.2.13 headed Block 0, is the results of the analysis without any of our independent variables used in the model, serving as a baseline for comparing the model with predictor variables included.

Table 4.2.13: Block 0: Beginning

Iteration History

Iteration		-2 Log likelihood	Coefficients
			Constant
Step 0	1	266.817	1.104
	2	265.963	1.238
	3	265.962	1.242
	4	265.962	1.243

Source: Extracts from SPSS output 2015
a. Constant is included in the model.
b. Initial -2 Log Likelihood: 265.962
c. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

The Omnibus Tests of Model Coefficients gives us an overall indication of how well the model performs, over and above the results obtained for Block 0, with none of the predictors entered into the model. This is referred to as a 'goodness of fit' test. For this set of results we want a highly significant value (the Sig. value should be less than .05). In this case the value is .000 (which really means p<.0005). Therefore, the model (with our set of variables used as predictors) is better than SPSS's original guess shown in Block 0, which assumed that everyone would be practicing Book-Keeping.

Table 4.2.14: Omnibus Tests of Model Coefficients

		Chi-square	Df	Sig.
Step 1	Step	45.228	12	.000
	Block	45.228	12	.000
	Model	45.228	12	.000

Source: Extracts from SPSS output 2015

The Hosmer and Lemeshow Test (Table 4.2.15) is the most reliable test of model fit available in SPSS. Poor fit for the Hosmer-Lemeshow Goodness of Fit test is indicated by a significance value of more than 0.05 contrary to the normal significance test of less than .05.

Our model, therefore, exhibits a goodness of fit with a Chi-square value of 4.005 and the test significant value of 0.857 which is greater than 0.05 as required.

Table 4.2.15 Hosmer and Lemeshow Test

Step	Chi-square	Df	Sig.
1	4.005	8	.857

Source: Extracts from SPSS output 2015

The Cox & Snell R Square and the Nagelkerke R Square values (Table 4.2.16) provide an indication of the amount of variation in the dependent variable explained by the model (from a minimum value of 0 to a maximum of approximately 1). These are described as pseudo R square statistics, rather than the true R square values that you will see provided in the multiple regression output. In this research the two values are .165 and .253, suggesting that between 16.5 per cent and 25.3 per cent of the variability is explained by this set of variables.

Table 4.2.16: Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	220.734[a]	.165	.253

Source: Extracts from SPSS output 2015

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

The Classification table provides us with an indication of how well the model is able to predict the correct categories of accounting practice or not for each case. We compare the Classification table shown for Block 0 (step 0) with the one post entry of the predictor variables (step 1), to see how much improvement that is registered.

In step 0 SPSS returns 77.6 per cent, thereby classified (guessed) that all respondents would not be keeping records (estimate of 22.4 per cent). The model in step 1 correctly classified

80.0 per cent of cases overall (sometimes referred to as the percentage accuracy in classification: PAC), an improvement over the 77.6 per cent in Block 0.

Table 4.2.17: Classification Table

Observed			Predicted		
			Average Total Accounting Practice. Categorical Value		
			0	1	Percentage Correct
Step 0	Average Total Accounting Practice. Categorical Value	0	0	56	0.0
		1	0	194	100.0
	Overall Percentage				77.6
Step 1	Average Total Accounting Practice. Categorical Value	0	15	41	26.8
		1	9	185	95.4
	Overall Percentage				80.0

Source: Extracts from SPSS output 2015

a. Constant is included in the model.

b. The cut value is 0.500

Table 4.2.18 presents the Wald confirmatory test against each predictor variable. The significant value of each of the variables provides information about the contribution or importance of each of the predictor variable in the model. , The variable(s) with significant values of less than .05 are the variables that determine, explain or predict accounting practice among the SMEs in Zaria. In this study, therefore, there are two significant variables (ATKS p=.002, ATSF p=.000). On the categorical variables, none contributed significantly to the model.

The B values provided in the second column are equivalent to the parametric β values obtained in a multiple regression analysis which define the extent of relationship between the response and the predictor variables. The sign of the B value will tell about the direction of the relationship (that is which factors increase the likelihood of a yes answer and which factors decrease it).

Being probabilistic model, the β value for Knowledge and skills at 0.720 states that the probability of knowledge and skills determining Book-Keeping practice is approximately 0.7, While for the source of finance determinant, the probability of its determining accounting practice is approximately 0.6.

The insignificance of the set of the categorical variables suggest that neither gender, business type, business sector nor the other variables impact SMEs' attitude towards Book-Keeping. That is, the pattern of behavior amongst these categories is not significant to vary their behavior towards record keeping. However, this is contrary to Esaete (2005) who found record keeping significantly varies between business sectors at p = 0.05 level of significance with no significant differences at 0.01. She also did not find any significant difference with the type of business categories.

Table 4.2.18: Wald Test of Variables in the Equation

		B	S.E.	Wald	Df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	Av_Total_Knowledge_Skills	.720	.232	9.640	1	.002	2.055	1.304	3.239
	Av_TEase_Application	-.221	.148	2.209	1	.137	.802	.599	1.073
	Av_TPerformance	-.074	.206	.129	1	.720	.929	.620	1.391
	Av_TManagement_Competence	-.160	.222	.523	1	.470	.852	.552	1.315
	Av_TSources_Finance	.580	.153	14.350	1	.000	1.786	1.323	2.412
	Constant	-2.307	1.685	1.874	1	.171	.100		

Source: Extracts from SPSS output 2015

a. Variable(s) entered on step 1: Av_Total_Knowledge_Skills, Av_TEase_Application, Av_TPerformance, Av_TManagement_Competence, Av_TSources_Finance

The Exp (B) column provides the odds ratios (OR) for each of the independent variables. The odds ratio is the increase (or decrease) in odds of being in one outcome category when the value of the predictor increases by one unit. For instance, the odds of a person keeps

accounting records is 2.055 times higher for someone who considers knowledge and skills important in life than the one who does not, all other factors being equal. So also the odd of another person to answer in the affirmative to practicing Book-Keeping is 1.786 times higher for the one seeking bank financing.

For each of the odds ratios Exp (B) shown in the Variables in the Equation table there is a 95 per cent confidence interval (95.0% CI for EXP (B)) displayed, giving a lower value and an upper value. This means we can be 95 per cent confident that the lower and upper range encompasses the true value of the odds ratio.

4.3 Hypotheses Testing

Most of the existing studies in developed markets and elsewhere in Africa try to investigate/examine the impact of record keeping on Small and Medium scale Enterprise. Hussein (1983) noted that, a good accounting system is not only judged by how well records are kept but by how well it is able to meet the information needs of both internal and external decision-makers. In his view, Clute (1980) maintained that it is common for qualified accountants to do a good job of keeping records up to date but they fail to provide information needed by decision-makers.

This would become more critical in trying to see what motivates the SMEs to keep accounting records so as to enhance both internal performance and external information provided to other stakeholders. In this regard, therefore, the research statistically tested the five (5) hypotheses formulated in chapter one on individual basis with the analysis as follows:

4.3.1 Hypothesis 1:

There is no significant relationship between Book-Keeping practice by SMEs and knowledge and skills of the promoters.

In testing this hypothesis and subsequent other four, the statistical results contained on tables 4.14 and 4.15, 4.16 and 4.17 are considered. It has been earlier stated in chapter 4.0 that the multiple regression analysis (summary on Table 4.10) is conducted solely to reinforce or reconfirm the results from the chosen binary model regression in this research.

ATKS is among the three variables that turned out to be significant in predicting or determining the attitude towards Book-Keeping by the SMEs within the two models specified. By ranking in this significance under the multiple regression model, however, it ranks the second to the need for external financing. This significance is maintained under the logistic regression analysis where it has a p-value of 0.002, again second to the measure of need for financing.

The Omnibus Tests of Model Coefficients gives an overall indication of how well the model fits. Generally, the binary model is said to have a good fit based on both the Omnibus and the Hosmer and Lemeshow tests (Tables 4.2.14 and 4.2.15). As such the model is well fitted, but what remains is the statistical significance of individual predictors. The Wald test of statistical significance of 0.002 for the ATKS predictor variable is provided on Table 4.18.

Based on these statistical test results, therefore, the hypothesis that there is no influence of knowledge and skills on imbibing the culture of Book-Keeping among the SMEs is rejected. This is consistent with finding of Lynch and Habte-Giorgis (1998) who identified education as one of the bases for success of SME owners.

However, the result is contrary to Esaete (2005) who stated that the quality of record keeping did not show any significant difference with the educational levels and business experience and skills attained by business owners. Her position reinforces an earlier assertion by McMahon (1999) that SME owners are more concerned about what impedes their traditional

profit making ability rather than capacity building believing that accountability is, after all, to the owners.

4.3.2 Hypothesis 2:

There is no significant relationship between Book-Keeping practice among SMEs and ease of application of Book-Keeping procedures.

In both the multiple and the logistic regression results, ease of application turned out to be insignificant at 1% level; however, even though it is significant at 5% level under the multiple regression, this process is only supportive and is not the main technique of the research.

The Wald test of statistical significance has a p-value of 0.137 indicating that it is not significant. Nonetheless even though the variable has failed to be significant under the logistic analysis, there is no enough evidence to accept the hypothesis that there is no significant relationship between Book-Keeping practice among SMEs and the ease of application of Book-Keeping procedures.

4.3.3 Hypothesis 3:

There is no significant relationship between Book-Keeping practice among SMEs and their business performance.

This measure is statistically insignificant at both the multiple regression (p-value of 0.944) and the logistic regression levels with Wald test significance p-value of 0.720. This suggests that statistically it is not significant in the model being tested.

The result is consistent with Berryman (1983), Elkan (1998a), Olson and Bokor (1999) and Ojala (2002) who found that poor accounting records is as a result of managerial incompetence. Gaskill, Van Auken, and Manning (1993) confirmed that managerial skill

development is related to a firm's success. Flusche and Kilgore (2001) also found that 14.6 percent of SBEs fail due to managerial incompetence.

This notwithstanding, there is no enough evidence to accept the hypothesis that there is no significant relationship between Book-Keeping practice among SMEs and their business performance.

4.3.4 Hypothesis 4:

There is no significant relationship between Book-Keeping practice among SMEs and their management competence.

This measure returned a high p-value of 0.414 under the multiple regression analysis and 0.470 for the Wald test of the binary regression as such it is statistically insignificant at both the multiple regression and the logistic regression.

However, there is also no enough evidence to accept the null hypothesis that there is no significant relationship between Book-Keeping practice among SMEs and their management competence. This is contrary to Esaete (2005) who asserted that quality of record keeping isinfluenced by the level of managerial competence of SME owners. Her researcg findings agree with many empirical studies such as Berryman 1983, Flusche and Kilgore, 2001, Ojala, 2002 among others) who concluded that managerial incompetence greatly influences the poor quality of record keeping within the SMEs.

4.3.5 Hypothesis 5:

There is no significant relationship between Book-Keeping practice among SMEs and the financing mix.

This measure is statistically insignificant at both the multiple regression and the binary regression level with accompanying p-values of 0.000 and 0.000, respectively. This suggest

that the null hypothesis that states there is no significant relationship between Book-Keeping practice among SMEs and the financing mix is rejected

4.4 Findings

The findings of this research are as follows:

1. The description of the data shows that trading has majority of the respondents distantly followed by services, others and manufacturing. Amongst these, sole proprietor and partnerships provide about 80% of the businesses. This result shows the likely reason why these business enterprises may prefer mental record to keeping proper business records.
2. From the ordinary regression result, only the first three largest contributors (ATKS, ATEA and ATSF) are found to make significant contribution to the prediction of the book-keeping practice of the SMEs in Nigeria. For completeness, a binary logistic regression analysis is also conducted.
3. The categorical outcomes considered in the binary regression are adequate or inadequate accounting practice. The goodness of fit test shows that the model is adequate in predicting accounting practice among the SMEs in Nigeria. The model classified 80% better than the SPSS guess of 77.6%.
4. From the Wald test outcome, only ATKS and ATSF statistically contribute to the predictive ability of the model. This is consistent with the ordinary regression result. The odds ratios are also good given predictability of both businesses with values in knowledge& skills and sources of finance to be around double each.
5. The other three variables that are not significant are consistent with the expectations of the attitudes of SMEs record keeping practice in Nigeria. People that are enlightened and/or seeking to borrow money are the ones that keep what can be

termed as adequate Book-Keeping records. However, disregard to performance, management incompetence and perception of uneasy accounting procedure are the hallmark of poor attitude to record keeping among the SMEs.

6. The result overall, suggest that more areas can be investigated to better understand the behavior of the SMEs in terms of providing good business information

CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

The research is focused at exploring the determinants of book keeping practices of selected small and medium enterprises in Kaduna state with the sole aim of offering some solutions on how to improve on the poor attitude of record keeping by SMEs in Kaduna State. The entire work has been segmented into five (5) chapters with chapter one containing the general introduction, chapter two entails the literature review while chapter three comprises of methodology, chapter four consist of data presentation, analysis and interpretation of the collected data on the field and the last which is chapter five consist of summary, findings, conclusion and recommendation.

The background of the study articulated that SMEs in Nigeria provide the majority of labour force with over 60%. However, most of these businesses have encountered short lived problem due to management in- competence and their inability to keep proper books of account. The research objectives is to, therefore, analyze the trends of SMEs growth and development in Nigeria by identifying the factors (knowledge and skills, ease of application, business performance, management competence and source of finance) shaping their good attitude towards book keeping. Five research hypotheses are tested within the scope of the SMEs study; i.e. manufacturing, trading and services in Zaria, Kaduna state.

Chapter two reviewed literature related to SMEs and Book keeping: such as characteristic of SMEs, contribution of SMEs to economic development, definitions and concepts of record keeping and book keeping, types of books kept by SMEs, significance of book keeping to SMEs and book keeping within the SMEs sub- sector. Others are how owners/managers should apply the practice of book keeping in their businesses in order to achieve their goals

and also contribute to the Nigeria economy. The review explained some concepts and definitions of SMEs by different individuals, institutes, bodies etc.

Relevant accounting theories and relevant empirical studies to establish the literature gap and find the theoretical framework for the research were also reviewed. The theoretical literature of this research is based on the information theory and others are stakeholders' theory, stewardship theory and finally the agency theory. The empirical literatures are categorically explained according to the variables: SMEs and book keeping practice, knowledge and skills of the entrepreneurs, ease of application of accounting procedures, business performance, management competence and source of finance.

The methodology process commenced with description of the data, the research design, and the population as the collection of small-scale businesses within Zaria metropolis (comprising manufacturers, service providers and general traders). The sampling method used is Krejcie and Morgan formula, when computed given the sample size of 217. The source of data is primary data with structured questionnaire using six likert scale as the method of data collection. The data was analyzed using Statistical Packages for Social Science (SPSS).

Data presentation, analysis and interpretation commenced with preliminary analysis by explaining the necessary statistics such as frequencies and other descriptive i.e. Range of scores, standard deviations, mean, skewness and kurtosis. It also includes the result of tests of normality, histogram and boxplots to explain the variables and also the regression results. The regression results indicate that even though the set of the predictor variables fit the model, only knowledge and skills, and source of finance appear to be statistically significant in predicting the SME behavior toward Book-Keeping practice in Kaduna State.

5.2 Conclusion

Small and medium enterprises have remained important in the economic life of the developing nations like Nigeria. Their contribution to employment generation and variety of economic activities is sizable across different sectors of these economies.

In this regard, their efficiency is tantamount to general economic efficiency. And with no doubt it has been established that modern accounting system is pivotal to measurement of efficiency in businesses. Once a segment of the business world lack efficiency in this regard, it would be difficult to ascertain its true performance.

This study has established that indeed the SMEs are far from being optimum in accounting practice. Their likely response is to meet financial institutional requirements and on the other hand as a consequence of knowledge. Incompetence and poor management competence stand as barriers.

5.4 Recommendations

Based on the findings of this research, the following recommendations are made:

1. The Nigerian accounting bodies (The Institute of Chartered Accountant of Nigeria and Association of National Accountant of Nigeria) should find ways to ease access and deployment of practice of financial accounting amongst the SMEs. This could be achieved, for instance, by designing simple manual and electronic systems at a very affordable cost, consistent advocacy and free training on both the importance and usage of the accounting tools.
2. Given (1) above, there should be regulations that will insist on mandatory returns in the format only feasible on the platform of modern Book-Keeping.

3. Accounting firms should design accounting management and auditing that further support the said efforts and ease the follow through to perfection. For instance, it would make it easy for sole proprietors to have on weekly basis, visits from their 'Accountants' to check the financial records and guide them on gray areas and mistakes.
4. Finally, more researches are desirable in this area. As a starting point, each of the variables in this research could be expanded into tens of items that could make understanding its impact more clear to enhance the SMEs study.

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APPENDICES:

APPENDIX I: Table for Determining Sample Size from a Given Population

$$S = \chi^2 NP\,(1-P) \div d^2\,(N-1) + \chi^2 P\,(1-P).$$

N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	314
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	381
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Note: N= Population S= Sample
Source: Author's Computation

APPENDIX II: QUESTIONNAIRE

DEPARTMENT OF ACCOUNTING
FACULTY OF ADMINISTRATION
AHMADU BELLO UNIVERSITY, ZARIA. NIGERIA

SURVEY ON BOOK KEEPING PRACTISE BY SMALL AND MEDIUM ENTERPRISES (SMEs) IN ZARIA, KADUNA STATE

Dear Sir/Madam,

TO WHOM IT MAY CONCERN

I am a postgraduate student of Ahmadu Bello University Zaria Nigeria, and currently conducting a survey on "Determinants of Book Keeping Practices of Selected Small and Medium Enterprises in Kaduna State". It is part of the requirements for the award of M.Sc. Accounting and Finance degree for student to conduct academic research in his/her field of study.

Kindly, help by completing this questionnaire as accurately as possible. Please note that your responses will be treated with utmost confidentiality and would be used purely for academic purposes. We highly appreciate your co-operations.

Thanking you in anticipation of your response.

Yours sincerely,

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(Please tick √ where applicable):

A1 **The gender of the respondent*:***

❑ Male ❑ Female

A2 **Business sector engaged is:**

❑ Manufacturing ❑ Services ❑ Trading

❑ Agro allied

A3 **The form of organization is:**

❑ Sole Proprietor ❑ Partnership ❑ Cooperative

❑ Limited liability ❑

A4 **The amount of capital employed in the organization is:**

❑ Less than N1M ❑ N1M - N10M ❑ N11M -100M

❑ N101M - N200M ❑ N201M - N500M ❑ More than N500M

A5 **The number of employees in the organization is:**

❑ Less than 20 ❑ 21-50 ❑ 51-100

❑ 101-200 ❑ 201-500 ❑ More than 500

B1 **The highest level of formal education of the promoter of the business:**

❑ Primary/Equivalent ❑ Secondary ❑ OND

❑ HND/BA/BSc ❑ PG Diploma ❑ MA/MSc/PhD

B2 **Working experience of the main business promoter is**:

❑ Less than 1 year ❑ 1-2 years ❑ 3-5 years

❑ 6-8 years ❑ 9-10 years ❑ Above 10 years

Please kindly tick [√] below on the number you consider appropriate:

Significantly Low	Low	Slightly Low	Slightly High	High	Significantly High
1	2	3	4	5	6

B3. How would you rate the current level of your business skills?	1	2	3	4	5	6
B4. In your opinion, what is your level of awareness of the importance of accounting?	1	2	3	4	5	6
C1. How would you rate the cost of using bookkeeping methods in your type of business?	1	2	3	4	5	6
C2. How would you rate the time spent in using standard accounting procedure in your organization?	1	2	3	4	5	6
C3. What do you consider the cost of engaging external accountants to prepare annual financial reports?	1	2	3	4	5	6

Please kindly tick [√] below on the number you consider appropriate:

Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree
1	2	3	4	5	6

Statements	Level of Agreement					
D1. Businesses could perform better irrespective of whether the businesses are directly managed by the owners or not.	1	2	3	4	5	6
D2. Monitoring business sales and comparing it to the sales of competitors help to develop ways to retain customers.	1	2	3	4	5	6
D3. The goods/services provided by the business are well tailored towards the customer needs.	1	2	3	4	5	6
E1. Given the market condition, the level of your management	1	2	3	4	5	6

Significantly Low	Low	Slightly Low	Slightly High	High	Significantly High
1	2	3	4	5	6

know-how is sufficiently high.						
E2. The information you get from your suppliers and customers guide your business decision.	1	2	3	4	5	6
E3. The efforts towards growth of your business are guided by the existing relationship with other businesses.	1	2	3	4	5	6
F1. All goods and services received on credit are recorded.	1	2	3	4	5	6
F2. The business easily sources financing from its bankers.	1	2	3	4	5	6
F3. Our business does not rely on local contributions (adashi, esusu).	1	2	3	4	5	6

How frequent are these documents used in your organization? (Please tick √ where applicable):

Very rarely	Rarely	Somewhat rarely	Somewhat Often	Often	Very often
1	2	3	4	5	6

G1. Cash sale receipts	1	2	3	4	5	6
G2. Sales Invoice	1	2	3	4	5	6
G3. Payment vouchers	1	2	3	4	5	6
G4. Stock cards	1	2	3	4	5	6
G5. Cash Book	1	2	3	4	5	6
G6. Sales Day Book	1	2	3	4	5	6
G7. Purchase Day Book	1	2	3	4	5	6
G8. Creditors Book	1	2	3	4	5	6
G9. Debtors Book	1	2	3	4	5	6

Very rarely	Rarely	Somewhat rarely	Somewhat Often	Often	Very often
1	2	3	4	5	6

G10. Payroll/Wages Records	1	2	3	4	5	6
G11. Bank reconciliation statements	1	2	3	4	5	6
G12. Cheque	1	2	3	4	5	6

Kindly provide your telephone number for follow up questions_____

APPENDIX III: Descriptive Statistics

Frequency Tables

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	196	78.4	78.4	78.4
Female	54	21.6	21.6	100.0
Total	250	100.0	100.0	

	Frequency	Percent	Valid Percent	Cumulative Percent
Manufacturing	17	6.8	6.8	6.8
Services	56	22.4	22.4	29.2
Trading	144	57.6	57.6	86.8
Agro allied	33	13.2	13.2	100.0
Total	250	100.0	100.0	

	Frequency	Percent	Valid Percent	Cumulative Percent
Sole Proprietor	148	59.2	59.2	59.2
Partnership	52	20.8	20.8	83.0
Cooperative	9	3.6	3.6	95.6
Limited Liability	41	16.4	16.4	100.0
Total	250	100.0	100.0	

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than N1M	111	44.4	44.4	44.4
N1M - N10M	104	41.6	41.6	86.0
N11M - 100M	15	6.0	6.0	92.0
N101 - N200M	4	1.6	1.6	93.6
N201M - N500M	2	.8	.8	94.4
More than N500M	14	5.6	5.6	100.0
Total	250	100.0	100.0	

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 20	211	84.4	84.4	84.4
21 – 50	15	6.0	6.0	90.4
51 - 100	2	.8	.8	91.2
101 - 200	4	1.6	1.6	92.8
201 - 500	2	.8	.8	93.6
More than 500	16	6.4	6.4	100.0
Total	250	100.0	100.0	

APPENDIX IV: Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
Business sector engaged		Statistic	df	Sig.	Statistic	df	Sig.
Knowl & Skill. The highest level of formal education of the promoter	Manufacturing	.196	17	.081	.898	17	.062
	Services	.211	56	.000	.894	56	.000
	Trading	.222	144	.000	.905	144	.000
	Others	.180	33	.008	.915	33	.013
Knowl & Skill. Working experience of the main business promoter	Manufacturing	.283	17	.001	.816	17	.003
	Services	.283	56	.000	.807	56	.000
	Trading	.280	144	.000	.814	144	.000
	Others	.288	33	.000	.785	33	.000
Knowl & Skill. Current level of your business skills	Manufacturing	.298	17	.000	.802	17	.002
	Services	.227	56	.000	.898	56	.000
	Trading	.200	144	.000	.861	144	.000
	Others	.258	33	.000	.761	33	.000
Knowl & Skill. Level of awareness of the importance of accounting	Manufacturing	.340	17	.000	.710	17	.000
	Services	.222	56	.000	.866	56	.000
	Trading	.229	144	.000	.858	144	.000
	Others	.342	33	.000	.788	33	.000
Ease of application. Cost of using Book-Keeping methods	Manufacturing	.140	17	.200*	.921	17	.154
	Services	.199	56	.000	.873	56	.000
	Trading	.208	144	.000	.893	144	.000
	Others	.183	33	.006	.912	33	.011
Ease of application. Time spent in using standard accounting procedure	Manufacturing	.286	17	.001	.861	17	.016
	Services	.188	56	.000	.914	56	.001
	Trading	.160	144	.000	.883	144	.000
	Others	.218	33	.000	.895	33	.004
Ease of application. Cost of engaging external accountants	Manufacturing	.293	17	.000	.851	17	.011
	Services	.169	56	.000	.903	56	.000
	Trading	.211	144	.000	.834	144	.000
	Others	.231	33	.000	.881	33	.002
Performance. Performance is irrespective of owner management	Manufacturing	.367	17	.000	.734	17	.000
	Services	.216	56	.000	.874	56	.000
	Trading	.200	144	.000	.857	144	.000
	Others	.280	33	.000	.717	33	.000
Performance. Monitoring competition increases customer loyalty	Manufacturing	.205	17	.056	.875	17	.027
	Services	.294	56	.000	.787	56	.000
	Trading	.320	144	.000	.766	144	.000
	Others	.307	33	.000	.794	33	.000
Performance. goods/services provided tailored to the customer needs	Manufacturing	.275	17	.001	.802	17	.002
	Services	.239	56	.000	.816	56	.000
	Trading	.288	144	.000	.716	144	.000
	Others	.288	33	.000	.788	33	.000
Management competence.	Manufacturing	.320	17	.000	.813	17	.003
	Services	.213	56	.000	.894	56	.000

management know-how is sufficiently high	Trading	.227	144	.000	.869	144	.000
	Others	.254	33	.000	.839	33	.000
Management competence. Market information guides business decision	Manufacturing	.313	17	.000	.715	17	.000
	Services	.262	56	.000	.796	56	.000
	Trading	.316	144	.000	.600	144	.000
	Others	.249	33	.000	.775	33	.000
Management competence. growth is aided by the relationship with other traders	Manufacturing	.264	17	.003	.845	17	.009
	Services	.264	56	.000	.817	56	.000
	Trading	.323	144	.000	.733	144	.000
	Others	.275	33	.000	.750	33	.000
Source of finance. All goods and services received on credit are recorded	Manufacturing	.286	17	.001	.779	17	.001
	Services	.278	56	.000	.723	56	.000
	Trading	.287	144	.000	.713	144	.000
	Others	.282	33	.000	.741	33	.000
Source of finance. The business easily sources financing from its bankers	Manufacturing	.233	17	.015	.816	17	.003
	Services	.240	56	.000	.838	56	.000
	Trading	.253	144	.000	.803	144	.000
	Others	.323	33	.000	.818	33	.000
Source of finance. Our business does not rely on local contributions (adashi, esusu)	Manufacturing	.250	17	.006	.778	17	.001
	Services	.173	56	.000	.870	56	.000
	Trading	.232	144	.000	.799	144	.000
	Others	.304	33	.000	.858	33	.001
Accounting practice. Cash sale receipts	Manufacturing	.229	17	.018	.798	17	.002
	Services	.321	56	.000	.742	56	.000
	Trading	.241	144	.000	.793	144	.000
	Others	.316	33	.000	.744	33	.000
Accounting practice. Sales Invoice	Manufacturing	.268	17	.002	.781	17	.001
	Services	.230	56	.000	.833	56	.000
	Trading	.238	144	.000	.800	144	.000
	Others	.256	33	.000	.791	33	.000
Accounting practice. Payment vouchers	Manufacturing	.243	17	.009	.740	17	.000
	Services	.228	56	.000	.797	56	.000
	Trading	.249	144	.000	.771	144	.000
	Others	.151	33	.054	.897	33	.005
Accounting practice. Stock cards	Manufacturing	.256	17	.004	.774	17	.001
	Services	.189	56	.000	.879	56	.000
	Trading	.218	144	.000	.813	144	.000
	Others	.213	33	.001	.862	33	.001
Accounting practice. Sales Day Book	Manufacturing	.255	17	.004	.762	17	.001
	Services	.259	56	.000	.782	56	.000
	Trading	.275	144	.000	.776	144	.000
	Others	.350	33	.000	.748	33	.000
Accounting practice. Sales Day Book	Manufacturing	.324	17	.000	.704	17	.000
	Services	.331	56	.000	.747	56	.000
	Trading	.267	144	.000	.763	144	.000
	Others	.314	33	.000	.746	33	.000

Accounting practice. Purchase Day Book	Manufacturing	.276	17	.001	.729	17	.000
	Services	.268	56	.000	.790	56	.000
	Trading	.283	144	.000	.781	144	.000
	Others	.255	33	.000	.746	33	.000
Accounting practice. Creditors Book	Manufacturing	.247	17	.007	.801	17	.002
	Services	.260	56	.000	.790	56	.000
	Trading	.299	144	.000	.730	144	.000
	Others	.278	33	.000	.758	33	.000
Accounting practice. Debtors Book	Manufacturing	.214	17	.038	.790	17	.001
	Services	.263	56	.000	.807	56	.000
	Trading	.282	144	.000	.752	144	.000
	Others	.337	33	.000	.751	33	.000
Accounting practice. Payroll/Wages Records	Manufacturing	.297	17	.000	.776	17	.001
	Services	.271	56	.000	.743	56	.000
	Trading	.308	144	.000	.726	144	.000
	Others	.389	33	.000	.611	33	.000
Accounting practice. Bank reconciliation statements	Manufacturing	.224	17	.024	.859	17	.015
	Services	.210	56	.000	.808	56	.000
	Trading	.291	144	.000	.785	144	.000
	Others	.254	33	.000	.871	33	.001
Accounting practice. Cheque	Manufacturing	.240	17	.010	.814	17	.003
	Services	.167	56	.000	.846	56	.000
	Trading	.264	144	.000	.787	144	.000
	Others	.243	33	.000	.866	33	.001

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction