

# Impact of Financial Literacy on The Growth of Small and Medium Enterprises in Maiduguri Metropolitan Council, Borno State, Nigeria

IBRAHIM GEIDAM BABAGANA<sup>1</sup>, BABA MALAM BUKAR<sup>2</sup>, BUKAR MODU<sup>3</sup>

<sup>1</sup>*Department of Accounting, Kashim Ibrahim University, Maiduguri*

<sup>2</sup>*Bursary Department, Kashim Ibrahim University, Maiduguri*

<sup>3</sup>*Department of Accounting, Kashim Ibrahim University, Maiduguri*

**Abstract -** *The study will assess the impact of financial literacy on the growth of small and medium enterprises in Maiduguri Metropolitan Council, Borno State, Nigeria. Four objectives and four research questions will be formulated for the study. The study will use primary data. A sample size of 150 respondents will be selected for the study using simple random sampling techniques. Structured questionnaire will be used to collect primary data. The data collected will be sorted, edited, coded, cleaned and processed using Statistical Package for the Social Sciences. Descriptive statistics will be used to analyse the data through computing of mean, standard deviation and percentages. In addition, regression analysis will also be used to establish the relationship between the independent variables and the dependent variable. The study would come up with strategies on how to manage debt since it is positively and significantly associated with profits of SMEs. Among the strategies would be to avoid multiple borrowings and accumulation of a lot of debt in the business since this may affect debt repayment.*

**Keywords:** *Financial Literacy, Small and Medium, Enterprises, Growth*

## I. INTRODUCTION

Small and Medium Enterprises (SMEs) are considered as the pillar of economic growth of many developed and developing countries across the globe. This sector accounts for about 55 per cent of Gross Domestic Product (GDP) and 65 per cent of job opportunities in high income economies. In the middle income nations, the SMEs contribute around 70 per cent of GDP and 95 per cent of total employment, whereas in the low income economies, these account for 60 per cent of GDP and around 70 per cent of total employment (Kongolo, 2010). Thus the SMEs act as a catalyst in stimulating economic growth and providing jobs for vulnerable groups such as women, young entrepreneurs, and poor communities.

In the Nigerian context, SMEs contribute for 35 per cent of the gross value of output, 80 per cent of the industrial jobs and 40 per cent of the total exports (Adomoko, Adomoko, Danso & Damoah, 2016). In spite of having a growth of 10 per cent over the last 5 years (Iyer, 2018) and expected to contribute 50 per cent of the Nigeria's GDP (Dewan, 2019), this sector encounters numerous hindrances like insufficient and timely banking finance, inadequate capital and lack of financial knowledge to use various financial products/services (Adomoko, Danso & Damoah, 2016). Since SMEs contribute remarkably to the economic development of many countries, the performance and growth of these enterprises become a great concern for several stakeholders such as government, policy makers, and financial institutions, among others.

Small enterprises are confronted with various obstacles such as rigid regulations, complicated policies, difficulty in accessing funds, unavailability of fund to acquire technology and inadequate guidance/support. Moreover, these enterprises struggle to acquire the required support from the government departments, banks, financial institutions and corporates, which further restrains the contribution of SMEs by slowing down their performance and growth (Atkinson, 2017). One of the noticeable studies undertaken by Lownes-Jackson, Olorunniwo, Flott & Ellzy, (2003) has stressed upon eleven financial problems encountered by the entrepreneurs: poor money management; huge losses owing to embezzlement and failure to meet the financial requirements.

The entrepreneurs of the SMEs do not have sufficient knowledge about various financial schemes and plans run by the government, can give them a better financial access (Chawla, 2018). The literature also indicates that lack of financial management skill is

prevalent in most of the developing nations that have a major impact on the performance, survival and growth of the SMEs (Adomoko *et al.*, 2016). Further, literature shows that inadequate financial innovation is the major reasons which prevent the SMEs to acquire the financial resources from the financial institutions and investors that lead to the failure of enterprise (Karadag, 2015).

Bookkeeping involves the recording, on a regular basis, of a company's financial transactions (Arnaboldi & Rossignoli, 2015). With proper bookkeeping, companies are able to track all information on its books to make key operating, investing, and financing decisions (Sakarya, 2016). Bookkeepers are individuals who manage all financial data for companies.

Innovation is clearly an important phenomenon for any sector of a modern economy. Although standard microeconomic theory (rightly) focuses much of its attention on the issues of static resource allocation and economic efficiency, there is nevertheless a general appreciation that performance over time is driven by a variety of dynamic factors including innovation. (Frame & White, 2016) Innovation continues to be a driver of economic growth at the societal level and a performance differentiator at the industry and firm level (Gianiodis, Ettlie & Urbina, 2018). In the banking concept of education, knowledge is a gift bestowed by those who consider the SMEselves knowledgeable upon those whom they consider to know nothing. The teacher presents hiSMEslef to his students as their necessary opposite; by considering their ignorance absolute, he justifies his own existence.

## II. STATEMENT OF THE PROBLEM

Despite the significant contribution of SMEs to the economy, it's been subjected to a number of challenges one of them being dearth of financial information and business records. Wanjohi (2011) refer to lack of sufficient financial business skills as a major challenge in the enlargement and growth of SMEs. Major contributor to these challenges is poor financial education foundation and unkempt business records. The CMA (2010) recognized that SMEs in Nigeria do not enjoy economies of scale which inhibits their elasticity. Challenges related to access of financial information are inhibited by both internal and external factors. Consequently, this constrains

financial health of SMEs in terms of liquidity, profitability, gearing among others give rise to opportunity cost and hinders growth (Badagawa, 2011).

There are many problems associated with small scale enterprises in Nigeria. One of these problems is lack of financial innovation which is evident in their inability to keep complete accounting records. This invariably has resulted into a situation where small business operators cannot capture adequately their business profits. This is because in the process of calculating profit, financial data are assembled in a way that cannot help make informed financial judgment and decision taking. These financial data cannot be assembled without adequate financial innovation. This problem has ultimately affected the profitability of small scale businesses. In addition to the above is are lack of awareness of financial risk and opportunities, reckless expenditure, use of business funds for personal transactions, limited access to bank credit facilities and insurance policies. These and more can be addressed by being financially literate.

## Objectives of the Study

The objectives of the study are to:

- i. examine the impact of debt management literacy on retain profits of SMEs in Maiduguri Metropolis, Borno State;
- ii. assess the impact of budgeting skills on retain profits of SMEs in Maiduguri Metropolis, Borno State;
- iii. assess the impact of book keeping skills on retain profits of SMEs in Maiduguri Metropolis, Borno State; and
- iv. assess the impact of knowledge of banking services on retain profits of SMEs in Maiduguri Metropolis, Borno State.

## III. LITERATURE REVIEW

### Conceptual Issues

#### Financial Literacy

For many centuries, financial literacy does not have an undisputed definition in the literature. Several researchers have defined financial literacy in many studies in the area of personal finance and most of the time failed to capture the entrepreneurial manager and the business persons. Abdullah & Azam, 2015 and Eniola (2016) outlined financing provision and

shows that financial service is the section that will include the delivery of financial products to individuals. Financial literacy is listed as one of the critical managerial competencies in entrepreneurial business performance and growth (Eniola, 2016). Scholars mostly agreed that entrepreneurs, irrespective of their age, are systematically involved in decision-making activities regarding procurement of resources, distribution and utilization, such activities virtually have financial consequences and therefore, in order to be effective, entrepreneurs must be financially literate (ACCA, 2014 and Oseifuah, 2010).

Atkinson and Messy (2015) define financial literacy as the ability of an individual to compacts facts in order to make sound financial decisions by use of financial resources available. Fiscal decisions have a long term consequences as far as the finance costs are concerned therefore, making the right decision is very important in the life of individuals and the businesses as well. Management of financial of a firm is not an easy task; SMEs need to make a choice out of a large menu of financial needs of which many have complicated features. SME Act (2011) was passed to push the credit accessibility and build the capacity of small and medium enterprises in the grassroot levels in the direction of eradicating poverty and to achieve vision 2030 (Republic of Kenya, 2012). By being financially literate, individuals are able to provide facts and sensitize financial concepts. Skills, motivation and confidence to apply such knowledge and sensitivity in the business, makes a manager to be efficient and effective across a range of financial contexts and improves the financial growth of SMEs (Hogarth, 2012).

Mutegi *et al.*, (2015) affirms that financial literacy enables the firm to meet their shortterm as well as long term obligations through informed decision making processes such as settling of bills timely, proper book keeping, improved budgeting skills, which positions the business strategically in the market. This welcomes a vibrant economy with integrated and inclusive systems thus boosting business as well as creating employment. This will make the firm to have strong internal controls of its financial future and to maximize on economies of scale. (Sunday & Ssekajugo, 2013).

Financial literacy refers to the financial knowledge and abilities which enable entrepreneurs to implement effective financial management strategies for their enterprises. Literacy is defined as the ability to read and write as well as knowledge and competence in a specified area (Atkinson, 2017). Financial literacy is defined as the degree to which one understands essential financial concepts and possesses the ability and confidence to manage personal finances through appropriate, short-term decision-making and sound, long range financial planning, while mindful of life events and changing economic conditions (Remund, 2010). Huston, (2010) acknowledged that a generally accepted definition of financial literacy among researchers did not exist and this has led to researchers developing their meaning of the construct. For that reason, Zuhair *et al.*, (2015) argued that a lack of a commonly used definition was indicative of the fact that financial literacy was multi-dimensional and had a different meaning to researchers and academicians. However, according to Klapper *et al.*, (2012) financial literacy is a combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial wellbeing, this was basically in line with what Lusardi, (2013) said, that financial literacy is a blend of awareness, knowledge, skill, attitude, and behaviour essential to make full financial decisions and ultimately accomplish individual financial well-being.

#### Components of Financial Literacy

Though recently, Schuh & Schürkemann, (2014) convey the most widely accepted definition for financial literacy all over the world consisting of three main pillars as financial knowledge, financial attitudes and financial behaviours (Schuh, 2014). It is acknowledge that an entrepreneur with best financial behaviour may results in improve business performance and financial wellbeing. Jappelli and Padula, (2013) find similar results for postulates that financial behaviour provide information about the extent to which entrepreneur's takes responsibility for business finances and budgeting. Indeed, Graf, (2012) stated that financial behaviour is one of the critical managerial competencies for entrepreneurial business performance and growth. This was supported by Musie, (2015) whose research study shows that financial behaviour aids the decision-making processes such as prompt bills payment and appropriate saving, debt management, book keeping

and business planning which help entrepreneurs to improve their business performance, while at the same time improving economic development, sound financial systems and poverty reduction.

In a study of Bucher-Koenen et al., (2014) found that entrepreneurs with low financial innovation are more likely to base their financial advice from friends and are less likely to participate in the stock market. Conversely, good financial behaviour enable entrepreneur to have understanding on overall impacts of financial decisions on business performance and also to make the right decisions related to the cash management, insurance, saving, business planning and book keeping (Oseifuah, 2010). According to Eresia-Eke (2013) most entrepreneurs in developing countries fail because they lack good financial behaviour and they are lacking business insight, which undermines entrepreneurial performance. Therefore, proper practice of good financial behaviour helps entrepreneurial business owners in both developed and developing economies to enhance their business performance through proper decision making like business planning, saving and record keeping (Matewos, Navkiranjit and Jasmindeep, 2016). A good financial behaviour might lead to business enterprise competitiveness in a globalized economy while poor financial behaviour lead to business closedown. Based on previous studies, financial innovation is significantly linked to financial behaviours such as book keeping, savings, cash management, debt management and investment decisions that maximizes benefits for entrepreneurial business owners (ACCA, 2014).

#### Financial Growth

Growth is a habitual change over a period of time taken as an indicator of a firm's economic fitness. There are various ways to measure the growth of a firm which rests a slightly dissimilar aspect of presentation such as cash inflows and expected returns. Productivity of the firms is also measured in terms of transactions and the market jurisdiction (Fatoki, 2014). These different measures rate the Growth of SMEs by use of profitability (return on investment, return on equity), liquidity (quick ratio, current ratio), and solvency (gearing). Such growth measures are indicators of commercial success (growth, market share) while others are indicators of financial success (profitability) (Miller, 2013).

SMEs growth is measured by both internal and external factors as indicated by some studies. They cited sales proceeds, quality of administration and capability to attend to daily commitments of the firm (Pisa, 2013). Nevertheless, there are only few studies based on growth measurement of the SMEs in developing countries (Muthoni, 2015). SMEs are the catalysts of the economic growth which are the engines to most economies. Researcher suggests that, businesses and SMEs account for 95% of firms in most countries. They satisfy industrial growth, support jobs creation, embraces innovation which contributes to GDP.

#### Financial Knowledge

Knowledge is about understanding exactly how business performance and business situation are measured by the psychological model to ease, strengthen, or enhance decision making (Lusardi and Mitchell, 2014). In the past few years, scholars have increased their efforts in conducting research related to financial innovation and have also documented the relationship between financial innovation and business performance (Lusardi, 2013, Aminu, 2016, Dinç Aydemir, 2017, Wise, 2013, Rousseau and Venter, 2016, Kamakia, 2017 and Eniola, 2016). Annamaria Lusardi and Olivia S. Mitchell, (2014) proposes that, financial innovation is required to make a measurement of financial capability, i.e., to remain knowledgeable about financial issues. Those financially literate persons were more likely to participate in financial market since they have knowledge on financial matters.

Lusardi, (2013) revealed that, there is a link between financial innovation and low-cost borrowers, most high cost borrowers show very low levels of financial literacy, lack knowledge of basic financial concepts, which affect their business performance level. Similarly, Abubakar (2015) establishes that, the field of individual actions affects the financial innovation level and individuals that invest in financial awareness have a higher level of financial literacy. Kamal Gupta and Jatinder Kaur, (2014) indicated that entrepreneurs with best financial knowledge keep comprehensive business financial records and have a more competitive advantage in regards to accessing external funding more than their equivalents who do not keep. Likewise, Lusardi, (2014) highlighted that entrepreneurial business owner that has financial knowledge and is able to put this knowledge into practice, may show an improved financial wellbeing.

**Debt Management and Financial Growth of SMEs**  
Lusardi and Mitchell (2011) studied the impact of literacy levels on entrepreneurs performance revealed that persons of limited financial innovation are more prone to exploitations when it comes to debt management, savings and credit, and are not able to administer their resources competitively eg investing in the money market, stock market and to perform better on their portfolio selection hence they end up planning poorly while individuals with high financial innovation are able to choose a feasible portfolio with lower finance cost. Furthermore, the study found out that the individuals with high financial innovation have the capacity to generate more wealth and be in a position to administer resources more optimally with less finance cost. FSD (2009) and Master card (2011) sought to resolve the impact of financial innovation on any personal economic running practice among employees of commercial banks in Nigeria using a sample of 100 respondents, the study found that individuals who are highly skilled have an affirmative relationship with higher levels of domestic wealth and good financial decisions while poor numeracy were coupled with redundant expenses. Individuals with stronger numeracy and financial innovation are also more likely to partake financial markets and to invest in stocks.

Pisa (2013) study sought after established contributors of financial innovation levels and found that the mounting attention in finance related education is a very significant life skill because it is linked to various factors both internal and external. Such factors may include the government policies and regulations which diversify risks and further resulted to employer and individuals sharing responsibilities like the introduction of the contributory pension whereby the individuals also chip in to prepare for their future retirement and be part and parcel of their future financial security thus replacing the earlier policy where the employer contributed for the individual pension alone. Other schemes have come up like social protection in Nigeria which includes the proposed reforms to health care and financing which the individuals and the business had to uphold at each level, this calls for a diversified market and its supplication thus an increased financial products and a number of financial decisions to be made. This required technical understanding of finance so as to be able to make informed decisions and come up with viable investments. Financial asses SMES and

accountability had been transferred to the individuals who are required to be educated on finance matters so as to mitigate financial loss and cover the SMEs from fraudulent systems.

**Budgeting Skills and Financial Growth of SMEs**  
Joshi, Jappelli and Padula, (2013) scrutinized budgeting financial innovation by an analysis of 54 both medium and large businesses in Bahrain aiming on budget processes which are inclusive of the participation, planning, controlling and its overall performance the researchers identified that the expansion of a firm is linked to its growth. For the two to be in harmony they require a more detailed budget development as well as implementation so as to benefit exemplarily performance. Extent of the firm and their commitments influence the nature of the budget to be adopted. Chidi and Shadare (2011) studied the challenges tackling human resource improvement in SMEs in Nigeria and found that budgeting was the greatest challenge among SMEs. Businesses are not being accountable, thus lack of assistance and/or participation and deficiency in budgeting plans caused by the incapability to meet timelines set thus individuals do not understand the significance of prior planning and provision of providing numbers which are not viable. As a result the studies established that budgeting skills acquired by the managers reflect on the budget procedures followed and the same will correspond with the budget implementation.

Joshi *et al.*, (2013) studied budgeting process and performance of companies found out that large companies have a susceptibility to perform an indepth budget procedure and be in a position to present it excellently. Researcher found out that the budget process is highly influenced by the magnitude and the company complexity as far as the business operations are concerned which also affect the performance of the company. Size of the company is a variable mostly used in a quantitative study. Wijewardena and DeZoysa (2011) studied contributions to SMEs towards the budget process and identified that the proper budget is compromised by the two significant aspects of the expected budget process which are the budget planning and the budget control. They realized that there are three set up of firms which are as follows, firms who do not use any type of budget, firms with ample planning process in some areas of operations which is also referred to as the simple budgeting and the firms with a detailed

budgeting which includes all areas of operations. Administration mainly focuses on budget controls for checks and balances of the business.

#### Book Keeping Literacy and Financial Growth of SMEs

Frankwood (2010) studied the benefits of book keeping on SMEs performance and found out that computation of the income statement is highly dependent on the proper book keeping which also enable the business to be able to collect their debts timely and also pay on time for their obligations. The business is able to identify the opportunities available and avoid opportunity cost as well such as stock outs etc and be able to plan progressively. Ezejiofor, Ezenyirimba and Olise (2014) investigated the impact of accounting records on SMEs and found that, a good bookkeeping scheme is reflected on its reports quality to both internal and external users and a well organized maintenance of records. Quality accounting information will be of help on financial administration and create room for a better funding. Wise (2013) found that increase in financial innovation leads to production of financial reports often and the individuals who have tendency of preparation of financial reports are able to repay their debts timely and this lowers the default levels.

Ezejiofor, Ejiofor and Egbu (2014) sought to establish the relevance of accounting records in small business performance in Nigeria found that SMEs that kept proper books of account were able to measure accurately the performance of their businesses. They also assert that business decisions with regard to expansion, maintaining a competitive edge, prevention of business failure and filling tax returns requires documentation with reliable and relevant information, easy to understand and readily available. Researcher also caution that the bookkeeping systems should generate the information in a simple and accurate order.

#### Knowledge of Banking Services and Financial Growth of SMEs

Wachira and Kihiu (2012) studied the family units in Nigeria using the 2009 National Financial Access (FinAccess) survey data using the multinomial logit model and how significant the financial innovation was in relation to finance accessibility. They identified that there are other factors which affect the access to financial access that are individual based to mention just a few, marital status, age, the level of

income, Financial innovation was also rated low as a factor in household decision making which implies that majority of individuals did not value and seek out financial information in making financial decisions although financial innovation was significant in explaining exclusion from financial services market. It was concluded that financial innovation created an awareness and enabled more individuals about 8.5% to be included in the financial services.

Fatoki (2014) studied causes of SMEs failure and found out that lack of finance education had adverse effects on the SMEs and especially the new start-ups. New start-ups require a sound financial background which will create a healthy base of a successful business hence the growth of the enterprise. Duchesneau and Gartner (2010) studied factors affecting new small firms progress and established that the individuals who have emerged successful in business mostly were brought up in a business set up or were raised by successful entrepreneur parents which is a requisite for growth due to vast experience and exposure. This gives them confidence and vigour that they will make it in the ventures they start unlike the ones raised by the unsuccessful entrepreneurs who are unsuccessful. The research also identified that lead successful firms have a good communication system; individuals have the sense of belonging and have the zeal to work with less supervision. In addition these firms have clear objectives and strive to achieve their targets. Businesses which includes more than one shareholders on their formation have better chances of existence and making it in the market (Westhead *et al.*, 2015).

#### Theoretical Framework

The study reviews three theories that underpins studies of this nature, these are:

#### The Agency Theory

There are two types of conflicts as identified by Jensen and Meckling (1976). The first conflict links the shareholders and managers and the second is between the equity-holders and debt holders. Disagreements which arise between shareholders and managers mostly are due to failure of optimizing the shareholders wealth as a result of managers serving their own interest by not capturing the entire gain towards value maximizing activities. The second category of conflict, is as a result of give equity holders investing sub optimally as per the expectation

of the debt holders (Mandell, 2008). Most benefits are taken into custody by the equity holders in the case where the venture is profitable than the face value of the debt and the debt holder bears all the burden when the venture incur losses. This happens due to asymmetric sharing of the profits. (Skousen, 2009). As a result, at times equity holders through investing in high volatile projects, they make huge profits which does not replicate to the debt holders because such investment results in devaluing the debt. Incase of equity loss due to poor investment in most cases it is settled by the gains equity holders transfer from appreciated equity value (Bullvag, 1996).

Following such interpretation Ouchi (2002) proposes two essential supervision tactics. The tactic can be either performance or results oriented. The performance-based tactic submits to an accord between the principal and the agent which distress a specific character which will be satisfied somehow, whereas the results oriented one submits to the principal's measurement of certain outcomes and the prize will be initiated on this measurement. According to Ouchi (2002), the option connecting the strategies is pegged on the two extents; acquaintance of transformation procedure and accessibility of productivity appraises. To use a performance-based strategy, explicitly to constantly observe the agent's behavior, the principal requires a causal acquaintance of what is expected to arrive at an ideal outcome (Greenspan, 2002). When the principal used the performance-based strategy, for instance, to evaluate the financial illiterate agent's accomplished results, the revolution course of action need not be branded at all, but a consistent and proper determination of the preferred productions have to be accessible. In the current study, agency theory would apply as it shows the conflicts which may arise between the managers and the owners, equity-holders and debt holders of SMEs which can become an impediment towards growth of SMEs.

#### IV. METHODOLOGY

##### The Study Area

Maiduguri also known as "Yerwa" locally is the largest and the oldest city of Borno State in the North-Eastern Nigeria. The city sits along the seasonal Ngadda River which disappears into the firkin swamps in the areas around Lake Chad. Maiduguri was founded in 1907 as a military outpost by the

British and has since grown rapidly with a population exceeding one million. The region was home to the Kanem-Borno Empire for centuries. Maiduguri actually consists of two cities; Yerwa to the west and Maiduguri to the east (Musa, 2014).

According to the 2006 census, Maiduguri is estimated to have a population of 1,197,497 (NPC, 2006) constituting Christians and Muslims. Its tribal constituents include Kanuri, Hausa, Shuwa, Bura, Chibok, Marghi and Fulani ethnic group among several other ethnic groups from other parts of Nigeria and neighbouring countries like Cameroon, Niger and Chad republics.

##### Source of Data

The study used primary data. The primary data was obtained through interviews and structured questionnaire.

##### Population of the Study

The target population is the subset of a large population that has similar characteristics of which the general conclusion of the study can be drawn (Castillo, 2009). The target population of the study comprised of 841 SMEs licensed by the Maiduguri Metropolitan Council (sources from MMC Yearly bulletin, 2019).

##### Sample Size and Sampling Techniques

A sample size of 150 respondents were selected for the study using simple random sampling techniques. In relation to sampling techniques, the simple random sampling is used to pick respondents in each of the category so as to give equal chance for all the population selected for the study. A sample size of one hundred and fifty respondents were selected from the population, using the Taro Yameni (1968) formula outlined below:

$$n = \frac{N}{1+Ne^2}$$

Where n=sample size; N=population; and e=level of significance. For the analysis, a 5% significance level was used. Therefore, if N=841, e = 5% = 0.05, then-

$$\begin{aligned} n &= \frac{841}{1+(841 \times 0.05^2)} \\ &= \frac{841}{1+5.6} \\ &= 150 \end{aligned}$$

##### Source of Data Collection

Structured questionnaire were used to collect primary data. Questionnaires were preferred as it was relatively quick to collect data in a standardized and more objective way.

#### Method of Data Analysis

The data collected were sorted, edited, coded, cleaned and processed using Statistical Package for the Social Sciences. Descriptive statistics was used to analyse the data through computing of mean, standard deviation and percentages. In addition, regression analysis were used to establish the relationship between the independent variables and the dependent variable. Linear Regression is a widely used technique for regression problems. It can be used to predict a dependent variable from independent variables. It searches for a relationship for the dependent variable in the data (training data) for the independent variables.

#### Results and Analysis

This section sought to establish the relationship between financial innovation and the profits of micro

and small enterprises in Maiduguri Metropolitan Council, Borno State, Nigeria. Multiple regression analysis was applied using mean score to determine the effect of independent variables (debt management literacy, budgeting skills, book keeping skills and banking services knowledge) on dependent variable (growth of SMEs). This was performed using the field data and the results interpreted according to the R values, R<sup>2</sup> values, the beta values and F ratio at the 0.05 level of significance. Explanation and interpretation of the findings was given.

#### 4.9.1 Model Summary

The study used a multiple regression model to determine the correlation coefficient (R) and coefficient of determination (R<sup>2</sup>) of independent variables on the dependent variable.

Table 4.10: Regression analysis model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.477a	.228	.204	1.03227

a. Predictors: (Constant), Banking Knowledge literacy, Book Keeping Literacy, Budgeting Skills, Debt Management Literacy.

The results for model summary indicated in Table 4.12, the Pearson's Simple Correlation of 0.477 indicates that financial innovation has a fairly strong positive correlation with growth of SMEs in Maiduguri Metropolitan Council. The findings further indicated that financial literacy explains 22.8% of the changes in profits of SMEs when other factors are held constant (R squared = 0.228). Hence, profits of the SMEs is mainly explained by other factors not part of the current study.

#### 4.9.2 Hypothesis Testing Results and Discussion

The four research hypotheses that the study sought to test are addressed in this section based on regression analysis coefficient output on Table 4.10 above.

#### 4.9.3 Debt Management Literacy and the Financial Growth of SMEs

The result of the first hypothesis was achieved by testing H01

H01: Debt management literacy has no significant effect on retain profits of SMEs in Maiduguri Metropolis, Borno State.

The study findings revealed that debt management literacy had positive and statistically significant effect on profits of SMEs in Maiduguri Metropolitan Council with  $\beta_1=0.281$  at P value 0.001 which is less

than 0.05. It is on this basis the null hypothesis that debt management literacy has no significant effect on profits of SMEs was rejected. The finding of the study concurred with Lusardi and Mitchell (2011) who studied the impact of literacy levels on entrepreneurs performance which revealed that persons of limited financial innovation are more prone to exploitations when it comes to debt management, savings and credit, and are not able to administer their resources competitively.

#### 4.9.4 Budgeting Skills and the Financial Growth of SMEs

The result of the second hypothesis was achieved by testing H02

H02: Budgeting Skills has no significant effect on retain profits of SMEs in Maiduguri Metropolis, Borno State.

The study found out that there was positive and statistically insignificant effect between budgeting skills and the profits of SMEs in Maiduguri Metropolitan Council with  $\beta_2=0.092$  at P value 0.354 which is greater than 0.05. It is on this basis that the null hypothesis that budgeting Skills has no statistical relationship to profits of SMEs in Maiduguri Metropolitan Council is supported.

#### 4.9.5 Book Keeping Literacy and the Financial Growth of SMEs

The result of the third hypothesis was achieved by testing H03

H03: Book keeping literacy has no significant effect on retain profits of SMEs in Maiduguri Metropolis, Borno State.

The study findings revealed that book keeping literacy had positive and statistically significant effect on profits of SMEs in Maiduguri Metropolitan Council with  $\beta_3 = 0.253$  at P value 0.000 which is less than 0.05. It is on this basis that the null hypothesis that book keeping literacy has no relationship to growth of SMEs in Maiduguri Metropolitan Council is rejected.

#### 4.9.6 Knowledge of Banking Services and the Financial Growth of SMEs

The result of the fourth hypothesis was achieved by testing H04

H04: Knowledge of banking services has no significant effect on profits of SMEs in Maiduguri Metropolitan Council

The study found out that there was positive and statistically insignificant effect between knowledge literacy and the profits of SMEs in Maiduguri Metropolitan Council with  $B4=0.114$  at P value 0.698 which is greater than 0.05. It is on this basis that the null hypothesis that banking services knowledge has no statistical relationship to profits growth of SMEs in Maiduguri Metropolitan Council is accepted. Djankov, McLiesh, and Shleifer (2012) studied the impact of debt administration on its repayment. The study engaged the managers of the financial institutions whose information was further analyzed using mean and standard deviation and it was concluded that financial education is significant on debt administration and its repayment too.

## V. DISCUSSION OF THE FINDINGS

The finding of this study is in line with Obago (2014) studied the impact of financial innovation on running of personal finances and established that most employed individuals suffer from pressure as a result of monetary problem behaviors which include, extravagance, credit mismanagement, over-indebtedness, meager cash management and scarce income. Obago opined that the above challenges make it hard for the staff to make ends meet which impacts negatively on their productivity at work. Lusardi and Tufano (2009) study sought to determine

debt literacy, financial occurrences, and over indebtedness among Americans. The study established that the three quarter of the target population could not understand the conception of interest compounding to their daily business operations or be in a position to embrace effectiveness of a credit card. In addition they acknowledged that women, marginalized, elderly and single parents are the most affected due to their constrained resources and poor financial supervision.

Mahmood (2008) studied the relationship between budgeting process and SMEs performance and found that, the formalization of the budget will depend on how clearly the relationship of the business and the owners is defined. Joshi *et al.*, (2003) studied budgeting process and performance of companies found out that large companies have a susceptibility to perform an in-depth budget procedure and be in a position to present it excellently. Researcher found out that the budget process is highly influenced by the magnitude and the company complexity as far as the business operations are concerned which also affect the performance of the company.

The finding of the study that there is low level of knowledge on book keeping literacy is in line with the G20 Seoul Summit (2010) whose report indicated that low levels of financial innovation particularly book keeping skills worldwide is a major contributor of lost opportunities for a large number of SMEs. The report further stated that information unevenness among SMEs due to unreliable financial reports makes it hard to determine the creditworthy of the SMEs and potential proposals are rejected due to lack of financial information which makes most lenders reluctant to fund small firms especially those with new products.

Mills and McCarthy (2014) confirm this and opine that assessing creditworthiness of small businesses is difficult due to information asymmetry because their transactions are largely informal. Ezejiofor *et al.*, (2014) sought to establish the relevance of accounting records in small business performance in Nigeria and found that SMEs that kept proper books of account were able to measure accurately the performance of their businesses. They also assert that business decisions with regard to expansion, maintaining a competitive edge, prevention of business failure and filling tax returns requires documentation with reliable and relevant

information, easy to understand and readily available. Researchers also caution that the bookkeeping systems should generate the information in a simple and accurate order.

The study also revealed that acquisition of skills on reconciling cashbook with the bank statements was rated below average. The finding of this study support earlier findings by Wachira and Kihiu (2012) who studied the family units in Kenya using the 2009 National Financial Access (FinAccess) who identified that there are other factors which affect the access to financial access that are individual based. They concluded that financial innovation created an awareness and enabled more individuals to be included in the financial services.

The study finding that financial innovation had positive effect on the profits of SMEs in Maiduguri Metropolitan Council concur with Fatoki (2014) who studied the causes of SMEs failure and found out that lack of finance education have adverse effects on the SMEs and especially the new start-ups. He noted that new start-ups requires a sound financial background which will create a healthy base of a successful business hence the profits of the enterprise. Duchesneau and Gartner (2010) studied on factors affecting new small firms progress and established that the individuals who have emerged successful in business mostly were brought up in a business set up or were raised by successful entrepreneur parents which are a requisite for growth due to vast experience and exposure. This gives them confidence and vigour that they will make it in the ventures they start unlike the ones raised by the unsuccessful entrepreneurs who are unsuccessful. The financial capability report of 2009 eluded that acquisition of financial literacy skills would have a positive impact on an individual's behaviors in terms of increased savings, wealth accumulation and avoidance of unnecessary expenses. This would make SMEs managers better customers for the banks, prudent managers of the limited financial resources in their businesses and better able to select the most suitable products for their businesses. The ultimate goal would be to enhance financial performance and growth of SMEs.

## VI. CONCLUSIONS

This study concludes that profits of SMEs is highly dependent on the debt management literacy level. Therefore a deliberate effort is paramount to train

SMEs on how to manage their businesses effectively with a view to enhance profits of SMEs. Consequently, this would lead to increased financial performance. The study also conclude that majority of SMEs access credit facilities before seeking information on debt management hence find themselves accumulating debts through multiple borrowings from both formal and informal sector. In addition, SMEs were found to divert the funds from the intended purpose which impede the profits of SMEs.

The study concluded that there is need to improve budgeting preparation skills as this would improve profits of SMEs as money will be allocated to specific areas which are determined in advance as this would facilitate controls as actual performance is compared to budgeted performance. In addition budgeting enhances coordination of various functions with ultimate goal of meeting the agreed performance levels. Moreover most of the SMEs do not prepare the business annual budget hence business transactions are undertaken based on the prevailing circumstances which leads to impulse expenditure. Therefore managers need to be trained on budgeting skills and the importance of adherence to the set budget.

## VII. RECOMMENDATIONS

Based on the study findings, the study recommends that:

1. SMEs should come up with strategies on how to manage debt since it is positively and significantly associated with profits of SMEs. Among the strategies would be to avoid multiple borrowings and accumulation of a lot of debt in the business since this may affect debt repayment.
2. In addition, management of SMEs should come up with better debt management strategies which would reduce the debt to appropriate level which the firm could service without facing financial distress. The study also recommends that SMEs should be trained on how to prepare budget as this would enhance financial performance. This would lead to increased production efficiently, eliminate wastes and control costs and ultimately growth of SMEs.

3. Management of SMEs should ensure that they put in place strategies policy of recruiting employees with basic accounting concepts to assist in record and book keeping or else undertake capacity building training on the same since book keeping literacy is positively and significantly associated with growth of SMEs. This knowledge enables the SMEs to prepared financial statement which could enable them to evaluate the financial performance of the enterprise and consequently enable them to make informed decisions.
4. Based on the findings that banking service literacy has a positive but insignificant association with growth of SMEs, the study recommends that management of SMEs should gather more information on operations of bank to avoid being charged hefty penalties and interest which could be addressed since it would lead increased operational cost which in turn could affect growth strategies.

#### REFERENCES

- [1] Adegoke, O. (2014). Poor financial innovation is a major cause of SME failure in Nigeria- ACCA. *Enterprise* 54. 14.12.2019.
- [2] Adomako, S., Danso, A. and Damoah, J. O. (2016). The moderating influence of financial innovation on the relationship between access to finance and firm growth in Ghana. *Venture Capital*, 18(1), 43-61.
- [3] Agyer, L. (2011). Asset allocation and information overload: The influence of information display, asset choice and investor experience. *Journal of Behavioral Finance*.6, 37-63.
- [4] Ali, H., Omar, E. N., Nasir, H. A. and Osman, M. R. (2018). Financial innovation of entrepreneurs in the small and medium enterprises. In Proceedings of the 2nd advances in business research international conference (pp. 31-38).
- [5] Al-Tamini, H. A. and Kalli, A. B. (2009). Financial innovation and investment decisions of UAE investors. *The Journal of Risk Finance*, 10(5), 500-516.
- [6] Andoh, K.F. and Nunoo, J. (2005). *Sustaining small and medium enterprises through financial service utilization*. Does financial innovation matter? Department of Economics, University of Cape Coast, Ghana.
- [7] Arnaboldi, F. & Rossignoli, B. (2015). Financial Innovation in Banking. *Palgrave Macmillan Studies in Banking and Financial Institutions*, 127.
- [8] Arnaboldi, F. & Rossignoli, B. (2018). Financial Innovation in Banking. *Palgrave Macmillan Studies in Banking and Financial Institutions*, 127.
- [9] Atkinson, A. (2017). Financial education for MSMEs and potential entrepreneurs. Paris: OECD Publishing (Working Papers) *Finance, Insurance and Private Pensions*, No. 43.
- [10] Badagawa Gideon (2011). Why Uganda Needs an SME Authority. New Vision, March 10, 2011- Business Vision.
- [11] Barte, R. (2012). Financial innovation in microenterprises: The case of Cebu Fish vendors Phillipines. *Management Review*, 19, 91-99.
- [12] Capital Markets Authority (2010). *The development of micro- cap securities markets in Kenya*. Nairobi: Capital Markets Authority.
- [13] Chawla, R. (2018). Importance of financial innovation for small and medium size businesses. *SME World*.
- [14] Chidi, C. & Shadare, O. (2011). Managing human capital development in small and mediumsized enterprises for sustainable national development in Nigeria. *International Journal of Management and Information Systems*, 15(2) 95-104.
- [15] Cucinelli, D., Trivellato, P. and Zenga, M. (2019). Financial literacy: The role of the local context. *Journal of Consumer Affairs*, 53(4), 1874-1919.
- [16] Dahmen, P., & Rodriguez, E. (2014). Financial innovation and the success of small businesses: An observation from a small business development centre. *Numeracy*, 7(1), 1-12.
- [17] Derbyshire, J. E. (2016). Analysing the need for financial innovation in small- and microenterprises. (Maters Dissertation). Potchefstroom Campus of the North-West University.
- [18] Dewan, N. (2019). Vision is to increase MSMEs contribution to GDP to 50%: Nitin Gadkari. Economic Times. [https://economictimes.indiatimes.com/small-biz/sme-sector/vision-is-to-increase-mSMEs-contribution-to-gdp-to-50-nitin-gadkari/articleshow/69978436.cms?utm\\_source](https://economictimes.indiatimes.com/small-biz/sme-sector/vision-is-to-increase-mSMEs-contribution-to-gdp-to-50-nitin-gadkari/articleshow/69978436.cms?utm_source)

1/4contentofinterest&utm\_

- [19] Diamond, J. and Khemani, P. (2006). Introducing Financial Management Information Systems in Developing Countries. *OECD Journal on Budgeting*, 5, 97-132.
- [20] Egbo, O., Ezeaku, H., Igwemeka, E. and Okeke, O. (2020). Financial innovation and access: Revisiting the bridges and barriers to women entrepreneurship in Nigeria. *Amazonia Investigata*, 9(29), 436-444.
- [21] Ekanem, I. (2010), "Liquidity management in small firms: a learning perspective", *Journal of Small Business and Enterprise Development*, Vol. 17 No. 1, pp. 123-138.
- [22] Engstrom, P. and McKelvie, A. (2017). Financial literacy, role models, and microenterprise performance in the informal economy. *International Small Business Journal: Researching Entrepreneurship*, 35(7), 855-875.
- [23] Ergun, K. (2017). Financial innovation among university students: A study in eight European countries. *International Journal of Consumer Studies*, 42(1), 2-15.
- [24] Evans, J. St. B. T. (2008). *Dual-processing accounts of reasoning, judgment and social cognition*. Annual review of psychology, 59, 255-278.
- [25] Fadahunsi, O. (1997). The challenge of promoting entrepreneurship and small business: The commonwealth experience. (Discussion paper) west african management development institutes network (WAMDEVN, lagos, Nigeria.
- [26] Fatoki, O. and Odeyemi, A. (2010a). *Determinants of access to trade credit by new SMEs in South Africa*. *Afr. J. Bus. Manage*, 4(13), 2763-2770.
- [27] Forrer Acie & Forrer D. A. (2015). Analysis of The Relationship Between Economic Cycle Swings and Adoption Rate Models of Financial Innovation Diffusion, *Journal of Business & Economics Research*. Volume 13, Number 2, 103-114.
- [28] Gerrans, P. and Heaney, R. (2016). The impact of undergraduate personal finance education on individual financial literacy, attitudes and intentions. *Accounting and Finance*, 59(1), 177-217.
- [29] Goswami, K., Hazarika, B. and Handique, K. (2017). Determinants of financial risk attitude among the handloom micro-entrepreneurs in North East India. *Asia Pacific Management Review*, 22(4), 168-175.
- [30] Greenspan, A. (2002). Financial literacy: a tool for economic progress. *The Futurist*, 36(4), 37.
- [31] Grenville, S. (2017). "The first global supply chain". *Lowy Institute*. Retrieved May 28, 2018.
- [32] Guliman, S. (2015). An evaluation of financial innovation of micro and small enterprise owners in iligan city: Knowledge and skills. In Paper presented in 9th global business conference on February 7, 2015 at de La salle university, manila, Philippines.
- [33] Isern, J., Agbakoba, A., Flaming, M., Mantilla, J., Pellegrini, G. and Tarazi, M. (2009). Access to Finance in Nigeria: Microfinance, Branchless Banking and SME Finance.
- [34] Iyer, A. (2018). The big cost of small business loans. Live Mint. <https://www.livemint.com/Money/08vmYmF115rOTVG764xa1LTh-e-big-cost-of-small-business-loans.html>. (Accessed 5 January 2020).
- [35] Joshi, Y. C., Pandey, A. K., Narasimha, D., Sagar, R. and Giraud-Héraud, Y. (2003). Financial literacy of high school students. *Handbook of consumer finance research A&A*, 402, 113.
- [36] Kalekye, P. N. and Memba, F. (2013). The role of financial innovation on the profitability of women owned enterprises in kitui town, kitui country, Kenya. *International Journal of Science and Research*, 4(6), 2360-2365.
- [37] Karadag, H. (2015). Financial management challenges in small and medium-sized enterprises: A strategic management approach. *Emerging Markets Journal*, 5(1), 26e40.
- [38] Kongolo, M. (2010). Job creation versus job shedding and the role of SMEs in economic development. *African Journal of Business Management*, 4(11), 2288-2295.
- [39] Kubickova, D., and Soucek, J. (2013) Management of receivables in SMEs in the Czech Republic, *European Research Studies* 16(Special Issue on SMEs), 97-111.
- [40] Kuntze, R., Wu, C., Wooldridge, B. R. and Whang, Y. (2019). Improving financial innovation in college of business students: Modernizing delivery tools. *International Journal of Bank Marketing*, 37(4), 976-999.
- [41] Lestari, M. D., Kantun, S., Hartanto, W., Suharso, P. and Widodo, J. (2020). Analysis of the financial innovation level of micro, small and medium enterprises (MSMEs) in jember, East Java, Indonesia. In Presented at IOP conference series: *Earth and environmental science*

(485):12-19..

[42] Lownes-Jackson, M., Olorunniwo, F., Flott, P. and Ellzy, J. (2003). Financial obstacles faced by African American entrepreneurs: An insight into a developing area of the US economy. *The Journal of Developing Areas*, 36(2), 125-145.

[43] Lusardi, A. and Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5-44.

[44] Mabula, J. B. and Ping, H. D. (2018). Financial innovation of SME managers' on access to finance and performance: The mediating role of financial service utilization. *International Journal of Advanced Computer Science and Applications*, 9(9), 32-41.

[45] Mahmood, K. (2008), "Library web OPACs in Pakistan: an overview", Program: *Electronic Library and Information Systems*, Vol. 42 No. 2, pp. 137-49.

[46] Mandell, L. (2007). Financial innovation of high school students. *Handbook of consumer finance research* (pp. 163-183). Springer.

[47] Marriott, D. N. and Mellett, H. J. (1996). Health care managers' financial skills: Measurement, analysis and implications. *Accounting Education: International Journal*, 5(1), 61-74.

[48] Maseko, N. and Manyani, O. (2011). Accounting practices of SMEs in Zimbabwe: An investigative study of record keeping for performance measurement (A case study of Bindura). *Journal of accounting and taxation*, 3(8), 158-161.

[49] Mashizha, M., Maumbe, B. and Sibanda, M. (2019). Financial innovation among small and medium enterprises in Zimbabwe. *The Southern African Journal of Entrepreneurship and Small Business Management*, 11(1), 1-10.

[50] Mutegi, H.K., Njeru, P.W. and Ongesa, N.T. (2015). Financial innovation and its impact on loan repayment by small and medium entrepreneurs: an analysis of the effect of book keeping skills from equity group foundation's financial innovation training program on entrepreneurs' loan repayment performance. *International Journal of Economics, Commerce and Management*, 3(3), 1-28.

[51] Muthoni, M. P. (2015). The role of micro and small enterprises (SMEs) in achieving Kenya vision 2030. *School of business, Nairobi University*.

[52] Obago, S. O. (2014) Effect of financial innovation on management of personal finances among employees of commercial Banks in Kenya. [medium%4text&utm\\_campaign%4cppst](https://medium.com/@text&utm_campaign=cppst) Accessed 26.01.2020.

[53] Osei-fuah, E. K. (2010). Financial innovation and youth entrepreneurship in South Africa. *African Journal of Economic and Management Studies*, 1(2), 164-182.

[54] Pisa, (2013). Students and Money: Financial innovation Skills for the 21st Century, examines students' performance in financial innovation and their experience with money.

[55] Plakalovi, N. (2015). Financial innovation of SMEs managers. *Technology, Innovation and Industrial Management*, 409-416.

[56] Ponio, J. and Timog, R. (2017). Financial knowledge, behaviour and attitude of micro business owners: Basis for developing financial innovation training modules. *International Journal of Management and Applied Science*, 3(12), 35-40.

[57] Rachapaettayakom, P., Wiriyapinit, M. and Cooharajanjanone, N. (2020). The need for financial knowledge acquisition tools and technology by small business entrepreneurs. *Journal of Innovation and Entrepreneurship*, 9(1), 1-28.

[58] Remund, D. L. (2010). Financial innovation explicated: The case for a clearer definition in an increasingly complex economy. *Journal of Consumer Affairs*, 44(2), 276-295.

[59] Ripain, N., Amirul, S. M. and Mail, R. (2017). Financial innovation and SMEs' potential entrepreneurs: The case of Malaysia. *Journal of Administrative and Business Studies*, 3(2), 60-68.

[60] Sakarya, B. (2016). Financial Stability of Islamic (Participation) Banks in Turkey, *Munich Personal RePEc Archive*, MPRA Paper No. 69451.

[61] Sekar, M. and Gowri, M. (2015). A study on financial innovation and its determinants among generation Y employees in Coimbatore city. *Great Lakes Herald*, 9(1), 35-45.

[62] Siekei, J. (2013). An assessment of the role of financial innovation on performance of small and micro enterprises. Case of Equity Group Foundation Training Program on SMES in Njoro district, Kenya.

[63] Sinha, D. K. (2019). Role of Micro Enterprises in Economic Development. Your Article Library:<http://www.yourarticlelibrary.com/econ>

omics/role-of-microenter prises- in-economic-development/40722 Accessed 23.03.20.

[64] Wachira and Kihiu, (2012), Impact of Financial innovation on Access to Financial Services in Kenya.

[65] Wanjohi, A (2011) Kenya Vision 2030 and youth agenda. Kenpro Papers Portal. Available <http://www.kenpro.org/tag/sme-sector-in-kenya/> retrieved on 30th July 2015.

[66] Warue, B. N. (2013). The effects of bank specific and macroeconomic factors on non performing loans in commercial banks in Kenya: A comparative panel data analysis. *Advances in Management and Applied Economics*, 6(3): 135-164.

[67] West, T. and Worthington, A. (2014). Personal attributes and financial risk-taking in Australia. *The FINSIA Journal of Applied Finance*, 1, 24-31

[68] Wijewardena, H. and Cooray, S. (1996) Factors contributing to the growth of small manufacturing firms: Perceptions on Japanese owners/managers, *Journal of Enterprising Culture*, 4(2): pp. 351-361.