# THE EFFECT OF FINANCIAL LITERACY ON THE FINANCIAL PERFORMANCE OF SME'S IN EMBU COUNTY

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A RESEARCH PROJECT PRESENTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

**NOVEMBER, 2021** 

# **DECLARATION**

This research project is my original work and has not been presented for a degree in any other		
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# **DEDICATION**

I dedicate this project to my late mum Lydia, your push and encouragement gave me the impetous to enroll for this MBA program, though you will not be here to see the culminatation, I know you will be celebrating with me.

To my dear husband Patrick, there's not enough words to express my appreciation to you, you have stood by me every step of the way, encouraged me even when I was at the brink of giving up, I never lacked any resource that was needed all due to your steadfastness.

To my children, where there is a will, there is a way, though you may find challenges and stunbling blocks along the way, stay true to your purpose and our God will always help you complete what you start. Hurray, I have done it! And so can you. Your furure is bright do not limit yourselves.

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# LIST OF ABBREVIATION AND ACRONYMS

**GOK** Government of Kenya

**KCB** Kenya Commercial Bank

**KWFT** Kenya Women Finance Trust

**MSME** Micro Small and Medium Entreprises

**OECD** Organization for Economic and Cooperation Development

**ROE** Return On Equity

**SACCOs** Savings and Credit Cooperative Organizations

**SMEs** Small and Medium Entreprises

**SPSS** Statistical Package for Social Sciences

#### **ABSTRACT**

The study's general objective was to examine the effect of financial literacy on the performance of Small and Medium Enterprises in Embu County. Descriptive research design was adopted to establish the effect of financial literacy. The county has approximately 600 SMEs which was sampled to 170 enterprises in Embu County using a stratified random technique. The study utilized both primary and secondary data which was analyzed using both descriptive and inferential analysis methods. The multiple regression models to determine the association between financial literacy and financial performance (Return on equity). Findings from the regression analysis showed that 76.4% of the variation in return on equity was due to a model fitted with financial literacy, inflation rate and annual GDP rate as predictors. Further the Anova results revealed that the model fit with financial literacy, inflation rate and annual GDP rate was statistically significant to predict return on equity. The results also showed that financial literacy and Annual GDP are positive predictors for return on equity as shown by the beta values 0.107 and 0.355 respectively. The findings from the study also showed that inflation rate had a negative impact on return on equity as shown by the beta value -0.569. The study established that financial literacy had a positive effect on financial performance. Thus the study recommends that the owners of the SME's in Embu county continually participate in financial literacy programs to ensure that they are up to date with the necessary skills required to run the business. The study also determined that Annual GDP rate had a positive impact on financial performance and inflation rate had a negative impact on financial performance. Thus the study recommends that the government through the Central Bank set up policies to stimulate the economy. This is to enable the economy to growth hence leading to growth of the Annual GDP and further cushioning the economy from bad inflation rates.

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# **CHAPTER ONE: INTRODUCTION**

# 1.1 Background of Study

Small and Medium Enterprises, commonly known as SMEs, refer to non-subsidiary firms characterized by independence. The number of employees is less than 500, depending on the company's state (OECD, 2015). Small firms have less than 50 workers in the SMEs categories, while micro-enterprises have personnel ranging from 5 to 10. Medium firms have less than 500 workers. According to Capital Market Authority (2020), Small and Medium enterprises take up more than 99% of all entities globally. In any state, both developing and developed countries, SMEs stand out as a significant force behind economic development and employment opportunities for various people. Katua (2014) states that SMEs stand out as an economic development engine plus poverty obliteration globally. Such enterprises play a significant role in society and globally provide products and services that people need. By providing employment opportunities, SMEs reduce the employment gap in any state created by the rising number of young people in need of jobs. Most of the newly created jobs are owed to the small and medium sectors.

SMEs also expand the tax base for a country and act as a source of innovation in the economy. SMEs also act as launchers of new ideas and create more effective resource use (Savlovschi & Robu, 2017). SMEs generate to a more significant degree the technical innovation appropriate in the economy. Many of the jobs arise from innovation, and consequently, the discoveries bring about new entrepreneurial adventures. Wanjohi (2017) also adds that SMEs inspire competition and entrepreneurship hence offering the economy exterior benefits such as efficiency and aggregate productivity. Entrepreneurs use SMEs to provide a constant supply of ideologies and skills.

Despite the several benefits derived from SMEs, such entities face a significant concern in performance and growth. The performance and growth rate of Small and Medium-Sized Enterprises (SMEs) have, over time, stood out as an issue for various stakeholders in the economic sectors, including capital corporations, monetary institutions, non-governmental organizations (NGOs), governments, and business individuals. Such SMEs face several challenges like money hindrances, economic discrimination, issues stemming from government directives, tax and state levies, and illiteracy. Another common challenge that small and medium enterprises face is access to adequate cash flow and working capital that enables such firms to maintain profitability (Audretsch et al., 2015).

SMEs stand out as entities that take over a more significant percentage of the financial world, yet their potential remains unutilized. The various challenges that SMEs face lead to dismal performance and slow growth. SMEs in Kenya encounter challenges that hamper them from achieving economies of scale. Such entities lack adequate and proper training coupled with administration capability to control the commercial capitals efficiently. Financial literacy stands out as a critical factor essential in ensuring the solid establishment of SMEs, proper and strategic management of such enterprises, and consequently, the thriving of SMEs in the economy.

#### 1.1.1 Financial Literacy

Financial literacy stands out as a crucial component of life in the current world. Whether engaging in business activities or not, every individual is required to obtain the necessary education of financial matters. The terminology denotes a set of skills and information that permits a person to

engage in well-versed and operative choices with all monetary capitals (Savlovschi & Robu, 2017). People must gather knowledge on how to manage their funds, income, savings, and expenditure (Buchdadi, Sholeha, & Ahmad, 2020). Such knowledge accords them the power to make the right financial choices, detect any fraud in their business ventures and take charge of their finances. The current state of the economy depicts that businesses and individuals constantly face consumer and business choices that utilize one's financial knowledge. Through fiscal literacy, people and SMEs improve their transparency, effectiveness, precision, and accountability.

Cherugong (2015) ascertains that financial literacy stands out as crucial in the running and operations of the business. Individuals or entrepreneurs with financial literacy exhibit a better understanding of the main monetary concepts in their business. Such people understand the risks that the company might face, how to manage them, and how to manage debts. Financially literate business people understand the aspect of financial record keeping as well as engaging in budgetary activities. Fiscal knowledge helps firms lower the running expenditures hence allowing advance the input of advanced strategies on any economic ventures the firm participates in. individuals with financial knowledge skills also exhibit the improved capability to engage in internal audit activities that allows them to identify any financial leakages within the firm and put in place the necessary measures towards curbing monetary issues.

According to Ye and Kulathunga (2019), the concept of financial literacy is an essential factor that firms should incorporate to enable them to attain success in their operations and improve performance. The authors note that most firms and individuals exhibit inadequate financial literacy, essential in achieving business sustainability. They also note that Monetary literateness is a vital

knowledge resource for financial decision-making. However, few studies exist exploring how SMEs' financial literacy affects their sustainability. Fiscal literateness offers information plus comprehension of economic notions and the expertise, motivation, and self-assurance to use such information and understanding to make operative choices across various monetary settings and advance SMEs' economic welfare. Undertaking accurate financial decisions is a very vital decision for individuals with longstanding monetary consequences. Managing the finances of an entity is a critical task. Therefore, SMEs should make choices on their financial needs, of which many have complex aspects.

#### 1.1.2 Performance of SMEs

As early stated, SMEs stand out as a crucial segment of the economy with far-reaching benefits. Small and medium enterprises (SMEs) have an actual weight in developing a nation's economy. However, for an economy to reap its benefits from SMEs and for small and medium enterprises to undertake their roles, there is a need for effective performance. Mahmudova and Kovács (2018) define performance as the firm's level of attaining the company's goal. Every enterprise measures its success and accomplishments as part of the performance. The terminology also denotes the measures taken by a firm or an individual to attain a given aim. According to Yucesoy and Barabási (2016), the concept of performance represents the entirety of accurately measurable accomplishments in a given area of action. The concept applies to various financial matters, sporting, social activities, and technical aspects. Companies use performance indicators to enforce improvement of the outcomes.

Performance is usually utilized as a pointer of a company's monetary health within a specific timeline. Some performance measures include return on profits, venture, revenue, or the customer base (Wood, 2016). Companies and individuals often measure performance from a financial viewpoint. Most firms use effectiveness, growth, and profits as measures of performance. Some companies use profitability to gauge the returns in terms of increases in sales and market share. Others use profitability in terms of return on investment (ROI) and return on equity (ROE). Others use liquidity by measuring the quick ratio and current ratio, while others use solvency. Such measures either depict the firm's commercial success in company growth and increase in market share. Other indicators define the financial success of the firm or profitability.

Over the years, the performance of Kenyan SMEs has been weakening. Most of the SMEs that contributed 40% of employment in Kenya were closed down due to the inability to operate small enterprises (GOK, 2009). The monetary presentation of SMEs over the years has been uncertain since some have been auctioned and others merged or acquired.

#### 1.1.3 Relationship Between Financial Literacy and Performance Of SMEs

SMEs range from hawkers, the public transport service in the country, farmers and entities that offer professional services but not under government leadership. Such entities often operate in urban segments. The Kenyan government has taken keen consideration of SMEs in the country stemming from the benefits that Kenyans reap from SMEs, such as job creation and gradual elimination of poverty in the republic. The Kenyan government recognizes that SMEs account for various initiatives to spur economic growth, hence offering support (Muthoni, 2015). Some of the support initiatives by the Kenyan government include the youth and women fund. The administration

advocates and recommends that relevant stakeholders offer an enabling setting for SMEs to operate effectively.

Wanjohi (2017) stipulates that a more significant percentage of SMEs lack adequate knowledge and lower management capability. Thus, such firms experience difficulty in the management of the finances at their disposal. The entities exhibit problem in proper fund allocation for various business activities. SMEs often stand out as unsafe and expensive commercials to engage with. The reason being such entities do not have monetary controlling measures. Thus they exhibit incapability even to receive funding from economic institutions. According to Wanjohi (2017), governments, private sector stakeholders, and non-governmental entities have put in place various ventures to aid SMEs in accessing relatively cheap credit and financial managing services for efficient management of such funds. However, there is a gray area on whether such ventures on monetary knowledge result in advanced management of funds amongst the small and medium enterprises.

Siekei (2013) adds that skills obtained through financial knowledge help SMEs in various ways. The researcher details that through financial literacy, individuals and firms acquire credit management skills. Such skills help them advance their performance by enabling them to receive credit funding. The skill also aids them in the proper managing of loans to minimize higher interests. Through fiscal knowledge, SMEs also gain budgetary skills. Such skills help them increase the sales of products and services as well as increase the yields. Companies also experience a smooth business operation.

#### 1.1.4 SMEs in Embu County

The county of Embu contains Small and medium enterprises of various categories. Some of them include *Jua Kali* artisans, bodaboda riders, taxi drivers, vegetable and fruit vendors, amongst other traders. Most SMEs operate in urban areas, but the majority of farming takes place in rural areas. SMEs in the county cut across all the demographics. In Embu, both men and women within the county engage in SME activities.

On top of that, the young and older people of all ages take part in SMEs. The sector also encompasses both the learned and unlearned. Such small-scale enterprises have few employers. Most are often run by family members with less than five employees. Most of the personnel in such a business are immediate family members. Within the county, the SMEs have the opportunity to acquire financial knowledge training from various entities. Some of them include commercial banks such as Equity Bank, Kenya Commercial Bank (KCB), and Corporative Bank. The people and businesses can also obtain training from the SACCOs within the county, county government entities, as well as microfinance lending institutions like Kenya Women Finance Trust (KWFT).

The county government of Embu has acknowledged the significance of training SMEs on financial matters. Such training enables them to create employment opportunities and eradicate poverty in the republic by training and financing them. According to Kithinji (2019), most Embu county traders lack knowledge of financial matters reporting for the star. The reporter noted that most artisan traders do not take their money to banks. Most of them store their earning in the house. The Embu County government stated that such actions stem from lack or insufficient financial literacy knowledge. Kithinji disclosed that the county government was collaborating with financial

institutions to train local small-scale traders in financial management and other business exposures. Such ventures are geared towards fostering growth in the SME sector. The county government also utilizes the youth fund and women's fund to support such small enterprises. The aim of such initiatives stems from the need to instill financial management skills enabling SMEs competently manage funds in their companies. Such measures go a long way in ensuring that SMEs develop their confidence, grow their profits, and ensure output efficiency and employment. Financial knowledge eventually enables the individual growth of the businessperson.

#### 1.2 Research Problem

As already established above, small and medium enterprises (SMEs) play a crucial role in the country's economy in national and global capacities. However, despite such significance, SMEs still face several challenges that hinder their performance. Cherugong (2015) states that SMEs lack appropriate and enough business skills and knowledge that affect growth and advancement. Such challenges stem from an inadequate understanding of financial issues. Such entities undergo difficulty in attaining the expected performance. SMEs without financial literacy fail to achieve long-term solvency, liquidity, and profitability, resulting in loss of business opportunities and stunted growth.

Despite the several reviews on the impact of financial literacy on SMEs performance in Kenya and globally, fewer studies exist. Several of the studies undertaken focus on the various characteristics of firms and how they relate to firm enactment. For instance, Njagi et al. (2017) explored how equity financing affects firm undertaking of SMEs. Other studies have focused on large firms in various countries. Scrutiny of past literary works indicates a limited amount of empirical studies centered

on the influence of monetary knowledge on the performance of small and medium-sized enterprises. Therefore, there exists a considerable gap of knowledge on the impact of economic literacy on the performance of SMEs. Therefore, this exploration sought to fill the gap by answering the following question what is the association between financial literacy and small and medium enterprise performance in Embu County.

#### 1.3 Objectives of the study

The study's general objective was to examine the effect of financial literacy on the performance of Small and Medium Enterprises in Embu County.

#### 1.4 Value of Study

The exploration stood out as crucial for various reasons and benefits to several stakeholders. First, the investigation would help training entities comprehend the importance of monetary literacy to the performance of SMEs. SMEs depend on relevant training institutions to help them understand and gain more knowledge on financial know-how. Therefore, the exploration helps such entities understand the level of financial illiteracy in the county and take the necessary measures in dealing with the problem.

The study would also prove curricula to academicians and scholars. The exploration help such stakeholders develop vital curriculum provisions allowing the teaching of relevant financial knowledge. Such a curriculum ensures that individuals wishing to venture into SME activity understand their operations' financial implications and obligations. The exploration would ensure that the government provides essential training for individuals within the informal sector.

The study would also help policymakers to undertake suitable measures towards the acquisition of financial data.

It would also help academicians establish the curriculum's relevance to business schools' curriculum to the actual business world. Considering that the vast majorities of SMEs are in the informal sectors where SMEs have no or only have primary education, the government policymakers would find out whether the primary financial education taught in school has any bearing on SMEs' performance. The exploration would also establish the need for monetary literateness programs amongst SMEs in a strive to arouse development in the sector.

The study would also adds to the existing pool of knowledge and literature. The work also acts as a background or basis for further research on the same or similar topic. There is a need to further study SMEs' financial performance as a critical area of development.

# **CHAPTER TWO: LITERATURE REVIEW**

#### 2.1 Introduction

This chapter presented a review of various literary works of studies conducted to comprehend the effects of financial literacy on the performance of SMEs. The segment details a theoretical examination of the study's theories, an empirical review of past research, and a literature review summary.

#### 2.2 Theoretical Review

The study anchored on three theories: agency theory, dual process theory, goal-setting theory, and knowledge spillover theory.

## 2.2.1 Goal Setting Theory

The theory was developed by Locke and Latham (1960) and presented in the book "A Theory of Goal Setting & Task Performance" in the 1990s. Their study consequently led to the contemporary comprehension of the concept of goal setting. The theory identifies five elements crucial for firms to achieve their goals. The elements include clarity by setting clear goals, which entails putting in place challenging goals to motivate people (Locke & Latham, 2012). The other part is the commitment that calls for firms to secure team commitment by the active participation of the team members. Such involvement ensures every individual understands the goals and even agrees with the set objectives.

The theory stood out as crucial to the understanding of firm performance. The theory advocates for a better comprehension of the elements and essence of goals to the success and performance. The theory advocates for the significance of the SMART criteria. Locke and Latham's theory also helps firms understand how to measure performance. The approach stands out as relevant to the study since it aided in understanding the various elements worth considering when measuring the performance of SMEs. However, the philosophy has some limitations. The first limitation is that advocating for complex goals also drives the incorporation of riskier behavior. The theory also fails to accommodate individuals without the appropriate skills and competencies to undertake the various tasks geared towards attaining the set goals. Thus, without the competency, the goal-setting process fails to materialize.

# 2.2.2 Dual-Process Theory

The dual-process theory can be traced back to James (1950) and Feud (1953). The two philosophers claimed that reasoning takes the shape of two diverse approaches to thoughts. However, this study narrows down to William James's viewpoint. William James viewed the experiential associative type of thinking, which stands separate from the deliberate, analytical mode of thinking. James states that the theory provides the architecture for the interaction between intuitive (type 1) and intentional (type 2) thinking. From this view, the monetary decisions of people with high monetary literateness are swayed by cognitive processes and intuition. The financial knowledge theory contends that the behavior of individuals with a high level of financial literacy might depend on the predominance of the two thinking approaches, intuition and cognition.

The theory calls upon businesses and individuals to embrace the impression that choices can be driven by both intuitive and cognitive processes (Gawronski & Creighton, 2013). The approach is crucial to the study since it helps the researcher understand the various factors that influence financial literacy. The theory explains how cognitive and intuition affect how individuals act when undertaking business decisions. However, the view contains its limitations. According to Osman (2004), the proposed dichotomy does not adequately accommodate the range of processes identified in reasoning studies.

# 2.2.3 Knowledge Spillover Theory

The theory of knowledge spillover was developed by Marshall (1890) and later extended by economists Arrow (1962) and Romer (1986). The theory postulates that individuals form new companies because they cannot commercialize their ideologies and knowledge within the incumbent firm. In such contexts, such individuals take an entrepreneurship approach where entrepreneurship acts as a conduit for the spillover of knowledge from the organization where the understanding was shaped to its commercialization in the organizational context of a new firm. Such a venture facilitates the spillover and commercialization of knowledge that could have otherwise remained dormant and unutilized.

According to the theory, new information extends the technological chances one has. Therefore, the enactment of various activities by SMEs relies on the arbitrage of opportunities and the exploitation of intra-temporal knowledge spillovers not appropriated by incumbent firms (Audretsch et al., 2015). The agents in possession of new knowledge pursue and exploit the new knowledge. Therefore, spillage of information or knowledge stems from the presence of knowledge. Such

spillovers, in return, affect the performance of SMEs. The theory's applicability to the study stems from finding out if knowledge spillovers impact the performance of SMEs in Embu County. The approach will also aid in the understanding of the difference between the concepts of financial literacy and economic knowledge.

# 2.3 Empirical Review

Various researchers have investigated the effect of financial literacy on the performance of companies both in a global and local capacity. On a worldwide level, Yeboah (2019) explored the impact of financial literacy on the performance of SMEs. The exploration utilized a descriptive survey design targeting a population of 6034 traders who formed part of the small-scale enterprises at the Makola market. Being a descriptive study, Yeboah used Simple random sampling to arrive at a sample size of 100 traders. The study utilized structured questionnaires with both open and close-ended questions to obtain primary data. The inquiry results were analyzed using the social science (SPSS) statistical package, generating descriptive and inferential statistics. The study used descriptive statistics to capture the features of the variables under analysis and inferential statistics to analyze the relationship of the independent variable and the dependent variables. The outcomes revealed the presence of a constructive association between financial performance and financial literacy. According to Yeboah, financial literacy, which affected the saving behavior of the traders, impacted financial performance.

Buchdadi et al. (2020) explored the influence of financial literacy on SMEs' performance through access to finance and financial risk attitude as mediation variables. The main aim of the exploration entailed examining the managers' financial literacy and the determinant of the SMEs' performance.

The inquiry adopted a survey research design. The study used an online questionnaire to gather primary data. The researchers used a population of 250 people derived using a total sampling technique. The population entailed SMEs who became the board of the Guyub Rukun Saklawase Forum. The researcher narrowed down the study population to a sample size of 71 respondents. The sample size entailed active MSME managers who were also involved in the Guyub Rukun Saklawase UMKM Forum throughout Brebes Regency. The data collected were analyzed using the structural equation model on partial least square to test the hypothesis. The study used descriptive analysis to interpret respondents' data. The exploration outcomes revealed the presence of an affirmative influence of financial literacy on the performance of SMEs.

Sunu et al. (2020) also explored the effect of financial literacy on SMEs' performance in Tema Metropolis, Ghana. The main aim of the exploration entailed determining the influence of economic behavior, monetary experience, and fiscal knowledge of owner-managers of SMEs on their financial performance. The investigation used a quantitative research approach and structured questionnaires divided into five sections to gather primary data. The sample size of the exploration included 105 participants. To arrive at the specific sample size, the researchers used the purposive sampling technique to handpick the owner-managers and personnel in charge of the everyday decision-making of the SMEs. The study employed descriptive and inferential statistics for the analysis. The explorers used Linear Regression to analyze the findings. The data gathered was also analyzed using Statistical Package for Social Sciences (SPSS) and presented using tables and regressions. The exploration outcomes show that monetary behavior is insignificant to the financial performance of SMEs, whereas fiscal experience and financial knowledge stand out substantial to the budgetary performance of SMEs.

Several researchers have also explored the concept of the Kenyan context while focusing on various counties in Kenya. Chamwada (2015) also explored the same concept in the context of Kibera Slums in Nairobi County, Kenya. The exploration used descriptive survey design and simple random sampling techniques to arrive at a study sample. The inquiry used open and closed-ended questionnaires as a data collection instrument. The data collected were analyzed using SPSS. The significance of the results was tested using inferential statistics such as analysis of the variance, Z-tests, T-test, and F-tests. The results were analyzed using Simple regression analysis and Correlation analysis. The exploration found out that the financial literacy and size of the firm had a significant positive influence on financial performance. The study concluded that high levels of financial literacy, capital invested, and size of the SMEs led to higher financial performance.

Cherugong (2015) also investigated the impact of financial literacy on the financial performance of SMEs in Trans Nzoia County in Kenya. The study adopted the descriptive research design on a sample of 85 SMEs selected through a stratified random sampling technique. The exploration utilized questionnaires to obtain primary data. The data was computed using descriptive statistics. The exploration outcomes indicate that the better-performing firms in the county have employees with financial literacy. The exploration depicted the existence of a constructive association between financial literacy and SME performance.

Otieno (2016) researched to establish the influence of fiscal knowledge on the fiscal performance of SMEs. The context of the study is Kiambu County in Kenya, narrowed down to Ruiru Sub County. The study aimed to find out the impact of various aspects of financial literacy on financial literacy. The exploration adopted a descriptive survey design. The study population comprised 334

owners of registered SMEs in Ruiru Sub County with prior training on financial literacy. The researcher used the stratified sampling technique and Yamanes' formula to arrive at a sample size of 100 respondents. The explorer used a questionnaire comprised of both open-ended and close-ended questions to gather primary data. The study used SPSS to scrutinize the data obtained and inferential statistics to test the significance of the outcomes. The multiple regressions outcomes discovered a substantial resilient constructive association between monetary literacy and the fiscal performance of SMEs. The exploration deduced that high levels of financial literacy among SMEs owners result in the greater performance of such SMEs.

Another similar exploration was conducted by Chepngetich (2016), focusing on Uasin Gishu county as the context. The main aim of the inquiry entailed determining the link between financial literacy and the performance of small and medium enterprises in Uasin Gishu County. The study population was 1053 registered SMEs owners in Uasin Gishu County. The researcher used Cluster and random sampling techniques to arrive at a sample size of 290 SMEs. The study utilized structured questionnaires to obtain primary data. Descriptive statistics were used to analyze the data, which was later on presented in frequencies, tables, percentages, means, and standard deviation. The inquiry also used Inferential statistics, and Pearson correlation was used to analyze data. The outcomes depicted a substantial effect of financial literacy on SME performance.

#### 2.4 Conceptual Framework

The enquiry analyzed the outcome of financial literacy on performance of SMEs. Financial literacy will represent the independent variable while the dependent variable is financial performance, GDP rate and Inflation rate are considered control variables, as displayed in the figure underneath.

# **Independent Variable**

# **Dependent Variable**

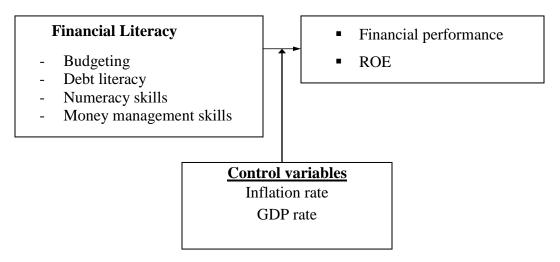


Figure 2.1: Conceptual framework

# 2.5 Summary of the Literature Review

Many studies have been undertaken, and substantial varieties of SMEs' fiscal purposes still undergo discussion. However, most explorations focus on the factors that lead to SMEs' success and those that result in higher levels of SMEs' failures. A substantial amount of investigations have looked into the impact of commercial acquaintance on SMEs. Most of the explorations above depict an existing relationship between financial literacy and the performance of SMEs. The outcomes from the sampled literature reviews reveal that financial knowledge significantly and positively impacts the enactment of small and medium-sized enterprises. However, very few studies exist that directly look into financial literacy and SMEs' performance. On top of that, no studies have been directly undertaken to determine the effects of financial literacy on the performance of SMEs in Embu County, hence the essence of this exploration.

# **CHAPTER THREE: RESEARCH METHODOLOGY**

#### 3.1 Introduction

This chapter discussed the research design, study population, sampling design utilized, the exploration's sample size, sampling procedure, data sources, data collection methods and tools, data processing, and analysis.

## 3.2 Research Design

According to Geoffrey (2019), a research design denotes a plan that scholars and researchers use to examine the question under study. It also points the various ways in which research can be conducted to answer the question under investigation. According to Mahoro (2017), the research design looks at the purpose of the study, the research strategy such as experiments, surveys, interviews, case studies, its location (the setting), the extent of to which the study is manipulated and controlled by the researcher, its temporal aspects (time horizon) and the level which the data will be analyzed (unit of analysis) which are all integral to research design.

Descriptive research design was adopted. The design entailed choosing a representative sample to undertake a study and make inferences on the entire population from the outcomes derived from the selection. According to Lans et al. (2002), this research design aims at characterizing the phenomena and identifying associations among selected variables. With this research design, the researcher will collect data from the owners of various SMEs in the county from the particular target population. Descriptive research design permits measuring several variables without considerably increasing the time and cost spent on the exploration. The descriptive study design is appropriate

because the inquiry aims to offer an indistinct image of SMEs' financial literacy. Similarly, the chosen study design contains the element of an analytical study that aids in establishing the association between monetary literacy and the performance of SMEs.

## 3.3 Target Population

According to Cooper and Schindler (2011), the research population refers to the objects that include people, groups, businesses, or organizations understudy in a given academic investigation. The terminology also refers to people, things, or events that researchers make inferences upon. The population of study in this research entails SMEs within Embu County. The county has approximately 600 SMEs. However, the study will sample 170 enterprises in Embu County using a stratified random technique.

# 3.4 Sampling Design

One aspect that differentiates researches entails the sampling approach for obtaining the study's sample size. Bougie and Sekaran (2013) define sampling as choosing an adequate number of the correct elements from the population. Research on the sample and an understanding of its characteristics enables the researcher to take a broad view of such properties or characteristics to the population elements. Rahi (2017) states that the two broad categories of sampling include probability and non-probability sampling techniques. Steps taken towards selection include defining the population, determining the sample frame, determining the sampling design and the appropriate sample size then executing the sampling process.

The sampling frame points to a physical representation of all the elements in the population from which the sample is drawn. Although the sampling frame is crucial in listing each component of the people, it may not always be current or updated. The sampling frame for this exploration was obtained from the 2021 Kenya Bureau of Statistics data on Embu County. The researcher had enough time to collect comprehensive and relevant data to make inferences through the sample size.

#### 3.5 Data Collection

Data collection stood out as the study's integral part, hence selecting the best and appropriate data collection method. The two major data sources included primary data directly obtained from the field by the researcher and secondary data derived from past resources details in research articles or books. The study utilized both primary and secondary data. The reason for using preliminary data lies in the ability of such data to offer accuracy in research. The researcher gets direct and updated information from the sample population under study. The study also used secondary data in analyzing the study question. Secondary data, which denotes already collected data, aids in providing literature essential in building the current study. Secondary data included past researchers on the same subject. The data served the purpose of complementing the primary data and offering a scholarly basis for the current research.

In this study, the research utilized questionnaires to collect data. Boparai et al. (2018) state that questionnaires stand out as the quickest and most straightforward approach to data collection. Considering the study's sample population's nature, the research used questionnaires to collect data

from the participants. Section A included the background information, Section B, financial literacy

questions, and section C performance questions for the questionnaires.

3.6 Data Analysis

The next step after collecting data in research is the analysis of the same data. Data analysis allows

for the interpretation of data. Data analysis entails checking for errors in the study, any omission

incurred, and making necessary corrections and adjustments. The research also aids in determining

whether the study achieved the set objectives. The study will use Statistical Package for Social

Sciences (SPSS) software to input and code the raw data for analysis purposes. However, the study

computed the data using both descriptive and inferential analysis methods. The descriptive analysis

method encompassed means and percentages that indicate the frequency of responses of the various

items detailed in the questionnaire. Inferential statistics was also used to analyze the existing

association between the two studies, financial literacy, and firm performance.

3.6.1 Analytical Model

The multiple regression models to determine the association between financial literacy and

financial performance (Return on equity) is adopted. The model of this study is as follows:

 $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$ 

Where: Y = Dependent variable ((Return on Equity))

 $X_1$ ,  $X_2$ , and  $X_3$  = Independent variables

X1 = Financial literacy was evaluated by five point Likert scale

 $X_2$  = Inflation (Rate of Inflation) was evaluated by Annual inflation rate

 $X_3$ = Annual GDP rate

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 $\alpha$  = Constant,  $\epsilon$  = error term

 $\beta$ 1,  $\beta$ 2,  $\beta$ 3 = Regression coefficients or alteration included in Y by each X value

The dependent variable is ROE of the SME's whereas the independent variables are the financial literacy.

# **3.6.2** Tests of Significance

The enquiry employed T statistic since the population is at 95% confidence level. A t-test's statistical importance pointed out whether or not the variance between two variables' means probably replicates an "actual" variance in the population from which the sets was picked.

## CHAPTER FOUR: DATA ANALYSIS RESULTS AND DISCUSSION

#### 4.1 Introduction

The study was carried out to access the effect of financial literacy on the financial performance of SME's in Embu County. Specifically, the study looked into financial literacy that broadly encompassed budgeting, debt literacy, numeral skills and monetary management skills together with inflation rate and annual GDP rate to establish their influence on financial performance of the SMEs. This chapter focused on data analysis, interpretation and presentation by presenting a discussion of background information, descriptive statistics, regression analysis and a discussion of the findings. The secondary data utilized for the study covered a 5-year period from 2016-2020.

## **4.1.1 Response Rate**

The study response rate is as presented in the table below.

**Table 4.1 Response Rate** 

Response	Frequency	Percentage	
Returned		152	89.41
Unreturned		18	10.59
Total		170	100

**Source: Primary Data, 2021** 

Findings from the study response rate revealed the study achieved a response rate of 89.41%. According to Mugenda and Mugenda (2011), a response rate of 70% in a study should be considered excellent for data analysis, interpretation and inference. Hence the response rate from the study implied that data collected was suitable for analysis, interpretation and inference.

# **4.2 Demographic Information**

The study sought to know the general information of the respondents that included: SME years of operation, business structure, number of employees, age, gender, level of education and working experience.

This information was important to the study as it helped to understand the general characteristics of the respondents which was important in establishing their suitability as informants as well as help the researcher draw valid conclusions.

# **4.2.1 SME Years of Operation**

The study sought to determine the length of existence of the SME's under study. Findings from the study are as presented in figure 4.1 below.



Figure 4.1 SME Years of Operation Source: (Primary Data, 2021)

From the study findings it was discovered that most of the SME's had been n operational for a period of time between 6-10 years, 28.3% of the SME's had been in existence for 11-15 years, 17.8% of the SME's had been in operation for a period between 1-5 years, 16.6% of the SME's

had been in operation for a period over 15 years while 5.6% of the SME's had been in operation for a period less than a year. These results indicate that most of the SM's have in existence for a considerable long time thus it implied that the SME's had been around long enough to be able to experience the impact of financial literacy on their businesses and hence it made them a good source of information for the study.

#### **4.2.2 Business Structure**

The study sought to understand the business structure of the various SME's under investigation. Findings from the study are as shown in the figure below.

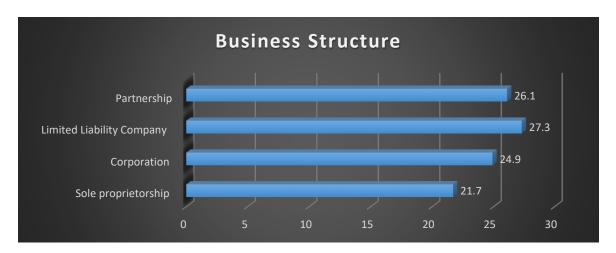


Figure 4.2: Business Structure

Source: (Primary Data, 2021)

From the figure 4.2 it was evident that a majority of the SME's were a limited liability company accounting for 27.3 of the total SME's investigated, 26.1% were paternerships,24.9% were corporations while 21.7% were sole proprietorships. These findings revealed that the study was able to pool from a wide range of business structures thus making the study findings rich with vast information from different perspectives.

# 4.2.3 Number of Employees

The study also sought to know how many employees each of the SME's employed. The findings from the study are as shown in the figure below.

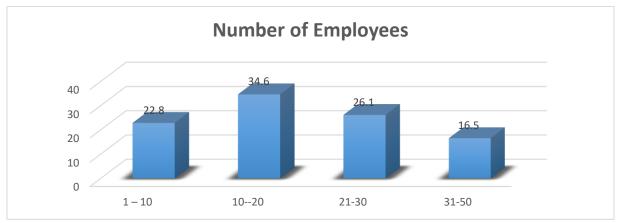


Figure 4.3 Number of Employees Source: (Primary Data, 2021)

From the study findings it was clear that most of the SME's employed 10-20 employees accounting for 34.6% of the SME's in the study, 26.1% of the SME's employed 21-30 people, 22.8% of the SME's employed 1-10 people while 16.5% of the SME's employed 31-50 people. These results show that most of the SME's employed between 10-30 people an indication that the SME's were medium to large in their size.

## 4.2.4 Age

The study also wanted to know the various age categories of the respondents. Results from the study is as shown in the figure below.

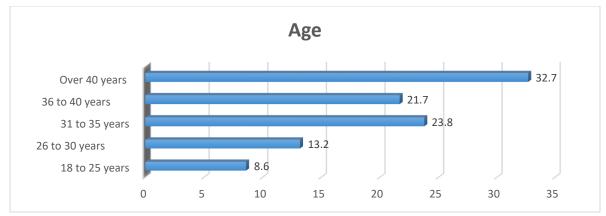


Figure 4.4: Age Source: (Primary Data, 2021)

Figure shows that the largest number of respondents 32.7% were over 40 years, 23.8% were aged between 31-35 years, 21.7% were aged 36-40 years, 13.2% were aged 26 to 30 years and 8.6% were aged 18 to 25 years. Despite most of the respondents been aged 31 years and above, a substantial number of respondents were represented from all ages. This shows that the study pooled responses from all age categories.

#### **4.2.5 Gender**

The study also sought to find out the gender of the respondents. The findings of the study are as shown in the figure below.

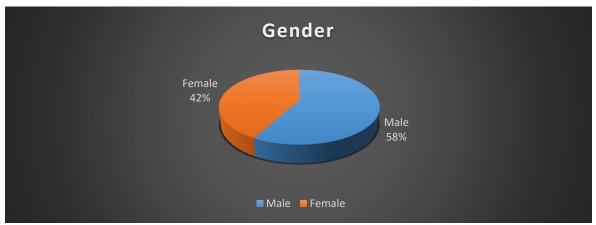


Figure 4.5 Gender

Source: (Primary Data, 2021)

Results from the study show that male respondents accounted for 58% of the respondents while the female respondents were 42%. This is an indication that a majority of the people in the study were male.

#### 4.2.6 Level of Education

The study also wanted to determine the level of education of the respondents. Results from the study are as shown in the figure below.

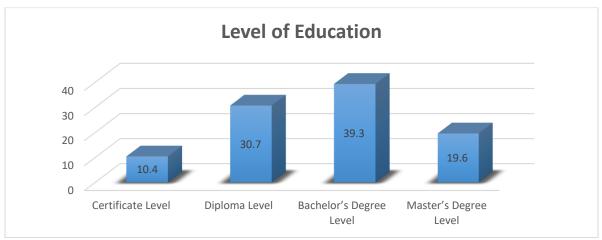


Figure 4.6: Level of Education Source: (Primary Data, 2021)

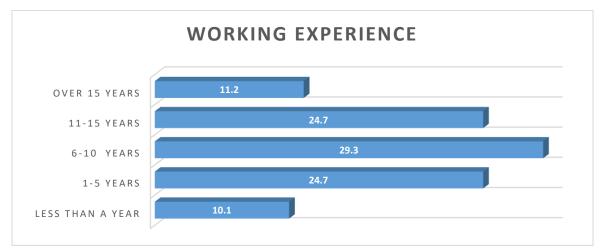
From the study findings it was shown that most of the respondents 39.3% were bachelor's degree holders, 30.7% of the respondents had a diploma level of education, 19.6% of the respondents were master's degree holders while only 10.4% of the respondents had a certificate level of education.

These findings indicate that a majority of the respondents had a diploma or higher level of education and thus implying that most of the respondents were in a position to understand the topic under investigation.

## **4.2.7 Working Experience**

The study also sought to establish how long the respondents had worked in the various SME's.

Figure 4.7 shows the findings of the study.



**Figure 4.7 Working Experience** 

Source: (Primary Data, 2021)

The findings from the study revealed that 29.3% of the respondents had a working experience of 6-10 years, 24.7% had a working experience of 1-5 years and 11-15 years respectively, 11.2% had a working experience of over 15 years while 10.1% had a working experience of less than a year. These findings reveal that a substantial number of respondents had a working experience of 6 years. This was an indication that the respondents had worked in the SME's long enough to understand factors that affect their financial performance hence this made the respondents a good source of information.

## 4.3 Budgeting

The researcher sought to investigate to what extent had budgeting been implemented in the SME's as part of value chain network and activities of financial literacy. Respondents were asked to rate their opinion towards certain statements that are associated with budgeting in the SMEs. These

responses were measured with the use of a Likert scale that was divided on a 5-point a where,1-very great extent,2- great extent,3- moderate extent,4- small extent,5-very small extent.

**Table 4.2 Budgeting** 

Budgeting	Mean	Standard Deviation
The business periodically assess it financial resources (cash)	1.76	0.32
The business determines its periodic expenses	1.94	0.73
The business sets its monthly, quarterly and annual goal	1.56	0.26
The business creates business plan	1.53	0.48
The business tracks its progress	1.61	0.71
Average Mean	1.68	0.5

Source: (Primary Data, 2021)

From the table it was clear that on average the respondents agreed to a great extent that their individual SME's engaged in budgeting as a value chain activity as shown by the mean of 1.68 and standard deviation of 0.5.

The respondents further pointed out that business creating a business plan was the frequent budgeting activity in which the SME's engaged in which they agreed to a great extent as shown by the mean of 1.53 and standard deviation of 0.48. The business determining its periodic expenses was the least budgeting activity in which the respondents SME's engaged in as indicated by the mean of 1.94 and standard deviation of 0.73.

## **4.4 Debt Literacy**

The researcher sought to determine to what extent had debt literacy been implemented in the SME's as part of value chain network and activities of financial literacy. Respondents were asked

to rate their opinion towards certain statements that are associated with debt literacy in the SMEs. These responses were measured with the use of a Likert scale that was divided on a 5-point a where,1- very great extent,2- great extent,3- moderate extent,4- small extent,5-very small extent.

**Table 4.3: Debt Literacy** 

Dobt Litomory		Standard	
Debt Literacy	Mean	Deviation	
The business owner understand interest on debt	2.76		0.67
The business owner understand the use of a credit card	2.33		0.58
The business owner understand fees on debt incurred	2.86		0.41
I am able to judge my debt position to avoid excessive debt loads	3.11		0.93
I am able avoid high-cost borrowing	3.23		0.03
Average Mean	2.858		0.524

Source: (Primary Data, 2021)

The study determined that on average the respondents acknowledged that their SME's engaged in debt literacy activities to a moderate extent as shown by the mean of 2.858 and standard deviation of 0.524.

The respondents agreed to a great extent that the debt literacy skills that the SME's engaged in more was understanding the use of credit cards as shown by the mean of 2.33 and standard deviation of 0.58.

The respondents also acknowledged that the least debt literacy skill that the SME's engaged in was avoiding high cost borrowing which they acknowledged was practiced to a moderate extent as shown by the mean of .23 and standard deviation of 0.03.

#### 4.5 Numeral Skills

The researcher sought to determine to what extent had numeral skills been implemented in the SME's as part of value chain network and activities of financial literacy. Respondents were asked to rate their opinion towards certain statements that are associated with numeral skills in the SMEs. These responses were measured with the use of a Likert scale that was divided on a 5-point a where,1- very great extent,2- great extent,3- moderate extent,4- small extent,5-very small extent.

**Table 4.4: Numeral Skills** 

Numeracy Skills	Mean	Standard Deviation
We have an understanding on numbers	1.68	0.89
We have an understanding counting	1.58	0.15
We are able to solve number problems	1.83	0.97
We have the basic knowledge of budgeting	2.45	0.71
I have the ability to interpret mathematical information	3.27	0.87
Average Mean	2.162	0.718

Source: (Primary Data, 2021)

Finding from the study show that the respondents on average agreed to great extent that they had numeral skills as shown by the overall mean of 2.162 and standard deviation of 0.718. The respondents acknowledged t a great extent that the numeral skills that the possessed more was their ability to understand counting.

The least numeral skill that the respondents practiced was having the ability to interpret mathematical information which they agreed they did to a moderate extent as shown by the mean of 3.27 and standard deviation of 0.87.

#### **4.6 Money Management Skills**

The study also sought to establish to what extent had money management skills been implemented in the SME's as part of value chain network and activities of financial literacy. Respondents were asked to rate their opinion towards certain statements that are associated with money management skills in the SMEs. These responses were measured with the use of a Likert scale that was divided on a 5-point a where,1- very great extent,2- great extent,3- moderate extent,4- small extent,5-very small extent.

**Table 4.5: Money Management Skills** 

Money Management Skills	Mean	Standard Deviation
The business is able to save	2.62	0.29
The business is able to invest	2.28	0.13
The business is able to spend as per the budget	2.83	0.33
The business is able to document cash received and spent	1.91	0.24
The business is able to document cash transactions	1.73	0.56
Average Mean	2.274	0.31

Source: (Primary Data, 2021)

The respondents acknowledged on average that they had money management skills to a great extent as shown by the average mean of 2.274 and standard deviation of 0.31.

The respondents acknowledged to a great extent that the money management skill they engaged in most was the business ability document cash transactions as shown by the average mean of 1.73 and standard deviation of 0.56.

The respondents stated that the least money management skill they practiced was been able to spent as per budget which they indicated they practiced to a moderate extent as shown by the mean of 2.83 and standard deviation of 0.33.

## **4.7 Descriptive Statistics**

The study utilized descriptive statistics to summarize and describe the secondary data that was used in a more meaningful way. Among the descriptive statistics that the study looked into include as mean, standard deviation, minimum and maximum. The mean was used to show the average values of various data points. Standard deviation was used to measure variability of the data set. Thus the standard deviation was used in the study to measure the dispersion of the data from the mean. Standard deviations less than the mean are an indication that most of the values were clustered around the mean while standard deviations greater than the mean are used to indicate that data was more spread out from the mean. The minimum was used to show the least number in the data set while the maximum was used to indicate the largest number in the dataset. The table below presents the descriptive statistics of the study.

**Table 4.6: Descriptive Statistics** 

				Standard	
	Minimum	Maximum	Mean	Deviation	
Inflation Rate	4.69	4.69	5.898		1.31
Annual GDP(Log)	7.59	7.44	9.23		2.87
Return on Equity(log)	-11.58	8.1	2.941		1.077

Source: (Secondary Data, 2021)

Finding from the study indicate that the mean for inflation over the five-year period was 5.898 with a standard deviation of 1.31. Annual GDP had an average mean of 9.23(Log) over the five-year period with a standard deviation of 2.87(Log). Return on Equity for the SME's had a mean of 2.941 and standard deviation of 1.077.

#### 4.8 Regression Analysis

The study used regression analysis to identify how the dependent variable is influenced by the independent variables. Through the analysis it become apparent which factors have more influence on the dependent variable and which factors can be ignored. In the study regression analysis was used to assess the assess the influence of financial literacy, inflation rate and annual GDP rate on return on equity of the SME's. The findings from the study were presented in model summary, Anova and coefficients tables. The model summary table provides information about what amount of variability in the dependent variable can be explained by the dependent variable. The Anova table provides information about the variability of the model and assess if the model is statistically significant to predict the dependent variable. The coefficient table gives the beta values of each independent variable which show the magnitude each independent variable affects the dependent variable. Findings from the study are presented in the table below.

**Table 4.7: Model Summary** 

Model Summary <sup>b</sup>							
Model		D	D Canara	Adjusted D. Cauero	Std. Error of the		
		K	R Square	Adjusted R Square	Estimate		
	1	0.864 <sup>a</sup>	0.764	0.741	0.112		

Source: (Secondary Data, 2021)

Findings from the model summary show that the r square for the model was 0.764. This implied that 76.4% of the variation in return on equity was due to financial literacy, inflation rate and annual GDP rate.

Table 4.8: Anova

	ANOVA <sup>a</sup>								
Model				um of uares	df	Mea Squa		F	Sig.
		Regression		1753.47	3	5	84.49	104.451	.000 <sup>b</sup>
	1	Residual		833.78	149	5.5	59584		
		Total		2587.25	152				

Source: (Secondary Data, 2021)

From the Anova table it was revealed that F-Statistic was 104.451 at 0.000 level of significance. This level of significance was less than 0.05. Thus this implied that the model fit was statistically significant to predict return on equity based on financial literacy, inflation rate and annual GDP rate.

**Table 4.9: Coefficients** 

			Coefficientsa			
			dardized	Standardized		
Model		Coeffi	icients	Coefficients	t	Sig.
		В	Std. Error	Beta		
	(Constant)	1.418	0.886		1.386	0
1	Financial	nancial 0.107	0.291	0.924	0.368	0
	Literacy	0.107	0.291	0.924	0.508	U
	Inflation Rate	-0.569	0.377	0.541	-1.509	0
	Annual GDP	0.355	0.108	0.162	3.287	0

Source: (Secondary Data, 2021)

From table 4.9 it can be deduced that the model fit for the data is;

 $Y = 1.418 + 0.107X_1 - 0.569X_2 + 0.355X_3$ 

Where;

Y = Return on Equity

X1 = Financial literacy will be evaluated by five point Likert scale

 $X_2$  = Inflation (Rate of Inflation) will be evaluated by Annual inflation rate

 $X_3$ = Annual GDP rate

## 4.9 Discussion of the Findings

Findings from the study revealed that 76.4% of the variation in return on equity was due to financial literacy, inflation rate and annual GDP rate. The results of the study also showed that a model fit with financial literacy, inflation rate and annual GDP rate was statistically significant to predict return on equity.

The study established the model constant as 1.418 which implied that if all other factors were held constant then return on equity would be 1.418. Financial literacy was revealed to be a positive predictor on return on equity as shown by the beta vale of 0.107. Inflation rate was determined to be negative predictor of return on equity as shown by the beta value of -0.569. Annual GDP was established to be a positive predictor of return on equity as shown by the beta value of 0.355.

The findings of this study agree with those of Cherugong (2015) also investigated the impact of financial literacy on the financial performance of SMEs in Trans Nzoia County in Kenya. Results from his study showed that firms with financial literacy performed better thus showing a positive association between financial literacy and financial performance.

The findings of the study were also in agreement with those of Chepngetich (2016) whose study investigated the link between financial literacy and the performance of small and medium enterprises in Uasin Gishu County. Findings from this study showed that financial literacy had a substantial impact on financial performance of the SME's.

The findings of this study are also in agreement with those of Otieno (2016) who investigated the influence of fiscal knowledge on the fiscal performance of SMEs. Findings from his study showed that high levels of financial literacy among SMEs owners result in the greater performance of such SMEs.

CHAPTER FIVE: SUMMARY, CONCLUSION AND

RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the study based on the objective of the study which examine

the effect of financial literacy on the performance of Small and Medium Enterprises in Embu

County. The chapter further presents conclusions, recommendations, limitations of the study and

suggestions for further research.

**5.2 Summary of the Findings** 

Findings from the study showed that on average the respondents had budgeting skills to a great

extent as shown by the overall mean of 1.68 and standard deviation of 0.5. Results from the study

also showed that on average the respondents had debt literacy knowledge to a moderate extent as

shown by the overall mean of 2.858 and standard deviation of 0.524. Results from the study also

showed that on average the respondents had numeral skills to a great extent as indicated by the

mean of 2.162 and standard deviation of 0.718. Results from the study also showed that the

respondents had money management skills to a great extent as shown by the mean of 2.274 and

standard deviation of 0.31.

Findings from the regression analysis showed that 76.4% of the variation in return on equity was

due to a model fitted with financial literacy, inflation rate and annual GDP rate as predictors.

Further the Anova results revealed that the model fit with financial literacy, inflation rate and

annual GDP rate was statistically significant to predict return on equity. The results also showed

that financial literacy and Annual GDP are positive predictors for return on equity as shown by the

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beta values 0.107 and 0.355 respectively. The findings from the study also showed that inflation rate had a negative impact on return on equity as shown by the beta value -0.569.

#### 5.3 Conclusion

The study concluded that financial literacy has a positive effect on financial performance of the SME's. This is because through literacy skills such as budgeting assists the SME's in planning for the business, tracking the expenses and managing resources. The numeral skills were deemed essential as the helped the SME's understand the number for running the businesses. Debt literacy was concluded to be important because the SME's are able to understand issues of borrowing and debt.

The study also concluded that annual GDP had a positive effect on financial performance of the SME's. This is because an increase in the annual GDP indicates a favorable growth in the economy which implies favorable conditions for the SME's to operate in. The study also concluded that inflation rate had a negative impact on financial performance of SME's. This is because inflation causes unfavorable conditions in the economy for SME's to operate in.

#### **5.4 Recommendation**

The study established that financial literacy had a positive effect on financial performance. Thus the study recommends that the owners of the SME's in Embu county continually participate in financial literacy programs to ensure that they are up to date with the necessary skills required to run the business.

The study also determined that Annual GDP rate had a positive impact on financial performance and inflation rate had a negative impact on financial performance. Thus the study recommends that the government through the Central Bank set up policies to stimulate the economy. This is to enable the economy to growth hence leading to growth of the Annual GDP and further cushioning the economy from bad inflation rates.

#### **5.5 Limitations of the Study**

Part of the data that was utilized for the study was secondary sourced from the central bank statistics. Thus the study findings were subject to the accuracy of the data as presented in the Central bank website. The study was also subject to bias as some of the respondents were unwilling to participate in the study. Also the researcher could not verify the accuracy of the data given by the respondents.

The time also set aside for carrying out the investigation was not adequate. Thus, the researcher didn't have enough time to interrogate the secondary data as it was sourced. However, the researcher did his best with the time set aside.

## **5.6 Suggestions for Further Research**

The study established that 76.4% of the variation in return on equity was due to a model fitted with financial literacy, inflation rate and annual GDP rate. Thus it is important that other studies investigate what other factors account for 23.6% of the variation on return on equity.

The study was limited to a 5-year period from 2016-2020. Thus the findings from this study can be inferred to this time period only. Hence it is important for other researchers to investigate other time periods as well to see if the results hold.

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## **APPENDICES**

# APPENDIX I: QUESTIONNAIRE

This questionnaire seeks to collect data on financial literacy on financial performance of SME's in Embu County. The collected information will be utilized solely for academic reasons and used confidentiality. Please provide all the required details in the questionnaire by ticking  $(\sqrt{})$  on the choices provided and/or filling questions requiring your personal opinion in the blanks provided.

## **SECTION A: DEMOGRAPHIC INFORMATION**

1. For how long has the SM	E been in existence/ operation?	
Less than a year [ ]	1-5 years [ ] 6-10y	ears [ ]
11-15 years [ ]	Over 15 years [ ]	
2. What category of business	s structure does your business fall?	
Sole proprietorship [ ]	Partnership	[ ]
Corporation [ ]	Limited Liability Company	[ ]
3. How many employees wo	ork in the sme?	
1 – 10 [ ]	11- 20 [ ]	
21 -30 [ ]	31- 50 [ ]	
4. Indicate your age group.		
18 to 25 years [ ]	26 to 30 years [ ]	31 to 35 years [ ]
36 to 40 years [ ]	Over 40 years [ ]	

5. Which	of the following is	your gender?							
Male	[ ]	Female	[ ]						
6. What is	6. What is your highest level of education?								
Certificat	e Level	[ ]	Diploma Level		[	]			
Bachelor'	's Degree Level	[ ]	Master's Degree Level		[	]			
7. For ho	w long have you w	orked for the Sl	ME?						
Less than	a year [ ]	1-5 years	[ ] 6-10yea	rs [	]				
11-15 yea	urs []	Over 15 years	s [ ]						
SECTIO	N B: FINANCIAI	LITERACY							
8. K	indly indicate on a	Scale of 1 – 5 t	o what extent your SME	has	adoj	oted	the f	ollov	wing
value cha	in networks and ac	tivities							
Key:	Very great extent	[1], great exten	t [2], moderate extent [3]	], sm	all e	xten	t [4],	ver	y small
extent [5]	(Kindly tick ( $\checkmark$ ) a	s appropriate.							
Statem	ent			1	2	3	4	5	
Budget	ting								
1. (cash)	The business peri	odically assess	it financial resources						
2.	The business deter	mines its period	dic expenses						
3.	The business sets i	ts monthly, qua	nrterly and annual goal						

4.	The business creates business plan			
5.	The business tracks its progress			
Debt 1	Literacy			
6.	The business owner understand interest on debt			
7.	The business owner understand the use of a credit card			
8.	The business owner understand fees on debt incurred			
9.	I am able to judge my debt position to avoid excessive			
debt lo	pads			
10.	I am able avoid high-cost borrowing			
Nume	racy Skills			
11.	We have an understanding on numbers			
12.	We have an understanding counting			
13.	We are able to solve number problems			
14.	We have the basic knowledge of budgeting			
15.	I have the ability to interpret mathematical information			
Mone	y Management Skills			
16.	The business is able to save			
17.	The business is able to invest			
18.	The business is able to spend as per the budget			
19.	The business is able to document cash received and spent			
20.	The business is able to document cash transactions			

# THANK YOU SO MUCH

# APPENDIX II: DATA COLLECTION FORM

	2	2	2	2	2
	0	0	0	0	0
	2	1	1	1	1
Statement	0	9	8	7	6
Return on Equity					
Inflation rate					
GDP rate					
Increased market share					