THE EFFECT OF FINANCIAL LITERACY ON FINANCIAL PERFORMANCE OF SMALL AND MICRO ENTERPRISES IN KIBERA SLUMS, NAIROBI COUNTY

BY

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DECLARATION

This research project is my original work and has not been presented for examination or award in any other University.

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D61/67645/2013

This research project has been submitted for examination with my approval as the University Supervisor.

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<td>NSE</td>
<td>Nairobi Securities Exchange</td>
<td>Return on assets</td>
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<td>ROA</td>
<td>Return on assets</td>
<td>Return on Capital</td>
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<td>ROC</td>
<td>Return on Capital</td>
<td>Return on Equity</td>
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<td>ROE</td>
<td>Return on Equity</td>
<td>Small and Medium Sized Enterprises</td>
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<td>SME</td>
<td>Small and Medium Sized Enterprises</td>
<td>Statistical Package for Social Sciences</td>
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ABSTRACT

Financial literacy has been identified as one of the key competencies required for the establishing, management and thriving of SMEs. However, the exact effect they have on the financial performance of SMEs hasn’t been fully established by the available literature thus the need for further research in this area. This study sought to establish the influence of financial literacy on the financial performance of SMEs in Kibera Slums, Nairobi County. A descriptive survey design was adopted in conducting the study. The study population entailed the SMEs in Kibera slum of which a representative sample was selected through simple random sampling technique. The main study instrument was a questionnaire which comprised of both open ended and close ended questions each addressing the study's objectives. The data collected was analyzed using SPSS and the significance of the results tested using inferential statistics such as analysis of the variance, Z-tests, T-test and F-tests. The study found that financial literacy levels remained low among the SME owners. The study further found out that financial literacy and size of the firm to had significant positive influence on the financial performance while the influence of the amount of capital invested had insignificant influence. The results of the multiple regressions revealed that there is a significant strong positive relationship between financial literacy, capital invested, size and financial performance of SMEs. From the results, the study concluded that high levels of financial literacy, capital invested and size of the SMEs led to higher financial performance. The study recommends that the County government to invest in instilling financial literacy knowledge to SMEs owners and the SMEs owners also to ensure that they be financially literate so as to improve the financial performance of the SMEs. Future research was recommended to be done using longitudinal study designs in order to provide a better assessment of how the study variables change over time.
CHAPTER ONE: INTRODUCTION

1.1 Background of the Study
The economic and social environments in which people take financial decisions has changed drastically in the recent past and this change is set to continue with the ever changing technology. This has led to a rapid growth and sophistication of the financial systems (Mitchell, 2011). However, there is lack of understanding of these financial systems and their complexity. This has been evidenced by reports of cases of financial difficulties among firms. The need for financial literacy among entrepreneurs and business owners has henceforth become an issue of interest in both developed and developing economies due to this change in the finance landscape (Hilgert & Hogath, 2003). Financial literacy refers to the knowledge of money and financial products that people can apply to financial choices in order to make informed decisions about how to handle their finances (Basu, 2005). Though it might not be an absolute state, it enables individuals to be able to respond effectively to ever changing personal, social and economic circumstances. Financial literacy is hypothesized to be a major determinant of the firm’s success or failure. It is for this reason, many individual nations have created task forces to study and evaluate the level of the financial literacy of their citizens (Alessie, Van & Lusardi, 2011).

Various theories have tried to explain the relationship between financial literacy and financial performance. These theories include exchange theory, prospect theory and transaction cost theory. Exchange theory holds that interpersonal, interactional, procedural and informational factors are linked to literacy skills. Hence, the higher the interactions, the higher the level of literacy the individual will have. Transaction cost theory holds that lack of financial skills will hereafter cause an increase in transaction costs, influencing negatively the performance. It is the
financial literacy skills which will enable the owner of the firm to identify transactions which will increase the financial performance of the firm. Prospect theory holds that decisions made by owners should be done with some level of expertise, and this requires financial literacy knowledge.

SMEs are widely recognized across the world for their role in the social, political and economic development. The importance of the sector is particularly apparent in its ability to provide reasonably priced goods, services income and employment to a large number of people (Kauffmann, 2006). In Kibera for example, the SMEs are a source of income for many individuals who have failed to acquire employment elsewhere. Though the Small and Micro Enterprises have a large market of their goods from the large population of Kibera slums, they need to develop, manage and monitor their businesses effectively to enhance their market performance.

1.1.1 Financial Literacy

Financial literacy is termed as the understanding and knowledge of the financial principles needed to make informed financial decisions and products which impact one's financial wellbeing (Basu, 2005). It includes the ability to make informed judgments and to take effective decision regarding financial matters (Worthington, 2005). OECD (2005) also adds on stating that financial literacy must involve not only the investors but also the customers, both having the knowledge of financial products and concepts and their ability to consider financial risks in their decision making and to make other effective actions to improve their financial.

Financial literacy is essential in helping individuals to identify vital financial issues and behaviors that support effective management of financial resources (Hilgert&Hogath, 2003). It enables one to have the knowledge of critical financial concepts for instance, types of interests,
risks and returns of investments, diversification of investments, among others. Hence it equips the ability to understand important financial products needed in life including various bank products, basic investments, ideas and saving plans. It improves how individuals are able to examine and appreciate money and financial issues. This aids greatly in making effective financial decisions regarding financial managements (Greenspan, 2001).

Financial literacy not only enables one make decisions while confident and sure, but also assists individuals to respond competently to changes that affect their everyday financial wellbeing including events in the general economy like collapse of financial markets, rising unemployment and the threat of rapid inflation (Hilgert&Hogath, 2003). Hereafter for any financial system to be effective, financial literacy is required in order to avoid pitfalls and to take appropriate actions to improve the firm's present and future conditions (OCED, 2009).

Having the numeracy and capacity to do calculations, understanding the financial systems and understanding the risks of financial decisions are some of the fundamental concepts about financial literacy. Common measures of financial literacy being money basic knowledge, financial management, debt, savings, insurance and investment literacy (Rooij, Lusardi, &Alessie, 2007). As argued by Mandell (2008), there should be more emphasis on raising up the level of financial literacy as this would help in achieving many objectives of organizations.

1.1.2 Financial Performance

Financial performance refers to the total economic results of activities undertaken by an organization, whether directly or indirectly (Lusch and Laczniak, 1989). It is the efficiency and effectiveness of the organization (Letting, 2009). Specifically, financial performance of a firm determines how well the business is doing in wealth creation and acquiring of resources (Komppula, 2004). Daft (1997) attributes performance to the competency of an organization to
transform the resources within the firm in an efficient and effective manner to achieve organization goals.

To measure financial performance, varied measure approaches have been adopted by various researchers including sales revenue, profits, return on investment/ equity (Wijewardena, Zoysa, Fonseka&Perera, 2004). The measures include, return on sales, combination of ROI and ROS (Pegels& Yang, 2000) and by its liquidity which is the amount of cash a company can put its hands on quickly to settle its debts as adopted by Gill (1990). Colvin (1991) provide various financial measures which include sales level, sales growth rate, cash flow, return on shareholder equity, gross profit margin, net profit from operations, and ability to fund business growth from profits.

Financial performance majorly influences the firm's growth. The enterprise growth is the unification of quantity and quality. The increase of quantity is embodied in the extension of enterprise scale such as the increases of sales volume, market share, production value and profit. Enterprise growth is embodied on the enhancement of enterprise quality, which includes the technological innovation, advancement and utilization (Sun, 2004). Growth is often closely associated with firm overall success and survival (Johannisson, 1993). Hence growth is a measure of performance (Ochieng, 2012).

1.1.3 Financial Literacy and Firm Performance

Over the last two decades, scholars and policy makers in both developed and developing countries have recognized that financial literacy is critical for the establishment and survival of small businesses (Wise, 2013). The exact role of financial literacy on performance is what the scholars have tried to determine.
Financial literacy is theorized to influence positively the performance of SMEs. Various theoretical perspectives have informed the debate on firm performance. Resource-based theories argue that a firm’s resources and capabilities are the fundamental determinants of performance (Peteraf et al, 2003). In order to manage these resources effectively, one has to be financially literate. From these speculations, the firm’s performance is highly dependent on financial literacy.

Empirically, studies have also confirmed the positive association between financial literacy and financial performance. A study by Alessie, Van, and Lusardi (2011) found out that the less financially literate households may be more likely, unknowingly commit financial mistakes, less likely to engage in recommended financial practices and less likely to be able to cope with sudden economic shocks (Lusardi & Mitchell, 2012). These findings are consistent with Olima, (2013) and Mwambia (2014) who also established a positive link between financial literacy and returns. Few studies have however been able to construct sophisticated measures of financial literacy and definitively establish causal links between financial literacy and returns (Hilgert, Hogarth & Beverly, 2003). As a result it is difficult to determine the exact influence financial literacy has on SMEs in Kibera Slum, Nairobi County.

1.1.4 Small and Micro Enterprises in Kibera Slums

Nairobi County is home to Nairobi city, the capital of Kenya. Nairobi is Kenya's principal economic, administrative, and cultural center and is one of the largest and fastest growing cities in Africa. Being the Kenyan capital, the national baseline survey (National Baseline Survey, 1999) indicated that about 17% of the total SMEs are located in Nairobi. According to the licensing record provided by Nairobi county licensing office (2014) there were 825 SMEs based in Kibera slum operating in service and manufacturing sectors (County Government of Nairobi,
2014). A large proportion of these SMEs are concentrated in densely populated areas, Kibera Slums being one of them.

The SMEs have been of great benefit not only to the economy but also to the society at large. In Nairobi County, SMEs employ over 4.6 million people which is over 30% of all employment and accounts for approximately 75% of all businesses. The sector also contributes 18.4% of the GDP and accounts for 87% of the new job creation (Kiveu, 2013). In Kibera, the SMEs is a source of income to many individuals. It has helped improve the livelihood of the people.

However, owing to their size and accompanying constraints thereof, SMEs in the county face challenges that impede their competitiveness and growth. This can be attributed to the fact that the SMEs sector is notoriously volatile and experiences a high degree of business closure and shrinkage as explained by Baard and Van Den Berg, (2004) and as a result the government has been making numerous efforts to assist the development of the SME sectors. The high SMEs mortality rate implies that SMEs are limited in their ability to create long-term sustainable employment and may also be responsible for the greatest number of job and wealth losses (Ahwireng, 2003). One of the challenges affecting these SMEs is financial illiteracy as noted by Wanjohi (2012). Due to this reason, it is highly essential that individuals be educated on the influence that financial literacy has on SMEs, in this case being Kibera Slums and the advantageous benefits of it.
1.2 Research Problem

In order for an SME to perform well, financial literacy is very essential. However, the nature of relationship between financial literacy and SMEs performance has been a subject of research and yet of debate among scholars. According to Rosenberg (1968), upon the advancement of contingency theory, the relationship between the financial literacy and financial performance is not linear but depends on the level of a third variable and by introducing moderators into bivariate relationships. Some scholars however argue otherwise stating that financial performance and SMEs have a direct linear relationship (Capuano, 2011). Theoretically, financial literacy aid in improved financial performance as depicted by transaction and prospects theory.

The SMEs have been of great benefit not only to the economy but also to the society at large. In Nairobi County, SMEs employs over 4.6 million people which is over 30% of all employment and accounts for approximately 75% of all businesses. The sector also contributes 18.4% of the GDP and accounts for 87% of the new job creation (Kiveu, 2013). In Kibera, the SMEs are a source of income to many individuals. However, owing to their size and accompanying constraints thereof, SMEs in Nairobi County face challenges that impede their competitiveness and growth. This can be attributed to the fact that the SMEs sector is notoriously volatile and experiences a high degree of business closure and shrinkage. The high SMEs mortality rate implies that SMEs are limited in their ability to create long-term sustainable employment and may also be responsible for the greatest number of job and wealth losses.

Empirical studies carried out however show contradicting information. Nunoo et al (2012) conducted a study on utilization of financial services by SMEs in Ghana. He found out that financial literacy improved greatly the utilization of financial services. Bruhn et al (2011) show
that financial literacy has a significant impact on the growth of firms in Bosnia. Eresia-Eke et al (2013) however on their study about the relationship between financial literacy of entrepreneurs and business growth, found out otherwise. They established that there was no correlation between financial literacy and performance of SMEs. These diverse findings indicate that the exact effect of financial literacy on performance hasn’t been fully established and hence need for further research.

Locally, Sabana, (2014) investigated the relationship between entrepreneur financial literacy, financial access, transaction costs and performance of micro enterprises in Nairobi County, Kenya. The study established that entrepreneur financial literacy had a statistically significant influence on enterprise performance. Mwambia (2014) studied the effect of financial literacy on financial returns of miraa farmers The study results were consistent with those of Lusardi and Mitchell (2011) who also found that financial literacy had significant effect on household income

Simil arly Mwaniki (2014) studied the influence of financial literacy training on financial performance of women self-help groups though the financial literacy and found out that financial literacy enhanced the record keeping and debt management among the women.

This shows that much focus has been given towards the effects of financial literacy in firms as evidenced by the studies. These studies however have failed to establish the relationship between financial literacy and the financial performance. This study will seek to conceptualize the relationship between the two variables and to answer the study question; what is the influence of financial literacy on financial performance of SMEs in Kibera?
1.3 Objective of the Study

The objective of this study was to determine the influence of financial literacy on financial performance of Small and Micro Enterprises in Kibera Slum, Nairobi County.

1.4 Value of the Study

This study is helpful to existing and potential entrepreneurs of SMEs since it lends assistance to the effect of financial literacy on the performance of a business in order to plan ahead. By exploring the impacts of financial literacy on the financial performance of a business, the study has enabled one to carry out scenario analysis before considering SMEs as a source of income. Additionally, the findings can enable the owners of SMEs to understand the importance of financial literacy hence improving their wellbeing and the wellbeing of the society also.

To academicians and researchers, the study has broadened the existing knowledge on the effect of financial literacy on financial performance and social economic lives, irrespective of their sources of incomes and present opportunities for further research.

At the policy level, the Government of Kenya, through Vision 2030 and the Micro and Small Enterprise Act, recognizes that micro enterprises are key drivers of economic growth. This study has contributed to policy formulation and implementation by providing empirical evidence on the combined roles of financial literacy, financial access and transaction costs on improving the performance of microenterprises.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction
This section reviews the existing theoretical and empirical literature on the effects of financial literacy on financial performance of firms. The chapter reviews different theoretical frameworks relating to the study, discussing their proposition and implication to the research variables. It also reviews the determinants of financial performance and the empirical literature with emphasis on the objective of the study, methodology and the results. The chapter finalizes by giving a summary of the literature and the research gap.

2.2 Theoretical Review
The study will be guided by theories which have previously been developed and that have called for more research on the subject over the years. These theories include Exchange theory, Transaction theory and Prospect theory.

2.2.1 Exchange theory
Exchange theory as proposed by Robson and Ladner (2006) holds that interpersonal, interactional, procedural and informational factors are linked to literacy skills. Hence, the higher the interactions, the higher the level of literacy the individual will have. Lusardi and Mitchell (2008) also supported this theory by their findings which indicated that financial literacy is higher among those who are working, and in some countries those who are self-employed as compared to those who are not working.

Therefore the difference in literacy levels among individuals as shown in this theory is as a result of exchange of information between the more literate and the less literate, financial education that may be offered in the workplace and the skills acquired on the job. As a result, in order for
one to be more financially literate, they have to increase their level of interactions with other personnel. According to this theory, the financial literacy of the SME owners will be more if they operate their businesses more and also increase their interactions. This will not only inform them of financial systems but also the trends and changes in the systems. This theory’s proposition to the study is that it tends to explain the difference in financial literacy among people and it also suggests on how to improve the literacy levels.

2.2.2 Transaction cost theory

Transaction theory as described by Polski et al, (2001) holds that organizations incur costs as they acquire, configure and utilize resources. This transaction costs reflect the costs of economic or organization both outside the firm and inside the firm. In addition to that, they are means by which one can measure the efficiency of different institutional designs in achieving economic outcomes in particular environments (Polski et al, 2001). In order for an individual to effectively manage transactions, they ought to have financial management skills.

Using the transaction theory framework, lack of financial skills will hereafter cause an increase in transaction costs, influencing negatively the performance. It is the financial literacy skills which will enable the owner of the firm to identify transactions which will increase the financial performance of the firm. Also, the management will be able to avoid in appropriate loans and debt. This will be enhanced by proper record keeping of any financial transaction taking place (Polski et al, 2001).

This theory is highly beneficial to the study in that, most SME owners in Kibera slum, due to their financial illiteracy, do not properly manage their transactions. This is due to their belief that they will ‘remember’ all the transactions and also transactions involving low amounts of money have no need to be monitored. This tends not to be true as it affects the financial performance,
for example through overspending, and also bad lending habits. Hence adoption of this theory will be recommended.

2.2.3 Prospect Theory

Prospect Theory was developed by Kahneman and Tversky, (1979) and it holds that decisions pertaining to financial matters of organizations are always between alternatives that involve risks (i.e., alternatives with uncertain outcomes) where the probabilities are known. This model theory is descriptive in that it tries to describe real-life choices rather than optimal decisions. Prospect theory therefore speculates that before the owner makes any financial decision, he/she has to consider majorly the risks involved.

This theory therefore holds that decisions made by owners should be done with some level of expertise, and this requires financial literacy knowledge. The theory’s proposition to the study is that individuals with financial literacy knowledge are able to make more informed decisions, hence are able to perform better financially. Hence adoption of this theory will enable the understanding of the effects of good decision making to financial performance.

2.3 Determinants of SMEs’ Financial Performance

There are a number of factors that have been shown to influence the performance of SMEs. These include; location of the SMEs, size, age, management practices and external factors.

2.3.1 Location of the SMEs

Location is defined by Orloff (2002) as economic situation and economic per capita, an indispensable component in shaping and determining the success, failure and effectiveness of business activities and entrepreneurship (Lucky, 2011). Therefore for an enterprise to be successful, strategic location is important. Strategic location may involve, good road network,
business of the area of the business, availability of raw material and accessibility to the business premises (Ilian, & Yasuo, 2005; Kala et al., 2010; Yancy & Christian, 2010).

Many small business developments are located in areas which are conducive for their business to operate. Strategic location is very important for firms, policy makers and business owner in their role in improving the financial performances of firms as posited by Lucky and Minai (2011). It is therefore a crucial factor impacting firms' performance in that proper location of a firm will increase its sales, reduce transaction costs and boost its performance.

2.3.2 Size of the Firm

The size of a firm can be measured in terms of the number of employees it has, the type of technology used, the number of capital invested in it or its market coverage (Pandey, 2005). Size affects a firm’s marketing capabilities, attitudes, needs, practices etc. which are important determinants of firms’ performance and success (Dean et al., 2000). The larger the firm, the more advantageous it will be in terms of acquiring resources. A large firm will have advanced equipment, adequate capital, more employees and also higher economies of scale.

This will highly enhance the financial performance of the SME more. On the contrary however, a small business will need less capital to finance its investment, whereas, a large business enterprise will need a lot of capital to plan and finance the investments, hence more flexible. This shows that the size of the firm greatly influences the returns. But it cannot be used solely as a method of comparison of levels of financial performances among businesses as it has no equity on how it is measured.
2.3.3 Age of the Firm

Age of a firm as described by Wakaba (2014) refers to the period of operation that a firm has been in operation. Age is a major determinant of performance in that it influences the type of technology, resources and competitive strategies used.

This is evidenced whereby the financial performance is relatively high in existing SMEs than new SMEs. The new SMEs will have to spend more so that they perform in the market (Santalo & Becerra, 2008). This is because the existing firms are aware of the market structures and have advanced technology. They therefore have an upper hand in terms of the competitive strategies and trust among the customers. However the exact linkage these business characteristics have on performance is still a topic under research and hence requires more study.

2.3.4 External Factors

These are external environmental factors which contribute to either the failure or success of the business enterprises (Mohd, 2005). These factors may include the number of competitors in the market and the competitive strategies they have employed. The factors have a strong impact on competencies and performance (Kuratko & Hodgetts, 2004). The performance of the SME will be higher when the firm has gained competitive advantage over the rival. If the external factors outweigh the firm, this may cause massive losses and could end up in collapsing of the firm.

This shows that external factors are a great determinant on firm performance as postulated by Colvin and Slevin (1989). According to Kader et al. (2009), it is unfeasible to fully cover the multiple dimensions of external factors in a single study. Therefore, in this study, the researcher concentrates on the economic factor, which is financial literacy and its influence on the financial performance.
2.3.5 Entrepreneurial Competencies

Baum et al. (2001) define entrepreneurial competencies as individual characteristics such as knowledge, skills, and/or abilities required to perform a specific job.” These skills determine how the entrepreneur relates with not only the customers but also the employees. Competencies enable the entrepreneur to conduct the business operations smoothly. Man and Lau (2000) have classified entrepreneurial competencies into six major areas: opportunity competencies, organizing competencies, strategic competencies, relationship competencies, conceptual competencies and commitment competencies.

Overconfidence however is a negative attribute of competency. It has been identified as a key factor affecting the level of financial returns. Odean (1998) describes overconfidence as the belief that a trader's information is more precise than it actually is. Self-attribution bias is attributing successful outcomes to own skill but blaming unsuccessful outcomes on bad luck as discussed in Miller and Ross (1975). Henceforth, the entrepreneur competencies need to be carefully evaluated and strategically planned for the financial performance to be improved. Studies however, fail to show the exact linkage between competencies and financial performances and this necessitates further research.

2.4 Empirical Review

Morara and Mureithi (2009) conducted a study on the challenges facing SMEs in Nairobi. This study employed stratified random sampling to collect data from 198 businesses using interviews and questionnaires. The data was analyzed descriptively and presented through figures, tables and percentages. The findings indicate that SMEs face the following challenges; in ability to manage financial systems, competition among themselves and from large firms, lack of access to credit, cheap imports, insecurity and debt collection.
Barte (2012), on a study on financial literacy in SMEs, also found out that financial literacy was directly linked to performance. The study was conducted using descriptive research survey design. Data was analyzed using descriptive statics and simple regression analysis. The study found out that Entrepreneurs had low levels of financial literacy as demonstrated lack of financial records, lack of monitoring of profit and losses and lack of cash management practices. The vendors were also confined to high interest loan. The study however did not show the exact influence of financial literacy on these SMEs.

Some studies however fail to establish the relationship between financial literacy on transaction costs and performance of small and medium enterprises. This is showed by a study conducted by Hoseini et al, (2012) on transaction costs of obtaining credit in rural Iran. Data was collected using observations, questionnaires and survey design. Simple linear regression was used to analyze the data. The study established that the transaction costs of receiving a loan are an equivalent to nine percent of the total loan size. The study also revealed that the contractual form, loan size, distances and borrower peculiarities were important determinants of transaction costs and not financial literacy.

Mengich et al (2012), conducted a study on the challenges of equity financing by SMEs in Kenya. The study aimed at evaluating the challenges faced by SMEs during equity financing. The study used a descriptive research survey design and data analysis was conducted by correlation analysis. The study found out that equity financing was constrained by low financial literacy, information asymmetries and transaction costs. The study however did not examine the relationship between financial literacy, equity financing and performance of the SMEs.
Wamugo, Muathe and Kosimbei (2013) also conducted a study on financial literacy investigating the relationship between capitals structures on the performance of non-financial companies listed in the Nairobi Securities Exchange (NSE), Kenya. The study employed an explanatory non experimental research design. A census of 42 non-financial companies listed in the Nairobi Securities Exchange, Kenya was taken. Feasible Generalized Least Square regression results revealed that financial leverage had a statistically significant negative association with performance as measured by return on assets (ROA) and return on equity (ROE).

Njoroge (2013) conducted a study on the relationship between financial literacy and business success among SMEs in Nairobi County. The study was conducted using a qualitative survey design and data collected using questionnaires. The data was later analyzed using descriptive statistics and simple regression analysis. The study found out that most of the entrepreneurs in Nairobi had some financial literacy and that in some cases those in formal SMEs were highly financially literate.

Also a study conducted by Hieltjes et al. (2013) on the impact of financial literacy on transaction costs on banks account uptake and uses the direct linkage between the two variables. The aim of the study was to evaluate the exact influence of financial literacy on savings of individuals and SME owners in Ghana. The study used randomized controlled experimental study design. Simple regression analysis was used to analyze the data. It was found out that financial literacy and transaction costs influence demand for and the use of financial services and subsequent performance of the SMES.

Okwachi, Gakure and Ragui (2013) focused on relationships between managerial practices and strategy implementation. The aim of the study was to determine the influence of managerial practices on performance. A questionnaire containing both open-ended and closed questions was
used for data collection. The study results indicate that managerial practices affect implementation of strategic plans in Kenyan SMEs. Based on the findings, the study recommended that SMEs should take initiatives to improve their management practices through methods of financial literacy which include; lobbying, professional and industry organizations, adoption of best practices and taking advantage of both government and private sector initiatives in order to boost financial performance.

In a recent study on the effect of venture capital financing on SMEs in Kenya, Gikomo (2013) noted that there was a positive and significant relationship between growth of SMEs and venture capital financing. The study had targeted top 100 SMEs and sampled out 30 firms using purposive sampling method. Secondary data from 2008 – 2012 was collected from their financial statements and analyzed using both descriptive and regression analysis. While the study was important in examining the role of venture capital financing on SME growth in Kenya, the sample selected was flawed because it did not determine the role which financial literacy had in venture capital financing and financial performance.

Sagara (2014) conducted a study on entrepreneur financial literacy, financial access, transaction costs and performance of micro enterprises in Nairobi County, Kenya. A cross-section design was adopted for the study. The study population comprised of all microenterprises in Nairobi County, from which a representative sample of 396 microenterprises was drawn. The main study instrument was a questionnaire which comprised of likert-type scale questions on the main variables of the study. The data was analyzed using both descriptive and inferential statistics. The findings of the study indicated that entrepreneur financial literacy had a statistically significant influence on enterprise performance therefore the hypothesis that financial literacy influences enterprise performance was supported.
Mwambia, (2014) conducted a study on the effect of financial literacy on financial returns of miraa farmers in Meru county. Descriptive research design was adopted by the study. The target population constituted the Miraa farmers in Igembe, the main Miraa growing area. The study adopted descriptive survey technique. The data collected was analyzed using SPSS version 21 and the significance of the results tested at 95% using ANOVA, and other statistical inference techniques like Z-tests, T-test and F-tests. The study found that financial literacy levels remained low among the Miraa farmers and this resulted to low returns.

2.5 Summary of Literature Review

Small and Medium Enterprises are a major economy earner in Kibera Slum. Contradicting information however is put across by theories tending to explain the linkage between financial literacy and financial performance. Exchange theory states that increased transactions increase the financial literacy on an individual. Hence experienced entrepreneurs will have better performance than emerging entrepreneurs. Prospect theory indicates that the SMEs' owner should greatly consider the risks involved during decision making or venturing in unfamiliar markets. This will prevent incurring of major losses. Lack of financial skills will cause increase in transaction costs, influencing negatively the performance of small and medium enterprises as posited by transaction theory.

Empirical studies have also been conducted on influence of financial literacy on financial performance. These studies have produced mixed results. Some studies established that there was a relationship among the variables while other studies failed to establish any relationship among them. This is shown by Hoseini et al, (2012) on a study on transaction costs of obtaining credit in rural Iran where he failed to establish any relationship. Also, financial literacy has been linked to influence the performance of firms as portrayed by Sagana (2014); on his study entrepreneur
financial literacy, financial access, transaction costs and performance of micro enterprises in Nairobi County, Kenya where he found a positive relationship. This is in line with the findings of Hieltjes et al, (2013), Mwambia (2014) and Gikomo (2013).
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the methods that were adopted by the study in obtaining information on the effect of financial literacy on financial performance of SMEs in Kibera Slum. The chapter also describes and explains the research instrument that was used in the study. The chapter is thus structured into research design, target population, data collection and data analysis techniques.

3.2 Research Design

A research design is the scheme, outline or plan that is used to generate answers to various research problems (Noum, 2007). This study used descriptive design. Descriptive research design determines and reports the way things (Mugenda&Mugenda, 2003). The design was appropriate as it enabled understanding of the exact nature of the two variables of the study; financial literacy and financial performance of SMEs in Kibera. Moreover it enabled the researcher to be able to describe the characteristics of these variables.

3.3 Population

A population is a larger collection of all the subjects from which a sample is drawn (Peil, 1995). Mugenda and Mugenda (2003) states that a target population entails the specific population that the researcher intends to carry the study; it shows an entire group of individuals or events having common observable characteristics that conform to a given specification.
The study target population consisted of owners SMEs operating within Kibera slum, Nairobi County. For data collection purposes, the target population was according to divisions in the area. Data available from Nairobi City Council indicate a total 825 SMEs were operating in Kibera slum in year 2014 (County Government of Nairobi, 2014).

3.4 Sampling Frame

The sampling plan describes how the sampling unit, sampling frame, sampling procedures and the sample size for the study. The sampling frame describes the list of all population units from which the sample will be selected (Cooper & Schindler, 2011). According to Mugenda and Mugenda (2003), a sample of 10%-30% is good enough if well-chosen and the elements in the sample are more than 30.

This study used simple random sampling technique to select a sample of 100 SMEs. The sample size was manageable in terms of time and cost and satisfactory according to Mugenda&Mugenda (2003) recommendation. The study respondents were the SME owners who are expected to be in a position to give credible information.

3.5 Data collection

Primary data was used for the study. Primary data is mainly used as it enables the researcher to obtain the required data for the study (Cooper & Schindler, 2011). The data was collected using questionnaires. The questionnaire consisted of a list of structured questions, un-structured questions and Likert rating scales relating to the field of inquiry with space provided for selection of choices and explanatory answers. Mugenda and Mugenda (2003) asserts that close ended questions have the advantage of collecting viable quantitative data while open-ended
questions allow the respondents freedom of answering questions and the chance to provide in-depth responses.

The questionnaires were administered through drop and pick later technique. The questions in the questionnaire were short and precise so that the respondents were not to have challenges in filling them. The questionnaires were mainly capturing both quantitative and qualitative data relating to financial performance information and financial literacy. SME’s approximate financial performance for previous five years (2010-2014) will be collected.

3.5.1 Data Validity and Reliability

A good study must meet the validity and the reliability that are most important in evaluating a measurement tool for research. Validity refers to how well the tool measures what it was supposed to measure and reliability of an instrument refers to its ability to produce consistent and stable measurements (Orodho, 2004). To enhance the reliability of the instrument, a pilot study was conducted. Pre-testing was used to gauge the clarity and relevancy of the instrument items and those items that were found to be inadequate for measuring variables were either be discarded or modified to improve the quality of the research instruments.

In order to test the reliability of the instruments in this study, internal consistency techniques were applied using Cronbach’s Alpha. The alpha ranges between 0 and 0.9 with reliability increasing with the increase in value. Coefficient of 0.6 to 0.7 is commonly accepted rule of the thumb that indicates acceptable reliability and 0.8 or higher indicates good reliability. A high value of alpha (>0.9) may suggest redundancies and show that the test length should be shortened (Tavekol and Dennick, 2011). This ensured that the instrument captured all the required data.
3.6 Data Analysis

Before processing the responses, the completed questionnaires were edited for completeness and consistency. The data was then be coded to enable analysis of the responses. A descriptive analysis was employed to analyses data. This includes the use of table, charts, graphs, percentages and frequencies.

Multiple regressions were used to measure the quantitative data which were analyzed using the Statistical Package for Social Sciences (SPSS). This tool is selected because of its clarity, preciseness, ease of understanding and interpretation. In addition content analysis was used to analyze qualitative information collected in the study. These were used to support the results of quantitative analysis in drawing recommendations.

3.6.1 Analytical Model

Financial literacy was measured by administering financial management, skills, and knowledge questions and scores using a scale of 1 to 10 where a higher score will imply higher financial literacy levels. This method that will be applied is closely related to the one adopted by Lusardi (2008) who argues that financial literacy is best measured by administering financial skills and management questions and financial literacy to be measured by the number of questions one gets correct; the higher the correct answers, the higher is the financial literacy levels. The financial performance was measured as return on assets (ROA) as percentage for easy comparison.

The study used regression analysis to describe the relationship that exists between the dependent variable (financial performance) and the independent variable (financial literacy). The model used in analysis took the following format:

$$\text{ROA} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$
Where;

ROA is the Return on Assets as a measure of financial performance

\( X_1 \) is the financial literacy score as a percentage score out 10 financial literacy questions

\( X_2 \) is the log amount of capital invested in the Small and medium enterprise

\( X_3 \) is the size of the firm as measured by log of assets

\( X_4 \) is the log of the age of the firm.

\( \varepsilon \) represents the error in the model

\( \beta_0, \beta_1, \beta_2, \beta_3 \) are the various intercepts

### 3.6.2 Test of Significance

The model significance was tested using the analysis of the variance (ANOVA), t-tests, z-tests and F-tests at 95% confidence. The coefficient of determination showed the extent to which the model explains the changes independent variable.
CHAPTER FOUR: DATA ANALYSIS, RESULTS AND INTERPRETATIONS

4.1 Introduction

This chapter focuses on the data analysis, interpretation and presentation of the findings. The main purpose of the study was to examine the effect of financial literacy on the performance of SMEs in Kibera Slum, Nairobi. The data was gathered exclusively from the questionnaire as the research instrument. The researcher has made use of descriptive, correlation and regression analysis to present the result in tables and figures.

4.2 Response Rate

The researcher administered the questionnaires through interviews where the respondents were explained the importance for the study and the use and required information. This ensured a high response rate of 83%. The 83% response rate was achieved due to the researchers’ determination to get all SMEs to respond. Further, most of the sampled firms’ management were not very busy since data collection was done during the business off peak. A response rate of 50% is considered adequate, 60% good and above 70% rated very good (Mugenda & Mugenda, 2003).

4.3 Reliability and Validity of Research Instruments

To enhance the reliability of the instrument, a pilot study was conducted. Pre-testing was used to gauge the clarity and relevancy of the instrument items and those items that were found to be inadequate for measuring variables were either be discarded or modified to improve the quality of the research instruments.

In order to test the reliability of the instruments in this study, internal consistency techniques were applied using Cronbach’s Alpha. Financial literacy score had a Cronbach’s Alpha of 0.781,
amount of capital invested 0.819, size of the firm 0.6923 while age of the firm had Cronbach’s Alpha of 0.810. On the basis of reliability test, it was concluded that the scales used in this study were reliable to capture the constructs.

4.4 Background Information

The study sought to determine the background information of the SMEs. This entailed; the sector into which the SMEs belonged to, the duration of operation of the SMEs, the legal formation of the SMEs and the number of the employees in the SMEs. This enabled more understanding of the research variables.

4.4.1 Small and Micro Enterprises Sector

The study sought to establish the business sector into which the SMEs in Kibera slum belonged to. As such the respondents were required to indicate their business sector on the questionnaire. The findings as illustrated by figure 4.1 show that 47% of the SMEs belonged to the trading sector, 34% to the service sector and 19% to the manufacturing sector. This shows that majority of the SMEs belonged to the trading sector and this may include small business and retail shops while only few belonged to the manufacturing sector. The high number of SMEs in the trading industry can be attributed to the fact that the amount of capital required to start this SMEs is less as compared to the other industries. Also the trading industry has wide and available market from the slum dwellers hence the most common sector.
4.4.2 Age of SMEs

The study aimed at establishing the age of the SMEs based on the number of years they had been operational. The findings show that 35% had been operational for a period of 5-8 years, 28% for 8-10 years, 23% for 2-4 years, 8% for less than 2 years and 6% for more than 10 years as shown by figure 4.2. This shows that majority of the SMEs were in operation for over two years but less than 10 years while few SMEs were operational for over a long time of over ten years. This implies that the SMEs owners were knowledgeable of the current market trends and business practices and thus gave valid and accurate information.
This section sought to establish the legal formation of the SMEs. The results show that 84% of the SMEs had been formed through sole proprietorship, 13% formed through partnership while the remaining 3% being formed through limited companies as illustrated by figure 4.3. This implies that the most preferred legal formation method of the SMEs was sole proprietorship whereas the least preferred was the limited companies. This can be attributed to the easiness of formation by sole proprietorship as it requires less legal procedures. It could be also due to the fact that through sole proprietorship, the entrepreneur is able to exercise full control over the business. The respondents therefore were mostly business owners and were the most appropriate for the study.
4.4.4 Number of Employees in the SMEs

The study sought to determine the number of employees in the SMEs. The findings as shown by table 4.1 show that 56 SMEs (68%) had less than 5 employees, 14 (17%) had 6-10 employees, 8 (10%) had 11-20 employees, 5 (6%) had 21-50 employees while no SME was established to have more than 50 employees. This shows that most SMEs had less than 10 employees (85%) and which may be due to the small nature of the SMEs. The also the low number of employees may be due to inadequate capital to hire a high number of employees and the SME owners also play a big role in running the SMEs themselves.

Source: Research Data, 2015
Table 4.1: Number of employees in the SMEs

<table>
<thead>
<tr>
<th>Number of Employees</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 5 employees</td>
<td>56</td>
<td>68%</td>
</tr>
<tr>
<td>6-10 employees</td>
<td>14</td>
<td>17%</td>
</tr>
<tr>
<td>11-20 employees</td>
<td>8</td>
<td>10%</td>
</tr>
<tr>
<td>21-50 employees</td>
<td>5</td>
<td>6%</td>
</tr>
<tr>
<td>Over 50 employees</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>83</strong></td>
<td><strong>100.00%</strong></td>
</tr>
</tbody>
</table>

Source: Research Data, 2015

4.4.5 Respondents Financial Literacy

Majority of the respondents at 59% (49) had financial literacy score of 3-5 implying that they answered 3 to 5 questions correctly. 16% (13) of the respondents had financial literacy score of 5 to 7, 14% (12) had 0 to 2 while 11% had financial literacy score of over 7. This indicates that majority of the respondents had low financial literacy.

Table 4.2: Respondents Financial Literacy

<table>
<thead>
<tr>
<th>Financial Literacy Score</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2</td>
<td>12</td>
<td>14%</td>
</tr>
<tr>
<td>3 to 5</td>
<td>49</td>
<td>59%</td>
</tr>
<tr>
<td>5 to 7</td>
<td>13</td>
<td>16%</td>
</tr>
<tr>
<td>Over 7</td>
<td>9</td>
<td>11%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>83</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: Research Data, 2015

4.4.6 Small and Medium Sized Enterprises Financial Performance

Financial performance of studied SMEs was measured by return on assets. 5% (4) of the SMEs had negative average five years return on assets, 31% (26) had return on assets of 0 to 5%, 40% (33) had ROA of 5-10% and 24% (20) had over 10% ROA. This implies that the studied firms were profitable since 96% had positive five years return on assets.
Cross tabulation on financial literacy score and financial performance is shown in table 4.4 below. The figure indicates that for SMEs with a ROA of 10%, majority of the respondents at 11% had financial literacy score of 5-7 while 5% had financial literacy score of over 7. This indicates that high financial literacy score is associated with higher performance.

Table 4.3: SME Financial Performance

<table>
<thead>
<tr>
<th>Financial Performance (ROA)</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 0</td>
<td>4</td>
<td>5%</td>
</tr>
<tr>
<td>0% to 5%</td>
<td>26</td>
<td>31%</td>
</tr>
<tr>
<td>5% to 10%</td>
<td>33</td>
<td>40%</td>
</tr>
<tr>
<td>Over 10%</td>
<td>20</td>
<td>24%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>83</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: Research Data, 2015

4.5 Diagnostic Tests

Kurtosis which is a measure of the "peakedness" or "flatness" of a distribution was used in testing the normality of the study variables. A kurtosis value near zero indicates a shape close to normal. A negative value indicates a distribution which is more flat than normal, and a positive kurtosis indicates a shape peaked than normal. An extreme positive kurtosis indicates a distribution where more of the values are located in the tails of the distribution rather than around the mean. A kurtosis value of +/-1 is considered very good for most empirical uses, but +/-2 is
also usually acceptable. Kurtosis results indicate that ROA had a kurtosis of 0.12, financial literacy -0.73, capital invested 1.10, size of the Firm -0.06 and SME age 1.09. The kurtosis values were all close to 0, +1 or -1 indicating that the data was distributed towards respective means and hence normal.

Skewness which is the extent to which a distribution of values deviates from symmetry around the mean was also evaluated. A value of zero means the distribution is symmetric, while a positive skewness indicates a greater number of smaller values, and a negative value indicates a greater number of larger values. Values for acceptability for empirical purposes are (+/-1 to +/-2). ROA had a skewness statistics of 0.42, financial literacy -0.22, capital invested 0.49, size of the Firm -0.06 and SME age 1.49. All the variables were acceptable since they were falling between +/-1 to +/-2.

Table 4.5: Cross Tabulation of Financial Literacy and Financial Performance

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>83</td>
<td>0.1</td>
<td>26.8</td>
<td>-10.64</td>
<td>0.42</td>
<td>0.12</td>
</tr>
<tr>
<td>Financial Literacy</td>
<td>83</td>
<td>0.1</td>
<td>0.90</td>
<td>0.51</td>
<td>-0.22</td>
<td>-0.73</td>
</tr>
<tr>
<td>Capital Invested</td>
<td>83</td>
<td>4</td>
<td>5.81</td>
<td>4.92</td>
<td>0.49</td>
<td>1.10</td>
</tr>
<tr>
<td>Size of the Firm</td>
<td>83</td>
<td>4.6</td>
<td>5.90</td>
<td>5.27</td>
<td>-0.06</td>
<td>-0.06</td>
</tr>
<tr>
<td>SMEAge</td>
<td>83</td>
<td>0.3</td>
<td>4.00</td>
<td>0.90</td>
<td>1.49</td>
<td>1.09</td>
</tr>
</tbody>
</table>

*Source: Research Data, 2015*

The VIFs for all variables were less than 10 and tolerance levels for all variables were greater than 0.1. Hence, there was no multicollinearity between the independent variables. Notably, as indicated in table 4.6, all the variables had VIF less than 10 and degree of tolerance of more than 0.1 hence multicollinearity didn’t exist.
Table 4.6: Multicollinearity

<table>
<thead>
<tr>
<th>Variable</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Literacy</td>
<td>0.810</td>
<td>1.235</td>
</tr>
<tr>
<td>Amount of Capital Invested</td>
<td>0.333</td>
<td>3.007</td>
</tr>
<tr>
<td>Size of the Firm</td>
<td>0.335</td>
<td>2.989</td>
</tr>
<tr>
<td>Age</td>
<td>0.953</td>
<td>1.050</td>
</tr>
</tbody>
</table>

Source: Research Data, 2015

4.6 Correlation Analysis

Correlation analysis was used to determine the nature of the relationship between study variables. As shown in table 4.4 below, financial literacy was positively correlated to ROA with coefficient of correlation of 0.6372 and a p value of 0.0016. This implies that increase in the financial literacy among the SMEs owners will lead to an increase in ROA. The effect is significant at 95% and 99% confidence level since the p-value is less than 0.05 and 0.01 respectively. Size of the firm also has positive significant effect on financial returns with a coefficient of correlation of 0.3306 which has a p-value of less than 0.05. The amount of capital invested has a coefficient of correlation of 0.1834 and p-value of 6.9233. This means that the amount of capital invested alone has no significant effect on innovation score at 95% confidence level since the p-value of 0.3626 is greater than 0.05. This study's findings relate with those of Mwambia (2014) who established that financial literacy influenced miraa farmers’ returns in Meru County.
Table 4.7: Correlation Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pearson Correlation</th>
<th>financial literacy score</th>
<th>log amount of capital invested</th>
<th>Size of the firm</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial literacy score</td>
<td>0.6372 (2-tailed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log amount of capital invested</td>
<td>0.1834 (2-tailed)</td>
<td>0.3789 (2-tailed)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Size of the firm</td>
<td>0.3306 (2-tailed)</td>
<td>0.3699 (2-tailed)</td>
<td>0.8123 (2-tailed)</td>
<td>1</td>
</tr>
<tr>
<td>N</td>
<td>83</td>
<td>83</td>
<td>83</td>
<td>83</td>
</tr>
</tbody>
</table>

Source: Research Data, 2015

4.7 Financial Literacy and Financial Performance

Multiple regression analysis was done on the dependent and independent variables to determine the effect of financial literacy, capital invested, size of the SMEs and ROA. As shown in table 4.5 below there is a strong positive relationship between independent variables (financial literacy, capital invested, size of the SMEs) and the dependent variable (ROA) with a coefficient of correlation of 0.9482. From the findings, the coefficient of determination of 0.8992 indicates that variations in independent variables can explain up to 89.92% of variations in the financial performance of the SMEs.
Table 4.7 (a): Model Summary

<table>
<thead>
<tr>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.9482</td>
<td>0.8992</td>
<td>0.7842</td>
<td>4.3163</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), log of the age, size of the firm, financial literacy score, log amount of capital invested

Source: Research Data, 2015

The analysis of variance results are shown in table 4.7 (b) below. As shown in the table, the model developed is significant at 95% and 99% confidence level since the p-value of 0.0000 is less than 0.05 and 0.01. This means that the effect of independent variables on the model has significant effect on the dependent variables.

Table 4.7 (b): Model Analysis of Variance

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>0.0708</td>
<td>4</td>
<td>0.0177</td>
<td>9.1769</td>
</tr>
<tr>
<td>Residual</td>
<td>7.8049</td>
<td>78</td>
<td>0.1000</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7.8757</td>
<td>82</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), log of the age, size of the firm, financial literacy score, log amount of capital invested

b. Dependent Variable: ROA

Source: Research Data, 2015

The model coefficients obtained for the study are as illustrated by table 4.5 (c). As shown in the model, financial literacy score has a coefficient of 0.0358, size of the firms has a coefficient of 0.0613, age of the firm has a coefficient of 0.0434 whereas the amount of capital invested has a coefficient of -0.0373. The positive coefficients of financial literacy, size of the firm and age of
the firm implies that an increase in these variables would result to increased financial performance.

While an increase in the amount of capital invested would have a negative effect on the financial performance of the SMEs as shown by its negative coefficient and this would result in decreased financial performance. All the models except the size are significant at 95% since their p-values are less than 0.05. The predictive model developed by the study is \( ROC = 0.4414 + 0.0358X_1 - 0.0373X_2 + 0.0613X_3 + 0.0434X_4 \) Where; ROC is the Return on Capital as a measure of financial performance, \( X_1 \) is the financial literacy score, \( X_2 \) is the log amount of capital invested in the SMEs, \( X_3 \) is the size of the firm as measured by log of assets, \( X_4 \) is the log of the age of the firm. These findings relate with that of Gikomo (2013) and Sagana (2014) who also established that financial literacy and efficient financial management influenced greatly how the firms performed.

**Table 4.7 (c): Model Coefficients**

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Std. Error</th>
<th>Beta</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>0.4414</td>
<td>0.7072</td>
<td></td>
<td>8.6241</td>
<td>0.0005</td>
</tr>
<tr>
<td>Financial Literacy Score</td>
<td>0.0358</td>
<td>0.2093</td>
<td>0.0214</td>
<td>9.1709</td>
<td>0.0012</td>
</tr>
<tr>
<td>Log amount of capital invested</td>
<td>-0.0373</td>
<td>0.1875</td>
<td>-0.0388</td>
<td>-5.1988</td>
<td>0.0004</td>
</tr>
<tr>
<td>Size of the firm</td>
<td>0.0613</td>
<td>0.2238</td>
<td>0.0533</td>
<td>9.2739</td>
<td>0.0007</td>
</tr>
<tr>
<td>Log of the age of the firm</td>
<td>0.0434</td>
<td>0.0615</td>
<td>0.0817</td>
<td>0.7075</td>
<td>0.4813</td>
</tr>
</tbody>
</table>

a. Dependent Variable: ROA

*Source: Research Data, 2015*
5.1 Introduction

This chapter presents a summary of the key elements of the study, discussion of major findings and interpretation of the results. This chapter further presents the conclusions drawn from the research findings as well as recommendations for improvement and suggestions for further research.

5.2 Summary of the Findings

The study sought to investigate the effect of financial literacy on financial performance of SMEs in Kibera slum, Nairobi. Specifically, the study investigated the effect of financial literacy level, capital invested, age and the size of the firms on the financial performance of SMEs. A population size of 100 SMEs from Kibera Slum, Nairobi County was used. The primary data was obtained through administering of questionnaires.

The findings established that financial literacy score, amount of capital invested and size of the SMEs all have a positive effect on the financial performance of SMEs based on their positive Pearson's coefficients; however only financial literacy and size of the firm have significant effect on financial performance. This implies that these two variables impact significantly on the financial performance. The other variable which is the amount of capital invested would not have a significant effect on financial performance due to its high p-value. Therefore, though all the
variables have a positive effect on the financial performance, they differ in their level of significance.

The study also sought to establish the relationship that existed between the dependent and independent variables. As such a multiple regression analysis was carried out to identify the relationship between the dependent variable which is financial performance and independent variables which are financial literacy, capital invested and size of the firm showed a positive relationship between the dependent and independent variables. The results of the regression revealed an R of 0.9482 indicating that there is a strong relationship between financial literacy, capital invested and size of the SMEs. The coefficient of determination of 0.8922 implied that financial literacy, capital invested and size of the firm explain up to 89.22% of changes in financial performance. This implied that all the independent variables combined had positive influence on the financial performance of the SMEs.

The analysis of variance results indicated that the model developed was significant at 95% and 99% confidence level. This meant that the effect of independent variables on the model has significant effect on the dependent variables. From the analytical model developed, financial literacy score has a coefficient of 0.0358, size of the firms has a coefficient of 0.0613, and age of the firm has a coefficient of 0.0434 whereas the amount of capital invested has a coefficient of -0.0373.

The negative coefficient of the amount of capital invested implies that it had a negative relationship on the financial performance. While the positive coefficients of financial literacy score and size of the firm implies that they have a positive relation on the financial performance of the SMEs. The predictive model developed by the study is:

$$\text{ROC} = 0.4414 + 0.0358X_1 + -0.0373X_2 + 0.0613X_3 + 0.0434X_4$$

Where; ROC is the Return on Capital as a measure of financial

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performance, $X_1$ is the financial literacy score, $X_2$ is the log amount of capital invested in the SMEs, $X_3$ is the size of the firm as measured by log of assets, $X_4$ is the log of the age of the firm.

### 5.3 Conclusion

This study sought to determine the effect of financial literacy on financial performance of SMEs in Kibera Slum, Nairobi County. Based on the study findings, the study concludes that financial literacy is positively related to financial returns of the SMEs in Kibera Slums. The findings are consistent with the empirical studies reviewed. For example Mwambia (2014) who established that financial literacy enabled the Miraa farmers in Meru County to increase their financial performance to a great extent. Bernheim and Garrett (2003) also found that lack of financial literacy and capability was particularly serious consequences for those on low incomes, for whom costly mistakes can have grave consequences going beyond depressed financial returns.

The study concludes that there is a strong positive relationship between financial literacy, capital invested and size of the SMEs on the financial performance of SMEs. Therefore, high levels of financial literacy, capital invested and size of land implies higher financial returns for the SMEs. Increase in financial literacy, size of the SMEs and capital invested will increase financial returns by 89%.

The study also concludes that financial literacy, age of the SMEs and size of the firm have positive relation with the financial performance while the amount of capital invested is concluded to have a negative relation. Therefore, a firm that has been in operation for long will be more profitable than that just established.
5.4 Limitations of the Study

The study was limited to small and medium enterprises within Kibera Slums in Nairobi County excluding those from other Counties within the country. The study was also limited to small and medium enterprises only excluding large enterprises. Thus other firms with different characteristics which otherwise could provide different results were not considered. Time and cost were also a limitation.

The available time did not allow the researcher to include more companies within the country in order to increase its sample size. The cost that could have been used if the sample size was enlarged is high hence limiting the sample size to 83 companies.

The study respondents of the study were SME owners whose responses may have been subjective and biased. This is due to the fact that information from SMEs may be contaminated by source bias because due to legal reasons small firms tend to manipulate some data, and control such manipulation through subjectively adjusting measures.

5.5 Policy Recommendations

The study is a justification of the fact that a SME owners with good financial literacy knowledge have sufficient capital to invest to carry out their businesses will have more financial returns. This can go a long way in eradicating poverty that has continued to the face the Kibera Slum area despite the endeavors the slum dwellers have to start firms. Based on this knowledge, the study has a number of recommendations.
First, Nairobi County government should invest in instilling financial literacy knowledge to SMEs owners. This can be done through holding of workshops and educating the entrepreneurs on how to increase their financial returns from their SMEs as well as how to manage the money they make from SMEs.

Secondly, the county government should come up with a financing program where entrepreneurs can be extended cheap credit especially in the slums region. This will provide them with the capital required to be invested and ensure that they maximize their financial returns from their SMEs.

Finally, the study recommends the SME owners should be encouraged to expand their farms to large scale so as to benefit from economies of scale. This will enhance the financial performance to a great extent. The SMEs owners should ensure that they not only gain the financial literacy skills but also use them to the maximum.

5.6 Suggestions for Further Research

The replication of this study in other sectors of the industry such macro enterprises as well as in other countries especially in the Sub-Saharan region would demonstrate the universality and significance of the financial literacy-performance relationship in general and on the performance of microenterprises in particular.

Future research should use longitudinal study designs in order to provide a better assessment of how the study variables improve over time. Sample should be drawn on the start of the study and data relating to financial performance collected on monthly basis. The level of financial literacy on the SME owners should be assessed every month for a period of five years. This will ensure that data collected is not subjected to bias and that the data is accurate.
Further research should also be conducted using a different approach in determination of the financial literacy levels of the SME owners other the one used by the researcher. This will ensure generalization of the results and fully establishing the relationship that exists between financial literacy and financial performance of the SMEs.
REFERENCES


Webster, J., & Watson, T., (2002). Analyzing the Past to prepare for the future: Writing literature review: *MIS quarterly review*.


APPENDICES

Appendix I: Questionnaire
This questionnaire is to collect data for purely academic purposes. The study seeks to determine the effect of financial literacy on financial performance of SMEs in Kibera Slums. All information will be treated confidentially. Do not put any name or identification on this questionnaire. The questionnaire is to be completed by SME owners only.

SECTION A: BACKGROUND INFORMATION

1. What is your SME business sector
   1. Manufacturing [ ]
   2. Trade [ ]
   3. Service [ ]

2. How long has your SME been in operation?
   Less than 2 years [ ]
   2–4 years [ ]
   5-8 years [ ]
   8-10 years [ ]
   More than 10 years [ ]
   Please specify the exact years as at December 2014……………………………

3. SME legal formation
   1. Sole proprietorship [ ]
   2. Partnership [ ]
   3. Limited company [ ]

4. Current SME number of employees
   Below 5 [ ]
   6-10 [ ]
   11-20 [ ]
   21-50 [ ]
   Over 50 [ ]
5. Are you aware of composition of financial market in Kenya?
   Yes [ ] No [ ]

6. What is the name of stock market in Kenya…………………………

7. What do you do with the money that remains after paying all your expenses?
   Saving [ ] Spending it [ ] Investing [ ]

8. What is your fact on investment in shares and other financial assets?
   Can always invest [ ]
   Can invest but have to compare with other investment options [ ]
   Can hardly consider it as an investment [ ]
   Never can I invest in such [ ]

9. Have you ever tried to/acquired a loan? Yes [ ] No [ ]

10. If Yes/No, what factors did /would you consider before taking the loan? Number using 1-5 according to their importance in your decision
    Amount to be advanced [ ]
    Payment period [ ]
    Rate of interest [ ]
    Cost of the loan [ ]
    Repayment amount per month [ ]

11. Do you usually compute the amount of income/returns you get from your business?
    Yes [ ] No [ ]

12. If No, why?
    It’s so tedious to determine the returns/income [ ]
    I don’t know how to determine the same [ ]
    I find it not useful [ ]

13. Do you save for retirement?
    Yes [ ] No [ ]

14. If yes, how do you do the saving?
    Accumulating assets [ ]
    Paying an amount every month to an retirement benefit scheme [ ]
    Keeping the money myself [ ]

15. If 14 above is no, why do you not save for retirement?
I believe it is not important [ ]
I can't afford [ ]
others [ ]
If others, Please Specify…………………………………………………………

SECTION C: INVESTED CAPITAL AND FINANCIAL PERFORMANCE

16 Please indicate your annual sales and investment in the SME for the last 5 years

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual sales</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accumulated total assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approximate annual costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Thank you for your corporation