Financial literacy and its impact on loan repayment by small and medium entrepreneurs

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FINANCIAL LITERACY AND ITS IMPACT ON LOAN REPAYMENT BY SMALL AND MEDIUM ENTERPRENUERS

AN ANALYSIS OF THE EFFECT OF BOOK KEEPING SKILLS FROM EQUITY GROUP FOUNDATION’S FINANCIAL LITERACY TRAINING PROGRAM ON ENTERPRENEURS’ LOAN REPAYMENT PERFORMANCE

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Abstract
In the year 2006, the government unveiled a blue print for developments of middle income status by the year 2030. Small and medium entrepreneurs (SMEs) were identified to be the key drivers to this initiative. Equity Group Foundation (EGF) supported the initiative by availing credit and financial literacy to SMEs. The SMEs form more than 99% of all enterprises in the world and they bring about economic growth in rural and urban setups and balanced developments. The global economy is heavily dependent on the success of SMEs. Equity bank founded a financial literacy program to provide the SMEs with relevant financial skills. SMEs in Kenya suffer from constrains like lack of training and management capacity that lower their resilience to risk and affects their growth. The general objective of the study was to establish the effects of EGF’s literacy training program on loan repayment by SMEs. The specific objectives of the study were to establish the extent to which book keeping, credit management and budgeting
skills influence loan repayment. Conducted on SMES in Ngara, Nairobi County, thirty (30) SMEs out of three hundred (300) trained by equity Bank participated in the study. The data collection instrument was a self administered drop and pick Questionnaire. Findings showed that the four skills mentioned here above greatly determine the ability of SMEs to repay loans. Findings of the study recommend that SMEs who have little or no financial literacy training should enrol in related programs to enhance their capacities. There is need to initiate more such programs to reach many SMEs for proper credit management, improvement of loans repayment, proper interpretation of financial statements as a result of financial analysis skills and proper decision making on opportunities and risk management.

Keywords: Financial literacy, Credit management, Loan repayment, Business growth

INTRODUCTION
In year 2006, the Kenya Government unveiled a blue print for development to middle income status by the year 2030. The initiative was popularly dubbed "vision 2030". Small and medium enterprises (SMEs) were identified to be a key driver of this initiative. Equity bank supported the government's effort in this idea and commissioned a subdivision to manage credit advances to SMEs. However over time, the bank realised that it was not enough to just advance the credit but training on financial literacy to the borrowers and potential borrowers would benefit the bank and the businesses of SMEs. This research sought to investigate the link between financial literacy and ability of the SMEs to repay the loans.

Background Information
SMEs form more than 99% of all enterprises in the world (Capital Markets Authority, 2010). SMEs allow the rural poor, including some of the most marginalized and vulnerable people such as women, youth, and the landless, to diversify their incomes, create new sources of economic growth and generate additional employment in rural areas. The same strata may also be reached through SME support to small-scale local entrepreneurs whose business expansion can create new jobs for the rural poor (IFAD, 2008). Global economy is heavily dependent on the success of the SME sector. The significance of Kenya's SME activity in developing economy has continued to grow since the sector was first brought to the limelight by the International Labour Organization. ILO provided the basis for the study of SME in Kenya under the informal sector, (ILO, 1972). It is now widely recognized that the promotion of the SME sector is a viable and dynamic strategy for achieving national goals, including employment creation, poverty
alleviation and the balanced development between sectors and sub sectors. The findings of the 1993 SME Baseline Survey underscored the important role that SMEs play in Kenya’s development process, particularly in the context of generating employment and income opportunities for majority of poor people throughout the country.

Indeed, the SME sector provides employment for substantially more people than does the formal sector. It is estimated that there are 7.5 million SMEs in Kenya, providing employment and income generation opportunities to low income sectors of the economy (CMA, 2010). The sector’s contribution to the Gross Domestic Product (GDP) has also grown from 13.8 per cent in 1993 to about 40 per cent in 2008 and the sector continues to grow to date. The latest Economic Survey (2012) indicates that the informal sector which comprises of the SMEs has contributed 80.8 per cent of total employment created (KNBS, 2012). The potential associated with the SME sector has been positively adopted by the government and other development partners in economic development, increasing wealth creation and fight against poverty and in employment creation. The economic pillar of Kenya’s Vision 2030 identifies SME development as a key strategy to propelling the country to a middle income economy by the year 2030, through equity and poverty elimination. Other development partners involved includes, the United States Agency for International Development (USAID), International Fund for Agricultural development (IFAD), Germany Technical Institution (GTZ), commercial banks, and Microfinance institutions. In order to overcome some of the constraints associated with financial management in the SME sector, the government and other relevant stakeholders have designed programs and policies that are market driven and market non-distorting to support SMEs. Government has, for example, created stable macroeconomic conditions, liberalized the economy, and encouraged the growth of micro-financing business.

SMEs are defined as non-subsidiary, independent firms which employ fewer than a given number of employees. This number varies across national statistical systems. The most frequent upper limit is 250 employees, as in the European Union. However, some countries set the limit at 200 employees, while the United States considers SMEs to include firms with fewer than 500 employees. Small firms are generally those with fewer than 50 employees, while micro-enterprises have at most ten, or in some cases five, workers. Financial assets are also used to define SMEs. In Kenya, the following definitions of the SME sector are applied: Micro Enterprise has 1-10 number of employees with a turnover of Kshs 0-5 million, Small Enterprise 11-50 employees with turnover of Kshs 5-50m and Medium enterprises has 51-100 employees and turnover of Kshs 51million -1billion (Gok, 2005).

As larger firms downsize and outsource more functions, the weight of SMEs in the economy is increasing. In addition, productivity growth – and consequently economic growth –
is strongly influenced by the competition inherent in the birth and death, entry and exit of smaller firms. This process involves high job turnover rates – and churning in labour markets – which is an important part of the competitive process and structural change. Less than one-half of small start-ups survive for more than five years, and only a fraction develop into the core group of high performance firms which drive industrial innovation and performance. This underscores the need for governments to reform policies and framework conditions that have a bearing on firm creation and expansion, with a view to optimizing the contributions that these firms can make to growth (OECD Policy Brief 2000).

Profile of Equity Group Foundation (EGF) Financial Literacy Program
The SME Act (2011) was enacted to guide the provision of credit, capacity development for micro, small and medium enterprises in the country going forward to attaining vision 2030 (Republic of Kenya, 2012). In response to the financial challenges affecting micro and small enterprises, the Equity group foundation (EGF) financial literacy program was born. Equity Group Foundation was founded in 2009 with its main purpose being to develop and grow initiatives with significant social impact by harnessing Equity Group’s banking capabilities and capacities and through effective partnerships with SMEs. EGF’s overall goal was to transform the socio-economic status of 50 million people in Africa over the next five years.

One of these initiatives by the EGF is to provide financial education and entrepreneurship training to low income people groups across the country. Equity Bank has been providing financial education to youth and women micro entrepreneurs in their Group Lending Program (GLP) thereby mainstreaming it to cover groups that were not part of the group lending programme (Equity group Foundation, 2009). Financial literacy provides knowledge and understanding of financial concepts and the skills, motivation and confidence to apply such knowledge and understanding in order to make effective decisions across a range of financial contexts and to improve the financial well-being of SMEs (Hogarth, 2002).

The program has been implemented since 2009 providing basic financial information with a view to enabling those addressing the financial challenges; provide a platform for enterprise performance, growth, and sustainability. The target of the EGFs financial literacy program was the banked and none banked population who lacked financial literacy skills. The bank had indentified specific challenges with these two groups. When applying for loans, SME owners were frequently unable to provide accurate, reliable financials and non financial information to support their applications. It was also evident from fields visit to the SMEs that the resources extended to them were not applied as intended, hence prompting the bank to come up with the financial literacy program.
Challenges faced by SMEs

Despite the role played by the sector, it’s been characterized by a number of challenges. Wanjohi (2011) cites lack of adequate business skills as a major challenge in the development and growth of Micro and small enterprises in Kenya. This is mainly attributed to low levels of education. The CMA (2010) has also identified that SMEs in Kenya suffer from constraints that lower their resilience to risk and prevent them from growing and attaining economies of scale. Challenges associated with access to financial resources are constrained by both internal and external factors.

Internally, most SMEs lack training and management capacity, so they have trouble managing funds secured for their business activities such as procuring raw materials and products, and investing in plant and equipment. From the external perspective, SMEs are regarded as insecure and costly businesses to deal with because they lack required collateral and have the capacity to absorb only small amount of funds from financial institutions. So they are rationed out in their access to credit because of high intermediation costs, including the cost of monitoring and enforcement of loan contracts. A number of initiatives have also been advanced by the government, NGOs, and the private sector aiming at increasing access to affordable credit, and financial management to enable SMEs efficiently manage finances in their businesses. However, it is not clear whether these initiatives on financial literacy education have translated to better management of finances among SMEs, improved enterprise performance and improved access to loan capital and overall improved the loan repayment behavior among SME borrowers. This is therefore the concern of this study. Data on loan repayment as at 30th December 2013 for Equity bank Limited is as shown below:

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount Disbursed(millions)</th>
<th>Amount repaid</th>
<th>% Repayment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>600</td>
<td>360</td>
<td>60</td>
</tr>
<tr>
<td>2009</td>
<td>800</td>
<td>560</td>
<td>70</td>
</tr>
<tr>
<td>2010</td>
<td>900</td>
<td>630</td>
<td>70</td>
</tr>
<tr>
<td>2011</td>
<td>1000</td>
<td>600</td>
<td>60</td>
</tr>
<tr>
<td>2012</td>
<td>1050</td>
<td>550</td>
<td>50</td>
</tr>
<tr>
<td>2013</td>
<td>1050</td>
<td>550</td>
<td>50</td>
</tr>
</tbody>
</table>

Source: Equity Bank (2014)
Statement of the problem
Banks have established separate units to be more responsive to the needs of their SME clients, in recognition of the inherent differences between SMEs, consumer and corporate clients. Obstacles to SME lending include lack of adequate information and business records, the most important deterrent to banks’ involvement with the SME segment. Such is the perceived extent of the problem that banks have allocated internal budgetary resources to assist SMEs through the extension of training services (African Development Bank, 2012). Some banks allocated resources to provide training to their SMEs clients to improve their book keeping and credit management skills (Rocha, 2011). A study by Mungai, (2012) revealed that financial literacy among the youth influences loan repayment of the finances obtained from the youth enterprise fund. SME owners with financial education have the motivation to go for loans and have them repaid as scheduled.

However, the youth enterprise fund is a different financial arrangement as compared to the funding from mainstream banks. Really all the efforts put by banks are meant to have SMEs increase their loan, have their loans repaid as scheduled without default. However, there is a steady increase in the default rate and a slowdown in the loan repayment by SMEs (Equity Bank Group report 2013). The study sought to establish the effect of Equity Group Foundation financial literacy Training Program more so in regard to book keeping and credit management skills on loan repayment by Small and Medium Enterprises. Cumulatively Equity bank has advanced ksh.5.4 billion over six year period (2008-2013). However recovery rate remained below 70% for the four out of six years. It is only two years that the recovery rate was equal to 70%. The banks tolerable default rate is about 5%. This means that over the entire period, the SMEs loan default rate remained significantly high. Preliminary investigations by the bank indicated possibility of a linkage between the lack of financial literacy and the loan default rate. This study was therefore done to establish the link between financial literacy (book keeping & credit management) and loan repayment by entrepreneurs.

Research Objective
The general objective of the study was to establish the link between financial literacy in book keeping & credit management and loan repayment by SME’s in Ngara of Nairobi County. The research undertaking further sought to address the following specific objectives:

i. To find out the extent to which book keeping skills influenced loan repayment by the entrepreneurs.

ii. To analyze the extent to which credit management strategy influences loan repayment by entrepreneurs.
iii. To find out the correlation effect of both budgeting skills and financial statement analysis skills on loan repayment by SMEs.

Research Question
The study sought the response to the following research questions -

i) How had book keeping skills from EGF financial literacy training program influenced the ability of the entrepreneurs’ to repay the loans?
ii) Was there any correlation effect of budgeting skills and financial statement analysis skills on loan repayment by SMEs? If indeed such effect existed, was it positive or negative and how had it impacted the ability of the entrepreneurs to qualify for loans (Credit Worthiness)?
iii) Credit management strategy- how far does it go into influencing the capacity of entrepreneurs to repay loans?

Research hypothesis
Ho: There is no significant relationship between financial literacy training on book keeping and loan repayment by SMEs.
H1: There is a significant relationship between financial literacy training on book keeping and loan repayment by SMEs.

Scope of the study
The study was conducted among the beneficiaries of Equity Group Foundation Training Program on SMES in Ngara, Nairobi County. The study considered the beneficiaries trained between the 2010 to April 2014 time frame.

Justification of the study
Study findings herein are of great significance to SME owners who will have a clear understanding of the requirements for effective business management, loan repayment and access to finance. This will enhance their repayment behavior and improve their credit ratings. Researchers and scholars are now availed with additional literature on the concept of financial literacy and its impact on loan repayment by SMEs. The study will benefit Equity bank and other financial institutions as there shall be upfront information on the role of financial literacy on loan repayment patterns by SMEs.
LITERATURE REVIEW

Theoretical Framework

Financial literacy theory argues that the behavior of people with a high level of financial literacy might depend on the prevalence of the two thinking styles according to dual-process theories: intuition and cognition. Dual-process theories (Evans 2008) embrace the idea that decisions can be driven by both intuitive and cognitive process. Intuition is the ability to acquire knowledge without inference or the use of reason. Intuition provides views, understandings, judgments, or beliefs that we cannot in every case empirically verify or rationally justify. Cognition on the other hand is the process by which the sensory input is transformed, reduced, elaborated, stored, recovered, and used. In science, cognition is the mental processing that includes the attention of working memory, comprehending and producing language, calculating, reasoning, problem solving and decision making. Cognition is a faculty for the processing of information, applying knowledge, and changing preferences. Cognition, or cognitive processes, can be natural or artificial, conscious or unconscious (Russell Revlin Cognition, 2004). Dual process theories have been studied applied to many different fields, e.g., reasoning and social cognition (Evans 2008).

Financial literacy remains an interesting issue in both developed and developing economies, and has elicited much interest in the recent past with the rapid change in the finance landscape. Atkinson and Messy (2005) define financial literacy as the combination of consumers’/investors’ understanding of financial products and concepts and their ability and confidence to appreciate financial risks and opportunities, to make informed choices, to know where to go for help, and take other effective actions to improve their financial status. Financial literacy helps in empowering and educating investors so that they are knowledgeable about finance in a way that is relevant to their business and enables them to use this knowledge to evaluate products and make informed decisions. It is widely expected that greater financial knowledge would help overcome recent difficulties in advanced credit markets. Financial literacy prepares investors for tough financial times, through strategies that mitigate risk such as accumulating savings, diversifying assets, and purchasing insurance.

Financial literacy facilitates the decision making processes such as payment of bills on time, proper debt management which improves the credit worthiness of potential borrowers to support livelihoods, economic growth, sound financial systems, and poverty reduction. It also provides greater control of one’s financial future, more effective use of financial products and services, and reduced vulnerability to overzealous retailers or fraudulent schemes. Facing an educated lot, financial regulators are now forced to improve the efficiency and quality of financial services. This is because financially literate investors create competitive pressures on financial
institutions to offer more appropriately priced and transparent services, by comparing options, asking the right questions, and negotiating more effectively. Investors on their part are able to evaluate and compare financial products, such as bank accounts, saving products, credit and loan options, payment instruments, investments, insurance coverage, so as to make optimal decisions (Miller et al 2009).

Greenspan (2002) argues that financial literacy helps to inculcate individuals with the financial knowledge necessary to create household budgets, initiate savings plans, and make strategic investment decisions. Proper application of that knowledge helps investors to meet their financial obligations through wise planning, and resource allocation so as to derive maximum utility. Hilgert et al (2003) asserts that financial knowledge appears to be directly correlated with self-beneficial financial behavior.

In Kenya, it would be advisable that every bank opens a Financial Literacy and Credit Counseling Centre (FLCCCs) in where it has the lead responsibility. Financial counseling through face-to-face interaction with interested individuals would be offered at these centres. Financial education imparted includes importance of responsible borrowing, financial planning and information about various financial products and services. Besides, debt counseling is provided for amelioration of debt-related distress of any individual. G20 Seoul Summit (2010) states that information asymmetry arising from SMEs’ lack of accounting records, inadequate financial statements or business plans also makes it difficult for creditors to assess the creditworthiness of potential SME proposals. As the lack of financial literacy, operational skills, including accounting and finance and business planning represents formidable challenge for MSE borrowers, we have, on August 1, 2012, advised banks to play a more proactive role in the affairs of their SME clients by providing them with financial literacy and consultancy support. For this, banks could either separately set up special cells at their branches, or vertically integrate this function in the Financial Literacy Centers (FLCs) set up by them, as per their comparative advantage. We have also stated that the bank staff should be trained through customized training programs to meet the specific needs of the sector. Berry (2006) said that although the external environment presents some of the key challenges in SME financing, such businesses’ internal resources must not be overlooked. Of these, perhaps the most important is the knowledge and social capital that exists within each business. It is important to remember that while levels of education often influence entrepreneurial ambition - with the more educated likely to have a higher desire to start a business - this ambition does not translate to higher levels of education among the actual business owners, as education improves their employment prospects (Zwan 2010). In fact, formal enterprise or management training is rare among business owners, creating a significant skills gap common in both developed and less
developed economies. This skills gap invariably affects owners’ ability to obtain finance - from knowing how to present a business plan and being able to navigate through the available financial products, to knowing how to apply business skills and acumen to manage and develop their business with a strategic approach to its operations, and ultimately finance. There is a significant role for the accountancy profession in addressing this challenge. Applying their broad-based knowledge in accounting and business, accountants are perfectly placed to work with governments and other relevant institutions, such as SME bodies, to provide financial literacy and management training for owner-managers.

**Book Keeping**

All over the world, Kenya not being exempted, many new business owners are daunted by the mere idea of book keeping and accounting. But in reality, both are pretty simple. Book keeping and accounting share two basic goals: to keep track of income and expenses, this improves chances of making a profit, and to collect the financial information necessary for filing various tax returns. There is no requirement that records be kept in any particular way as long as they accurately reflect the business's income and expenses. There is a requirement, however, that some businesses use a certain method of crediting their accounts: the cash method or accrual method. Based on the size of the business and amount of sales, one can create own ledgers and reports, or rely on accounting (Williams et al., 1993).

An accounting system records, retains and reproduces financial information relating to financial transaction flows and financial position. Financial transaction flows encompass primarily inflows on account of incomes and outflows on account of expenses. Elements of financial position, including property, money received, or money spent, are assigned to one of the primary groups i.e. assets, liabilities, and equity. Within these primary groups each distinctive asset, liability, income and expense is represented by respective “account”. An account is simply a record of financial inflows and outflows in relation to the respective asset, liability, income or expense. Income and expense accounts are considered temporary accounts, since they represent only the inflows and outflows absorbed in the financial-position elements on completion of the time period (Williams et al., 2008). There are account types that include real accounts which represent physically tangible things in the real world and certain intangible things not having any physical existence.

SMEs are a large contributor to both the Kenyan and the global economies and their importance is noted in every country. SMEs make a substantial contribution to the economy in terms of job creation, GDP, investment and social welfare (Nieman, 2006). According to the African Development Bank (2005), SMEs contribute more than 55% of total employment and
22% of the Gross Domestic Product in Kenya. Since they are so important to the economy, their creation is very important as it a positive move towards economic growth. However there is a need to keep these SMEs in operation and avoid failure. Lack of skills has been a major challenge to the SMEs (Smith and Perks, 2006) and skills acquisition through training can provide a long lasting solution to the survival battle of the SMEs. Due to various reasons, some SMEs end up closing down business at an early stage. This could result from the view that the entrepreneur miscalculated the opportunity, and unforeseen threats that are too big for the business to overturn, lack of essential information on running the business and lack of proper funding of the business (Chimucheka and Rungani, 2011; Monk, 2000).

A look at the Kenyan context shows that there are a lot of other issues that may appear insignificant when the business is starting which can bring down the business at the end. Seemingly there is a lot that needs to be done in all fields that may prevent the loss of jobs, revenue and increase of poverty in the communities by preventing failure in the SMEs. Apart from the financial problems that may affect the businesses, the input of the owner and the business skills (Smith and Perks, 2006) are very important in keeping the business afloat.

The purpose of this study was to examine the important financial analysis skills including financial risks management. The study would help new SMEs in the industry to be able to survive and keep growing finances, thus benefiting the province in development, employment and the country in revenues. These skills do not only promote business and manufacturing efficiency success but also efficiency and benefit the country at large. Therefore, it was, of great importance to assess and specify success factors that promote efficiency and survival of SMEs that could serve as benchmarks for emerging SMEs. It went further to assess whether training can play role in the acquisition of these skills by entrepreneurs.

Credit Management Strategies
Idowu (2010) claims, that a major barrier to rapid development of the small and medium enterprises sector is a shortage of both debt and equity financing. Accessing finance has been identified as a key element for small and medium enterprises to succeed in their drive to build productive capacity, to compete, to create jobs and to contribute to poverty alleviation in developing countries. Small business especially in Kenya and Africa as a whole can rarely meet the conditions set by financial institutions, which see small and medium enterprises as a risk because of poor guarantees and lack of information about their ability to repay loans Idowu (2010). Without finance, small and medium enterprises cannot acquire or absorb new technologies nor can they expand to compete in global markets or even strike business linkages with larger firms Idowu (2010).
According to Cork and Nixon (2000), poor management and accounting practices hamper the ability of smaller enterprises to raise finance. This is coupled with the fact that small businesses are mostly owned by individuals whose personal lifestyle may have far reaching effects on the operations and sustainability of such businesses (Idowu, 2010).

Given the myriad of challenges faced by SMEs and the central role played by their managers, (who are often the owners of the business), having sound credit management skills cannot be over emphasized. A number of researchers such as García (2005) and Pansiri & Temtime (2008) have found that a lack of appropriate skills for SME owner managers is one of the main causes of failure for SMEs. Fatoki and Odeyemi (2010a) define managerial competencies as sets of skills, attitudes, behaviours and knowledge that contribute to the effectiveness of an individual. According to these two authors, managerial skills play a key role in the success of small enterprises as they determine its growth. Likewise, (Fatoki and Asah, 2011) point out that lack of managerial skills, personal qualities and skills are major contributors to the failure of firms. Lack of managerial competence reduces the ability to develop sound plans and strategies for effective management of SMEs. Fatoki and Odeyemi (2010a) explain that managerial skills influence business planning as well as the ability of the firm to obtain knowledge regarding sources of finance and means of obtaining it. As such, managerial skills do affect access by new small firms to financing.

To succeed therefore, it’s important that governments, the private sector, financial institutions and other industry players advance credit management skills and strategy assistance to SMEs, to enable them curb the above mentioned challenges. Among what these players can do and among the strategies that SMEs can execute include but not limited to;

1. The supporting industry players should craft more financial skills educative programs similar to or better than the Equity Group Financial Literacy Program to educate SMEs entrepreneurs on credit management skills. Also Incorporated in this should be budgeting skills which is also a key player in the credit management strategy.

2. Governments should be more stringent in regulating the way banks handle interest rates on loans, ensuring that they don’t fluctuate the loans at free will and to ensure that the rates are reflective of the true lending rates as advised or set out by the regulating authorities such as CBK, to prevent frustrating loaned SMEs.

3. Governments, financial institutions and the private sector should all work together in an ethical way, to ensure a plain level playing field. Competition should be healthy and should take into consideration that SMEs are just that- ‘Small and Medium Enterprises’ and their capacity cannot be equated with market giants. Such an initiative can be the provision of SME incubators.
4. There is strength in numbers: in light of the fact that SMEs may not be able to move market mountains in their own individual capacity, one great strategy that they can employ in order to gain market strength and greater competitive advantage is through mergers. Whether vertical or horizontal, new and diverse skills, capital and human resource are brought on board. These have far reaching positive implications on credit management and loan repayment, if managed effectively.

5. Another strategy that SMEs can employ in order to keep their head above the water is through the entrepreneurs enrolling in financial literacy programs like the EGF one. This should be done without waiting for the government or other stakeholders to sponsor such endeavors. SMEs owners are therefore advised to be in active search of such programs and enroll in them.

Research Gaps
From the studies conducted, there is mixed evidence about the effect of financial literacy on the performance of SMEs. It is therefore, important for bankers, bank regulators, supervisors, investors and researchers to understand how financial literacy affects the performance of SMEs in terms of loan repayment. Hence, the researchers’ main purpose in this proposal was to fill this significant gap by providing systematic analysis of the effect of financial literacy on the performance of SMEs with loan repayment in mind. To achieve this goal, the researcher analyzed the financial statements and loan history files of selected SMEs, financial literacy and annual supervision reports from Equity Bank as well as licensed Credit Reference Bureaus (CRBs). Few researches had been conducted on the area of financial literacy especially on performance of SMEs in Kenya and most had failed to show that there is a relationship between loan repayment and the performance of SMEs as a result of financial literacy and this motivated the researcher to fill this gap in the literature.

RESEARCH METHODOLOGY
Research Design
Research design is key to collection, measurement and analysis of data (Kothari, Ramanna, & Skinner, 2010). In this case, the study used a descriptive research design complimented by a Cross-Sectional Survey. Descriptive research is a process of collecting data in order to answer questions concerning the current status of the subject under study. This design was found suitable because it described the effect of financial literacy on loan repayments. Cross-sectional survey design was used to supplement the study which sought to investigate associations between financial literacy and the performance of SMEs in light of loan repayment.
**Target Population**

From Equity Bank’s records, 300 SMEs in different industries have benefited from Equity Group Foundation Literacy programme within Ngara, Nairobi County. The sectors covered in the program included hardwares, clothes dealers, general retail traders and others.

<table>
<thead>
<tr>
<th>Category</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware business men</td>
<td>40</td>
</tr>
<tr>
<td>Clothes dealers</td>
<td>100</td>
</tr>
<tr>
<td>General retail traders</td>
<td>120</td>
</tr>
<tr>
<td>Others</td>
<td>40</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>300</strong></td>
</tr>
</tbody>
</table>

Source: Equity Bank (2014)

**Sample Size**

The study used random stratified sampling method to select 10% of the respondents from the target population (Mugenda and Mugenda, 1999). This gave a total of thirty (30) respondents which was deemed to be a good representation of the population.

The formula below was used to calculate the sample size as, (Kothari, 2004):

\[
n = \frac{Z^2 \times p \times q \times N}{e^2 \times (N - 1) + Z^2 \times p \times q}
\]

Where:
- \(n\): is the sample size for a finite population
- \(N\): size of population which is the number of SMEs
- \(p\): population reliability (or frequency estimated for a sample of size \(n\)), where 0.5 is taken for all developing countries population and \(p + q = 1\)
- \(e\): margin of error considered is 10% for this study.
- \(Z_{\alpha/2}\): normal reduced variable at 0.05 level of significance \(z\) is 1.15

According to the above formula, the sample size for all the SMEs is:

\[
n = \frac{1.15^2 \times 0.5 \times 0.5 \times 300}{0.1^2 \times (300 - 1) + 1.15^2 \times 0.5 \times 0.5}
\]

\[
n = \frac{99.19}{3.32}
\]

\[
n = 30
\]
Data collection Instruments
The study utilized primary data. The data collection instrument was a Questionnaire, (see Appendix 1). The researcher self-administered questionnaires for primary data through drop and pick method to all selected program beneficiaries.

Data Collection Procedures
The questionnaire was administered through the ‘drop-and-pick-later’ approach. This gave the respondents ample time to think through the questions before answering them. They were then collected after one week for analysis. The questions were structured in the context of a custom designed and adjusted Likert Scale of 1-10 with 1 being strongly disagreeing and 10 being strongly agreeing.

ANALYSIS
Descriptive statistics was applied to help establish patterns, trends and relationships and to make it easier to understand and interpret the implications of the study. Data collected was then organized, coded and entered in the computer for analysis using SPSS package version 20.0. Results were presented using frequency counts, percentages, means and standard deviation; correlation coefficient and regression were used to analyses the difference in loan repayment after training.

Here, study findings are presented on the effect of financial literacy on performance of SMEs in Kenya with loan repayment as the subject of study.

Demographic Information

Level of education
The study sought to determine the respondent’s level of education. According to the findings, 31% of the respondents had no certificates, 10% had diploma, 55% were form four leavers, and 4% had degrees as shown in figure 1 below.
Years of Operation

From the findings, 16.67% had 1-5 years of operation, 50% had 6-10 years, 16.67% had 11-15 years and lastly 16.67% had 16-20 years of experience. Thus majority of the respondents had 6-10 years which is an average years for a competent SME.

Mode of Financing

On the type of financing that the SMEs employ, the study established that 50% of the SMEs rely on formal borrowing, 35% on internal savings and the remaining 15% were reliant on informal borrowing as shown in figure 3 below.
Figure 3: Mode of Financing Employed by SMEs

<table>
<thead>
<tr>
<th>Mode of Financing</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal Borrowing</td>
<td>50%</td>
</tr>
<tr>
<td>Internal Savings</td>
<td>30%</td>
</tr>
<tr>
<td>Informal Borrowing</td>
<td>20%</td>
</tr>
</tbody>
</table>

**Loan Default Rate**

The respondents were asked to indicate, in light of having undergone financial literacy training via the EFG initiative, whether they had fallen behind on loan repayment. The result was 75% had not fallen behind, 20% had indeed veered off the track and 5% were not sure of their loan status. This finding is captured in the figure hereunder.

Figure 4: Loan Default Rate (%)

- Not Defaulted: 75%
- Defaulted: 20%
- Unaware: 5%
Book Keeping Perspective of Financial Literacy

To understand the effect of financial literacy in different SMEs, the respondents indicated the extent to which they agreed with the various statements. The statements were as accruals of having undergone the financial literacy training program. The findings according to the respondents agreed that their now gotten skills in the maintenance of debtors and creditors ledgers increased after financial literacy training and this had a positive effect in business in terms of expansion prospects as shown by a mean of 4.667 and standard deviation of 0.5164; the maintenance of purchases and sales ledgers skills increase and these were effective to the tune of heightened competitiveness, evident in a mean of 4.1667 and a standard deviation of 0.75277; the respondents agreed that ability to maintain the payroll improved their business efficiency and effectiveness, evident by a mean of 4.0000 and a standard deviation of 0.63246; the financial literacy afforded more skill to participants through many learning to balance the ledgers and trial balance, seeing growth in performance of loans through planned loan repayment plans as indicated by a mean of 4 and standard deviation of 0.63246 and lastly they testified that SMEs met the core capital requirement preparation of final financial statements as shown in table 4.3 below with a mean of 4.3333 and a standard deviation of 0.5164 which greatly enabled them to be potential receivers of loans in the future.

<table>
<thead>
<tr>
<th>Aspects of Booking</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have your gotten skills in maintaining the debtors and creditors ledgers helped you in expansion endeavours?</td>
<td>4.6667</td>
<td>.51640</td>
</tr>
<tr>
<td>Has the training in maintaining purchasers and sales ledgers increased your business’s competitiveness?</td>
<td>4.1667</td>
<td>.75277</td>
</tr>
<tr>
<td>Has the training in maintaining of payroll improved your business’ efficiency and effectiveness?</td>
<td>4.0000</td>
<td>.63246</td>
</tr>
<tr>
<td>Do you think your ability of balancing the ledgers &amp; trial balance and preparation of financial statements has improved your loan award qualifications?</td>
<td>4.3333</td>
<td>.51640</td>
</tr>
</tbody>
</table>

Budgeting Perspective of financial literacy

Budgeting was another independent variable in the study to determine whether financial literacy had an effect on performance of SMEs albeit in loan repayment parameters. The findings showed the different extents to which the respondents agreed with different statements about
the efficiency of financial literacy on loan repayment. The respondents agreed that financial literacy regarding the maintenance of a budget committee reduced the SMEs running costs and ultimately enabled advance planning on loan repayment as shown by a mean of 4.5 and a standard deviation of 0.54772; the service costs reduced and enabled proper allocation of adequate loan repayment resources as indicated by a mean of 4 with no standard deviation; however the study found no positive relationship whatsoever between the presentation and approval of budget by owners and the possibility of improved loan repayment prospects.

Respondents to a large extent agreed that their after financial literacy training, the ability to do a self internal audit enabled them to identify resource leakages and with that the proper channelling of adequate resources towards loan repayment, as shown by a mean of 4.3333 and a standard deviation of 0.5164; salaries and operating costs reduced also as shown in the table at a mean of 4.5 and a standard deviation of 0.54772; Improved presentation skills which was a core result of financial literacy increased innovation and invention enhancing probability of meeting customers’ unique needs as shown by a mean of 4 and a standard deviation of 0.63246; lastly internal audit to track budget implementation has reduced chances of defaulting on loans as one is able to plan ahead as shown below with a mean of 4.8333 and a standard deviation of 0.40825.

Table 5: Aspects of efficiency

<table>
<thead>
<tr>
<th>Aspects of efficiency</th>
<th>Mean</th>
<th>Std. deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has the maintenance of a budget committee reduced running costs and enhanced loan repayment plans?</td>
<td>4.5000</td>
<td>.54772</td>
</tr>
<tr>
<td>Has your ability to collect budget inputs from business units reduced service costs and enabled allocation of adequate resources towards loan repayment?</td>
<td>4.0000</td>
<td>.00000</td>
</tr>
<tr>
<td>Has your acquired ability to carry our a self internal audit to track budget implementation enabled you to track financial leakages?</td>
<td>4.3333</td>
<td>.51640</td>
</tr>
<tr>
<td>Salaries and operating costs have reduced?</td>
<td>4.5000</td>
<td>.54772</td>
</tr>
<tr>
<td>Improved presentation skill has increased innovation and invention enhancing probability of meeting customer’s unique needs?</td>
<td>4.0000</td>
<td>.63246</td>
</tr>
<tr>
<td>Internal auditing has reduced probability of loan defaulting?</td>
<td>4.8333</td>
<td>.40825</td>
</tr>
</tbody>
</table>
Credit Management Perspective of Financial Literacy.

Competitiveness is the ability to outperform others and win the minds of many. On the differentiated products and services, the financial literacy training program was able to provide, SME loans, budgeting skills, book keeping skills, financial statements preparation and self internal auditing. In addition to the previously discussed questionnaire areas, the respondents were required to evaluate the different aspects of credit management; the findings indicated that SMEs maintenance of invoicing and billing records had increased over the years as indicated by a mean of 3.6667 and standard deviation of 0.5164; self assessment of customer credit risk also increased at a mean of 4.5 and a standard deviation of 0.54772; the financial literacy initiative was also able to help the small and medium enterprises capture a great number of different customer groups as shown by a mean of 4.000 and standard deviation of 0.63246;

Table 6: Aspects of competitiveness

<table>
<thead>
<tr>
<th>Aspects of competitiveness</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMEs maintenance of invoicing and billing records had increased over the years</td>
<td>3.6667</td>
<td>.51640</td>
</tr>
<tr>
<td>Self assessment of customer credit risk</td>
<td>4.5000</td>
<td>.54772</td>
</tr>
<tr>
<td>The financial literacy initiative has been able to capture a great number of customer groups</td>
<td>4.0000</td>
<td>.63246</td>
</tr>
</tbody>
</table>

Regression Analysis

The researcher conducted a multiple regression analysis so as to test relationship among budgeting skills, book keeping, credit management and financial analysis skills against loan repayment rate. The research applied the statistical package for social sciences (SPSS) to code, enter and compute the measurements of the multiple regressions for the study.

Table 7: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.937</td>
<td>0.878</td>
<td>0.865</td>
<td>0.65244</td>
</tr>
</tbody>
</table>
Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of the variation in the dependent variable (loan repayment by SMEs) that is explained by all the four independent variables (credit management skills, book keeping skills, budgeting skills and financial analysis skills). The independent variables studied explain only (87.8%) of the effects of financial literacy on the loan repayment by SMEs in Kenya as represented by $R^2$. This means that the other variables not studied in this research contributed (12.2%) and thus further research should be conducted to investigate these other effects of financial literacy on the loan repayment by SMEs in Kenya.

Table 8: Coefficient of determination

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.843</td>
<td>.175</td>
<td></td>
<td>4.847</td>
</tr>
<tr>
<td>Credit Management</td>
<td>.642</td>
<td>.082</td>
<td>.586</td>
<td>7.835</td>
</tr>
<tr>
<td>Book Keeping Skills</td>
<td>-.212</td>
<td>.083</td>
<td>-.246</td>
<td>-2.806</td>
</tr>
<tr>
<td>Budgeting skills</td>
<td>.167</td>
<td>.063</td>
<td>.223</td>
<td>2.583</td>
</tr>
<tr>
<td>Financial analysis skills</td>
<td>.143</td>
<td>.082</td>
<td>.132</td>
<td>1.739</td>
</tr>
</tbody>
</table>

As per the SPSS generated table above, the equation $(Y=\beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon)$ becomes $Y=0.843 + 0.642X_1+0.212X_2 +0.167X_3+ 0.143X_4$. This regression equation shows that taking all the factors into account (credit management skills, book keeping skills, budgeting skills and financial analysis skills) at constant zero then loan repayment rate is 0.843. However taking all the independent variables at zero, then a unit increase in credit management leads to 0.642 increase in loan repayment, the same way a unit increase in book keeping skills leads to 0.212 increase in loan repayment. Again a unit increase budgeting skills will increase performance by 0.167 and finally a unit increase in financial analysis leads to 0.143 increases in loan repayment respectively.

This depicts that credit management continues to have the leading effect on SMEs loan repayment followed by book keeping skills, then budgeting skills and financial analysis skills which shows a positive relationship between financial literacy and loan repayment by SMEs. At 5% level of significance and 95% level of confidence, then credit management skills, book keeping skills and budgeting skills are significant in explaining the relationship between financial literacy and the loan repayment by SMEs in Kenya since their levels of significance are below the base significance level of 0.05. The interpretation therefore is that the observed data are
consistent with the assumption that the null hypothesis is false and thus that hypothesis must be rejected and the alternative hypothesis accepted as true

**RESEARCH FINDINGS**

1. **Financial literacy training instilled book keeping skills in SMEs. This in return improved prospects of business expansion.**

To understand the effect of financial literacy in different SMEs, the respondents indicated the extent to which they agreed with the various statements. The statements were as accruals of having undergone the financial literacy training program. The findings according to the respondents agreed that their now gotten skills in the maintenance of debtors and creditors ledgers increased after financial literacy training and this had a positive effect in business in terms of expansion prospects.

   The ability to carry out proper maintenance of purchases and sales ledgers increased and these were effective to the tune of heightened competitiveness. This on the other hand was complimented by the ability to maintain a proper payroll, which improved their business efficiency and effectiveness. The financial literacy afforded more skill to participants through many learning to balance the ledgers and trial balance, seeing growth in performance of loans through planned loan repayment plans.

2. **Financial literacy in book keeping reduced the SMEs running costs and ultimately enabled advance planning on loan repayment.**

The study found and to a large extent that after financial literacy training, the ability to do a self internal audit enabled them to identify resource leakages and with that the proper channeling of adequate resources towards loan repayment. This revelation appears to compliment Miller’s argument that financial literacy helps in empowering and educating investors so that they are knowledgeable about finance in a way that is relevant to their business and enables them to use this knowledge to evaluate products and make informed decisions. It is widely expected that greater financial knowledge would help overcome recent difficulties in advanced credit markets. Financial literacy prepares investors for tough financial times, through strategies that mitigate risk such as accumulating savings, diversifying assets, and purchasing insurance.

   Financial literacy facilitates the decision making processes such as payment of bills on time, proper debt management which improves the credit worthiness of potential borrowers to support livelihoods, economic growth, sound financial systems, and poverty reduction. It also provides greater control of one’s financial future, more effective use of financial products and
services, and reduced vulnerability to overzealous retailers or fraudulent schemes. Facing an educated lot, financial regulators are now forced to improve the efficiency and quality of financial services. This is because financially literate investors create competitive pressures on financial institutions to offer more appropriately priced and transparent services, by comparing options, asking the right questions, and negotiating more effectively. Investors on their part are able to evaluate and compare financial products, such as bank accounts, saving products, credit and loan options, payment instruments, investments, insurance coverage, so as to make optimal decisions (Miller et al 2009).

3. The ability to perform internal self auditing, enabled SMEs to improve competitiveness in the various sectors that the SMEs operated. Competitiveness is the ability to outperform others and win the minds of many on the differentiated products and services. The financial literacy training program was able to provide book keeping skills. Among the aspects of book keeping skills that exist are financial statements preparation and self internal auditing. As previously discussed with regard to the questionnaire used, the respondents were required to evaluate the different aspects of book keeping; the findings indicated that SMEs maintenance of invoicing and billing records had increased over the years. This proper documentation of operating records and clientele data enabled most of the SMEs to capture as well as retain great and diversified numbers of customer groups. The ultimate result was greater competitiveness which was positive for the SMEs.

4. Financial literacy training enabled SMEs acquire more funding from financial institutions. Respondents to a large extent agreed that after financial literacy training, the book keeping ability to do a self internal audit enabled them to identify resource leakages and with that the proper channeling of adequate resources towards loan repayment. Coupled with improved presentation skills which were a core result of financial literacy, there was increased innovation and invention enhancing probability of meeting customers' unique needs. Lastly, internal audit to track budget implementation reduced chances of defaulting on loans as one was now able to plan ahead. The result of all these achievements from financial literacy training would see the credit ratings of the SMEs go up and hence improving their chances of securing subsequent loans from the financial institutions, with Equity not the limit.
5. **There was a positive relationship effect between budgeting and financial statement analysis skills which in turn improved loan repayment performance by SMEs.**

Again a unit increase budgeting skills led to improved credit management and competitiveness. These in turn led to increase in performance respectively. Good performance no doubt improved loan repayment by the SMEs.

This depicts that credit management continues to have the leading effect on SMEs performance followed by book keeping skills, then budgeting skills and financial analysis skills which shows a positive relationship between financial literacy and loan performance of SMEs.

Further findings indicated that the growth and expansion attracted qualified professionals and eliminated inefficient management through job descriptions and specification reviews, trainings, seminars and workshops. Greenspan (2002) argues that financial literacy helps to inculcate individuals with the financial knowledge necessary to create household budgets, initiate saving plans, and make strategic investment decisions. Proper application of that knowledge helps investors to meet their financial obligations through wise planning, and resource allocation so as to derive maximum utility.

Financial literacy theory argues that the behavior of people with a high level of financial literacy might depend on the prevalence of the two thinking styles, according to dual-process theories: intuition and cognition (Evans 2008).

The findings of this study indeed appeared to compliment the financial literacy theory as those who were in active search of financial literacy (cognition process), ended up having positive feedback from the cognition of it. The findings of this research are a true indication and without doubt, that Equity Group Foundation had achieved and is still in due course of achieving its main purpose of developing and growing initiatives with significant social impact, by harnessing Equity Group’s banking capabilities and capacities through effective partnerships with SMEs.

**POLICY RECOMMENDATIONS**

The findings in this research highlight the importance of providing SME operators with financial skills. Be it book keeping, budgeting, credit management or financial analysis skills, each one of them would come in handy either in its own unique way or as a compliment of the other. Few researches have focused on successful SME programs as majority focus on trying to find solutions for failure. However, the findings of this study are a clear insight into some of the routes to can be followed for one to run a successful SME. Further to that, the policy recommendations below would also go a long way to the development and support of small and medium enterprises in Kenya and East Africa as a bloc.
1. **SMEs whose management has little or no financial literacy at all should consider enrolling in related programs both in and out of the EFG program.**

As clear as is portrayed by the evidence contained herein this research, undergoing training to understand various financial related issues can turn-around your business and in a positive way. It's advisable that one understands the environment in which one operates and also that one has the upper hand when dealing with a challenging industry. As mentioned earlier, SMEs in Kenya and in East Africa suffer numerous constraints; it is prudent therefore that one equips themselves with all the necessary tools of survival.

2. **SMEs facing constraints in the market should consolidate their energies by forming focus groups to help on training to expand their necessary skills needed in their business.**

Considering that it might be challenging for one SME to pursue certain strategies, it is advisable that they form synergies and focus groups as these would help them achieve great things together as a lobby. That being said, it's important that governments strongly support such initiatives and that legislation be put in place to enable synergies to be legally considered. The legislation would also see the governments easily manage SMEs as a group as opposed to on an individual basis.

3. **SMEs are advised and be a requirement by both the government and other industry players such as banks that everyone should employ book keeping in their day to day running of the business to improve the performance without any leakages of revenues.**

Proper documentation enables a company be able to track its revenues and expenditures. It also allows proper filing of certain industry regulations such as tax returns. As mentioned here above, one of the advices to SMEs is to form synergies. Of course no one wants to merge their business with that which lacks clear indicators of prior and future performance.

4. **The study recommends that institutions initiate financial literacy departments which will assist the SMEs in acquiring financial analysis skills and other related skills.**

Doing so will enable industry players to be able to project on the profitability of their businesses as well as understanding financial statements which help in interpretation and understanding of business environments.
CONCLUSION

From the findings, it can be concluded that performance of SMEs in terms of loan repayment as a result of owners undergoing a financial literacy training program is indeed affected by bookkeeping skills, credit management know-how, budgeting skills and financial analysis skills. This study focused primarily on the SME sector and more so Ngara area of Nairobi County, Kenya. There are many challenges facing the formation of SMEs and the acquisition of financial literacy by the SME stakeholders. The global economy is heavily dependent on the success of SMEs which creates employment, poverty alleviation and balanced developments. SMEs allow the rural poor, women and youth to diversify their income which brings about economic growth in rural and urban setups.

LIMITATIONS OF THE STUDY

The researcher encountered a number of problems in the cause of the study. For example, some of the businesses had relocated from Ngara; however their contacts were obtained from credit managers to trace them to their new locations. The study concentrated on those respondents who had complete records. Those with 75% complete records were also considered and their records analyzed by use of existing Generally Accepted Accounting Principles (GAAP) guidelines for dealing with and treating incomplete records. The other limitation was the fact that some beneficiaries of the EFG initiatives were uncooperative, though majority supported the idea hence enabling the researcher achieve the desired sample size.

SCOPE FOR FURTHER RESEARCH

A further study should be carried to find out the challenges on formation of SMEs and why many firms have not formed or considered forming SMEs despite the advantages got from engagement in the same. Further studies should also be done on other factors of financial literacy training that could affect performance of SMEs in loan repayment terms since the study only covered 87.8% of the factors. It should also be further sought to identify ways of structuring loans to the ease of SMEs’ payment ability, considering the challenges they face and not ignoring the fact that SMEs are a great contributor to the employment market and ultimately to the GDP of Kenya and the wealth of Africa as a whole.

REFERENCES


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