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## **Microfinance Credit and Financial Performance of Small and Medium Enterprises in Nairobi City County**

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# Microfinance Credit and Financial Performance of Small and Medium Enterprises in Nairobi City County

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## Abstract

The study examined the impact of microfinance credit the financial performance of SMEs situated in Nairobi CBD. The research employed a cross-sectional descriptive survey methodology and focused on business owners and managers of SMEs located in the Nairobi CBD. The licensing department of Nairobi City County in 2017's data informed the sample selection process. The researchers utilized a stratified random sampling methodology in order to include 70 individuals in the investigation. The primary instrument employed for data collection was a semi-structured questionnaire. The research was carried out utilizing SPSS 25.0, which encompassed the application of both descriptive and inferential statistical methods. The researchers employed a multivariate linear regression model to assess the variable's statistical significance. The findings of the analysis were graphically represented through the utilization of tables and bar charts. The study's coefficient was 0.631, accompanied by an adjusted R-squared value of 0.606. Both of these values were determined to have statistical significance with 95% CI. The findings of this research indicate that several factors, such as collateral security, loan-income ratio, branch penetration, and credit rating, collectively account for 63.1% of the variability SMEs performance in the Nairobi CBD. The findings of the study indicate that the inclusion of collateral security has a significant impact on performance ( $\beta = 0.251$ ,  $p = 0.014 < 0.05$ ). In a similar manner, it was found that the ratio of loans to income and the level of branch penetration had a statistically significant positive effect on financial performance ( $\beta = 0.238$ ,  $p = 0.024 < 0.05$ ;  $\beta = 0.382$ ,  $p = 0.004 < 0.05$ , respectively). However, the study indicated that there was a positive trend in association between credit rating and SME performance. However, this trend was not statistically significant ( $\beta = 0.022$ ,  $p = 0.844 > 0.05$ ). This study draws a conclusion based on the empirical evidence provided, suggesting that collateral security has a significant and beneficial influence on SMEs performance in Nairobi CBD. Furthermore, the sustainability of small and medium companies (SMEs) inside the Central Business District of Nairobi is contingent upon some essential aspects pertaining to

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microfinance funding. Additionally, they should engage in thorough pre-loan planning and steadfastly adhere to their initial strategies in order to augment their financial performance.

**Keywords:** *Microfinance, Credit, Financial Performance, Small and Medium Enterprises (SMEs), Nairobi City County*

## 1.0 Introduction

Financing Small and Medium Enterprises (SMEs) has garnered significant attention in recent times and has emerged as a crucial subject for economists and policymakers involved in the advancement of economic and financial growth. This enthusiasm is motivated, at least in part, by the fact that SMEs constitute the majority of businesses within an economic context and contribute significantly to overall employment (Demirguc-Kunt & Huzinga, 2013). Most big company normally begin as small enterprises, so the ability of SMEs to produce and invest ends up being important to any type of kind of economy desiring to be successful (Boahene, Dasah & Agyei, 2012). The recent concentrate on SME financing likewise originates from the assumption among academicians and policymakers that SMEs lack suitable funding as well as additionally require to get unique help, such as federal government programs that boost borrowing. Benedikt, Ian, Judit, & Wolf (2007) observed that the difference in between the stopped working SMEs in addition to those that remained healthy and balanced or redeemed from problems was not just the quality of monetary management yet in addition economic access.

SMEs play a considerable role in financial growth in every country in African. Looks into indicate that in both innovative financial circumstances as well as additionally creating nations SMEs include typically 60 percent of complete official work in the production sector (Ayyagari, 2007). For African economic situations, the repayment of the SME market to task opportunities is a lot more vital. Considering the contribution of the informal sector, SMEs stand for worrying three-quarters of overall operate in manufacturing (Ayyagari, 2007). A necessary aspect in the growth of the SME field is accessibility to fund, specifically to financial institution financing, provided the relative importance of the financial field in offering this section. Firm-level data gathered by the Globe Financial institution reveal that accessibility to financing is viewed as one of the main obstacles to doing organization (World Bank, various years). A variety of studies have actually exposed that financing is a greater barrier for SMEs than it is for massive firms, particularly in the developing world, and that availability to finance negatively influence the development of the SME field more than that of large business (Schiffer as well as Weder, 2001; Beck et al, 2006). It is, for that reason, unsurprising that the international advancement area has supplied SME accessibility to finance as an essential plan leading priority.

The global emphasis of employment and also riches development is the continued development of the tiny and also average venture sector (SMEs) which develops the core of Entrepreneurship in Kenya (Omboto, 2014). It is gratifying to keep in mind that the youth of Kenya can now be fully employed through establishing own services with the help of MFIs and federal government funding (Kiptugen, 2015). Nevertheless, according to Atudo (2014), one significant problem impeding growth of SMEs in Kenya is accessibility to micro-finance. Lack of ample financing consequently positions considerable constraints on SMEs financial efficiency (K-REP, 2013). Microfinance credit rating is essential for the development as well as development of Small and Medium-sized Enterprises (SMEs) (Kiptugen, 2015). Accessibility to microfinance credit history

<https://doi.org/10.53819/81018102t4195>

is still an obstacle to most SMEs in Kenya, and it is also still a vital issue both within the personal and also public sectors (K-REP, 2013).

Microfinance institutions (MFIs) have come to the forefront of financing for Small and Medium Enterprises in recent years, particularly in developing countries. According to Dinh et al. (2020), these institutions offer financial products tailored specifically for SMEs, who often find it difficult to secure financing from traditional banks. By filling this gap, microfinance has become a promoter of entrepreneurship and economic development. Accessibility to credit has been democratized through microfinance, especially for those in rural or underserved areas. Traditional banking might require collateral or credit history, but microfinance has broken those barriers. Ashe (2019) highlights how this ease of access positively impacts the initiation and sustainability of small businesses, thus broadening the financial landscape.

The relationship between microfinance credit and SMEs' financial performance has been studied extensively. Ong'olo and Awino (2019) found that microfinance credit boosts working capital, allowing business owners to invest in inventory, machinery, and human resources. This growth in operational capacity frequently leads to an increase in revenue and profitability. However, the picture is not entirely rosy. Microfinance also presents challenges and risks. High-interest rates, inflexible repayment schedules, and limited financial literacy might lead to over-indebtedness or misuse of funds, as pointed out by Quaye et al. (2019). The financial stress of repayment can, in some instances, overshadow the benefits. Combining microfinance with training and financial education seems to enhance its effectiveness. Research by Banerjee et al. (2020) underscores the importance of teaching SMEs to manage their loans effectively, fostering responsible borrowing, and enhancing business performance. Also noteworthy is the significant impact microfinance has had on empowering female entrepreneurs. Demirgüç-Kunt et al. (2019) illustrate how microfinance promotes gender equality and the financial success of women-led SMEs, translating into broader social and economic empowerment.

In Kenya SMEs run in all sectors of the financial circumstance, that is, production, occupation and also service subsectors (Omondi, & Jagongo, 2018). The SMEs vary from those non-listed, called Jua Kali organization, to those officially registered small-scale organizations, such as grocery stores, wholesale stores and also transportation firms. Practically two-thirds of all SMEs in Kenya hinge on the backwoods with only one-third uncovered in the urban areas. Worrying 17 percent depend on Nairobi along with Mombasa (KNBS, 2017). According to the City County of Nairobi, the registered SMEs in the hospitality industry comprise 3.67 percent of the overall variety of signed up SMEs in Nairobi City County. According to Aseka (2014), the small and medium ventures (SMEs) play a crucial duty in the Nairobi City County economy. Although they speed up financial development, generate work, forex and also tax obligation revenue, they run against hefty chances and also any type of slight changes in the outside environment hits them strongly. In spite of their importance, research studies show that three out of 5 businesses located within Nairobi City CBD pass away within the very first few months of their operation.

Financial performance is the results of a firm's strategies and likewise procedures in financial terms (Demirgüç-Kunt & Huzinga, 2013). Business efficiency can be gauged with different indications such as success, advancement in sales, rise in supply degrees as well as additionally increase in worth of set properties. Additionally, firms additionally have their really own effectiveness indications (Meyanathan & Munter, 1994). Obwogi (2006) remembered that financial measurement of performance is required for both substantial along with little ventures. The source

<https://doi.org/10.53819/81018102t4195>

restraints attached to SMEs reveal that the measurement of high quality and also similarly time are necessary to assure that waste degrees are kept minimized which high level of performance effectiveness is gotten. Financial efficiency actions are cooperated monetary systems (Omboto, 2014). Performance measurement offers comments on the performance of strategies and also their application. This study used revenue margin to gauge the performance of the SMEs.

### 1.1 Statement of the Problem

Small and Medium-Sized Enterprises have a vital impact on the economy, making significant contributions to job creation, innovation, and the overall growth of the economy. According to Hu et al. (2019), SMEs account for a substantial share of employment opportunities, providing jobs to a large segment of the population. Moreover, SMEs foster innovation and competition, driving technological advancements and productivity improvements (Coad et al., 2019). Their agility and flexibility enable them to respond quickly to market demands, making them a vital component of a dynamic and resilient economy (Roper & Hewitt-Dundas, 2020). SMEs also contribute to regional development and the diversification of economic activities (Caloffi et al., 2020). Overall, the success and growth of SMEs have a direct positive impact on the overall economic health and stability of a country.

According to Ndemi and Mungai (2018), despite the crucial role of SMEs in Kenya's economy, they face significant economic constraints that hinder their operations. As a result, their financial performance is adversely affected, limiting their potential to contribute as expected to the national economy. This situation is particularly challenging in an emerging economy like Kenya, where the lack of sufficient infrastructure and innovation hampers the growth of industries. Many small and medium businesses struggle to access necessary funding and credit, especially from established financial institutions like commercial banks (Liedholm & Mead, 2013). This is because of the financing problems given to them such as security for the loan. These businesses may not be able to supply collateral such as stationary properties due to their small possession base.

Many of these business hotels to obtaining from pals and relatives. Nonetheless, this kind of money is inadequate to provide for all the demands of the medium as well as tiny enterprises. Consequently, absence of debt forces the management to utilize affordable and also neighborhood modern technology which most times is inappropriate. Generally microfinance is very critical to the growth of SME as they give credit history to tiny companies. The ability of SME to expand depends very on their potential to access funding in order to buy restructuring, advancement as well as credentials.

Azende (2012) research study in Nigeria revealed that SMEs struggle to gain access to finance from financial institutions because of strict collateral requirements and inefficient guarantees plans. The research by Azende (2012) fell short to focus on the impacts of monetary access on economic efficiency of SMEs in Nigeria; a space the current study looks for to load. Ghimire and also Abo (2013) examined the issue of insufficient financing among SMEs running in Cote D'Ivoire. The study gathered data from drivers employed by small and medium-sized enterprises (SMEs) in both urban and rural regions. The research employed probability sampling methods and utilized cross-tabulation and correspondence analysis techniques. The research study identified information asymmetry and inadequate security as the primary factors impeding the transmission of credit from financial institutions to small and medium-sized enterprises (SMEs). The previous research study did not establish a definitive correlation between credit access and SMEs economic performance. This gap in knowledge is what the current research aims to address.

<https://doi.org/10.53819/81018102t4195>

Daily, the federal government and various other stakeholders continue to present new laws for markets as well as enterprises in Kenya (Kaname & Mahesh, 2018). New legislations are being enacted in a bid to control the procedures of business. These laws are likewise meant to spearhead lasting economic growth in the nation. Such policies occasionally position incredible hazard to the development of small and moderate business in Kenya. This is since several of these regulations are as well hard. Nonetheless, existing research fails to fully prove a link between micro-finance loans and the economic activity of SMEs. Thus, this study investigated the impact of microfinance credit on small and medium sized enterprises financial performance in Nairobi City County specifically those in Nairobi City Central Business District.

## 1.2 Research Objectives

- i. To determine the effect of collateral security on financial performance of SMEs in Nairobi City CBD.
- ii. To establish the effect of loan-income ratio on financial performance of SMEs in Nairobi City CBD.
- iii. To evaluate the effect of branch penetration on financial performance of SMEs in Nairobi City CBD.
- iv. To assess the effect of credit rating on financial performance of SMEs in Nairobi City CBD.

## 1.3 Research Hypotheses

- H<sub>01</sub>:** Collateral Security has no statistical significant effect on financial performance of SMEs in Nairobi City CBD.
- H<sub>02</sub>:** Loan-Income Ratio has no statistical significant effect on financial performance of SMEs in Nairobi City CBD.
- H<sub>03</sub>:** Branch Penetration has no statistical significant effect on financial performance of SMEs in Nairobi City CBD.
- H<sub>04</sub>:** Credit Rating has no statistical significant effect on financial performance of SMEs in Nairobi City CBD.

## 2.1 Theoretical Review

### 2.1.1 Pecking Order Theory

This theory was established by Myers (1984). The theory stated that firms like interior sources of money; they adjust their target returns pay-out proportions to their economic investment chances although benefits in addition to pay-out percentages are slowly adapted to changes in the level of beneficial financial investment possibilities. Additionally, Myers (1984) discussed that in case outside funding is needed, companies are greater than likely to launch the most effective safety and security at first that is to claim they begin with financial debt after that potentially convertible financial debt then equity comes as last option. In wrap-up, Myers' disagreement was such that services stick with a chain of command of financing sources along with support interior funding when easily provided. Ought to exterior financing be asked for, economic obligation would definitely be selected over equity.

Scherr et al. (1993), Holmes et al. (1991), and Quan (2002) have extensively examined the Cosh and Hughes (1994) on the other hand claimed that within the overall positioning principle, Little in addition to also Medium Sized Enterprises' when contrasted to substantial endeavors would absolutely depend a lot more on holding excess liquid buildings to please suspensions in financial investment programs, depend far more on short-term monetary responsibility including profession credit history record in addition to over-limits, depend better on hire purchase as well as also renting devices. In connection to Small Medium Enterprises funding, Cosh and Hughes 17 (1994) suggested an improvement of the concept due to its lack of details to examine hazard both on specific as well as likewise cumulative basis. This concept associates with this study given that it informs economic effectiveness of SMEs in Nairobi City County.

### **2.1.2 Credit Rationing Theory**

This theory was propagated by Stiglitz (1976). Credit scores Rationing Theory proposes that asymmetric details brings about credit history rationing conditions by personalizing the risk-return circulation. This fact encouraged banks to decline proceeding resources for investments as well as generated divergence in between funding need and also supply. Constrained accesses to finance derived from financial institutions' credit history rationing actions were not effective since managers functioned under problems of asymmetric information. This resulted into much less rewarding investments being funded while much more lucrative financial investments were excluded resulting right into adverse alternative in addition to moral danger dangers. Because of this, crooked info explained crooked distribution of credit report among business with identical features (Alfo & Trovato, 2006).

Credit history allocating theory has actually also been criticized for concentrating generally on exactly how financial institutions assign existing resources and ignoring the endogenous production of cash (Piegay, 1999). Wolfson (1996) has actually been one of the very first to bring these two principles with each other. Wolfson suggests that financial institutions will certainly try to fit any kind of demand for credit history by adjusting their books accordingly. However, the debtors' demand that banks attempt to meet is not the same as the borrowers demand term we have actually made use of throughout this paper. Financial institutions will certainly attempt to offer only the demand of those consumers that are regarded to be creditworthy. Little companies were disadvantaged hereof, due to the truth that they lacked collateral safety and also they did not have a proven credit rating performance history. Consequently, start-up firms with brand-new ingenious products were constrained to gain access to financing because of the reality that they were unlikely to equip financial institutions with securities. This theory relates to this research given that it certainly assisted the researcher understand just how collateral safety affects the efficiency of SMEs in Nairobi CBD.

### **2.1.3 Market Power Theory**

The Market Power Concept was first advanced by Joskow and Tirole (2000). The academic theories on market power suggest that a company's ability to easily access credit is largely influenced by the structure of the banking market. The typical market power was that focused financial markets belong to much less credit report availability as well as a higher price of debt report. Empirical research study studies supplied combined results. Some researches established that better emphasis is contacted better credit report routine regular with information concept that a lot less affordable financial institutions had far more rewards to obtain soft details. Different various other empirical researches, however, discovered support for the marketplace power theory

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that credit report record rationing was higher in much less budget-friendly financial institutions markets (Valverde, 2005). However, a different view that arise over the past years recommended that the impact of competitors on credit history might be related to the degree of unequal information in the marketplace (Dell' Ariccia & Marquez, 2005).

Olomi (2001) exposed that growth was another element that constricted access to fund based on funding rationing. There was a broad conflict concerning the growth of MSEs in Kenya; and also the survival rate which was developed to be substantially reduced. Due to doubts about the opportunity of development in MSEs, business financial institutions were inclined to tightened demands as well as information from MSEs to authorize a finance to finance a practical investment. Such information was not provided sufficiently bring about possibly viable service ideas falling into the credit allocating catch. This theory relates to this research because it notifies geographical branch penetration variable.

## **2.2 Empirical Literature Review**

### **2.2.1 Collateral Security and SME Performance**

Azende (2012) conducted a study on threat monitoring and insurance of small and tool range ventures in Nigeria. This research evaluated the financing choices available to Small as well as Medium Scale Enterprises (SMEs) in Nigeria to determine just how they impact the development and performance of the SMEs, making use of Benue and also Nasarawa States as study. Mean scores as well as standard deviation were made use of to provide and also examine the key information gotten through surveys. Correlation was used to confirm whether there was similarity in the fundamental identified issues of each funding alternative. Straightforward percent integrated with mean scores were made use of to check theory one on threat management and efficiency while Chi-square was utilized to examine hypothesis 2 on collateral safety and security as well as financial accessibility. The result revealed that the SMEs were considerably financed by informal resources of money than the formal sources of financing due to undependable collateral safety and security.

The official financing options were extra organized and also because of this prevented SMEs as a result of their risky nature. Primary SMEs were doing not have in collateral safety and security and also risk administration techniques such as insurance cover which is influenced their monetary access for this reason performance. The research advised that both the federal government and also the banking industry should equally agree on a credit history assured plan method that will incorporate a risk-sharing arrangement as a way of motivating the banks to funnel funds to the SMEs. However, the research provided the collateral safety issue a threat administration technique. Taking into consideration the truth that this research study was performed in Nigeria, the technique embraced as well as the research study variables involved, the research study presents conceptual, technical, and contextual gaps.

### **2.2.2 Loan-Income Ratio and SME Performance**

Muguchu (2013) did a research study on the partnership in between ease of access to credit report and likewise monetary efficiency of SMEs in Nairobi, Kenya. The research sought to discover whether there was connection between accessibility to credit rating along with monetary efficiency of SMEs in Nairobi, Kenya. The research study concentrated on the incomplete information theory. The research study used secondary data, sourced from the financial documents of business from the year 2008 to 2012. The research study made use of correlation analysis and regression

<https://doi.org/10.53819/81018102t4195>



analysis to take a look at the information gathered. Detailed analysis along with regression evaluation located that there was a beneficial link in between income-loan proportion and additionally ROI for the SMEs. Nonetheless, the research used extra information only, a space the existing research looks for to fill.

A research study by Iopev along with Kwanum (2012) on evaluation of income-loan profile influencing monetary access and also performance of SMEs was carried out in Nigeria. The research accepted a study research style to analyze the level of threat management by SMEs in Nigeria with specific emphasis on the income-loan account by SMEs, the credit report rating acquisition standards and also insurance coverage cover embarked on by their company with a sight of decreasing their threat. The findings exposed that SMEs did not keep proper accounts as a result they might not be able to determine, assess as well as intend the monitoring of their income-loan proportion efficiently. The research stopped working to provide a clear analytical relationship between earnings- financing proportion and also the efficiency of the SMEs. The present research will certainly load the void by showing clearly the analytical connection as well as organization in between income-loan proportion and financial performance by conducting regression and correlation analysis.

### **2.2.3 Branch penetration and SME Performance**

Nkuah, Tanyeh and Gaeten (2013) did a study on result of financing SME in Ghana: barriers along with factors in accessing banks debt on performance. The research study concentrated on the credit scores rationing concept recommended by Stiglitz as well as Weiss (1981). The complying with classifications of little and also medium business were determined in the study; Chop bar drivers, fast-food drivers, restaurants, fabric and also leather works, woodworking, steel fabricating, fixing solutions, auto repair work, pharmacies, spare part suppliers, motorcycle dealers, hair cabinets, barbers and also sachet water producers. The study found significant relationship between specific characteristics and access to credit scores. The research study found that there was no considerable partnership in between the location of a company and likewise accessibility to credit history score.

Minh (2012) did a research study on the elements of SME accessibility to credit history along with performance in Vietnam. The study used a data source of SMEs from World Bank Enterprise Survey (2009). The data source consisted of not just tiny as well as moderate organization yet additionally large enterprises. The range of information was really vast however in dimension of factors of SME credit scores availability, the data was instead limited. Because of the features of data, the research study might not aim at comprehensive particular troubles, but at basic photos of SMEs financing including endogenous as well as exogenous variables. The study showed that in general, companies in Vietnam depended way too much closeness from financing establishments to obtain cash for development and also development. The research focused on established listing of SMEs from World Bank documents, a space the present study looks for to fill.

### **2.2.4 Credit Rating and SME Performance**

Vairava (2012) performed a research on execution of credit report rating for SMEs as well as just how it is beneficial to Indian SMEs. The study embraced detailed research study style. The study findings indicated a favorable and significant connection in between debt ranking and the monetary performance of SMEs in India. Demoussis, Drakos and Giannakopoulos (2017) examined determinants of the degree of credit report rationing amongst SMEs in Ghana. The research study tackled study approach in discovering credit rating rationing among the SMEs. The research study

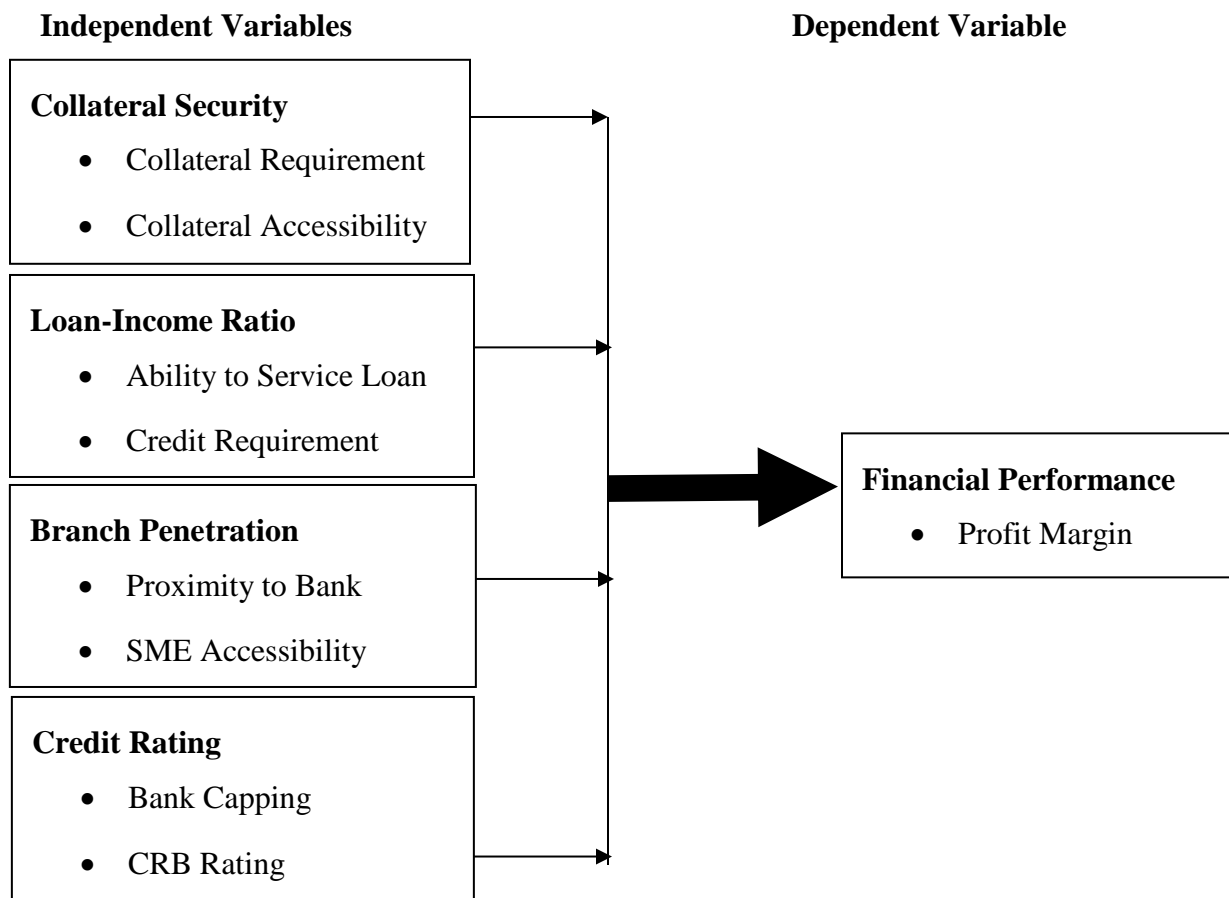
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discovered a beneficial link in between financial debt availability and also the period a venture has with the loan provider. An increase in the variety of banks causes a boost in the likelihood of credit report rationing. Nonetheless, this effect is more powerful or weak depending upon the size of the loan provider and of the customer. They also discovered a direct partnership between the economic efficiencies of these ventures to the price at which the firms obtained credit report from the lending institutions.

Njiru (2014) conducted a research on the result of price of financial obligation on the economic Performance of industrial milk tiny as well as likewise ordinary Enterprises in Kiambu Area Outcomes reveal that the expense of credit rating has direct effect on the economic efficiency of service milk SME's in the area of Kiambu. There is a favorable partnership between the interest payable in the year by SMEs as a result of car loans borrowed by SMEs in time, lending exceptional from banks, the age of commercial dairy products SMEs, their dimensions and the values of finances borrowed from financial institutions by business milk SMEs to the economic performance of these entities, additionally verifying the positive relationship observed under the exploratory analysis that is, the higher the expense of credit rating the larger the impact on financial efficiency of the SMEs. There is requirement to check out policy options meant to boost competitors in the industry as well as measures to break market dominance will certainly be one such choice.

### **2.3 Conceptual Framework**

The independent variables consisted of collateral security, loan-income proportion, and likewise geographical branch seepage in addition to credit score report ranking. Efficiency will certainly be suggested by sales amounts, success and also liquidity. The signs for the different variables are as illustrated in Table 1.



**Figure 1: Conceptual Framework**

**3.0 Research Methodology**

The study employed mixed method research design which was the application of both qualitative and likewise measurable strategies. Both qualitative in addition to likewise quantifiable information was accumulated as well as additionally merged in order to supply a significant analysis of the research study issue.

This research study targeted SME's that are based within the Central Business District of Nairobi City County. The research study targets proprietors as well as supervisors of SME's in the CBD throughout all markets as given up the Nairobi city area licensing division in the year 2017. Nairobi City area has concerning 98,600 companies that have NCC trading licenses (Nairobi County, 2017). There are about 8 collections of numerous sub-sectors in Nairobi CDB, which are gathered by NCC making use of firm codes throughout different fields.

The size of the sample was determined using the Fisher's et al. (2007) formula

$$n=Z^2 pq/d^2$$

Where n=the desired sample size

Z=standard normal deviation at required confidence level 95% or 1.96

P= Business owners and managers, 0.214 of the entire population of SME's.

$$\text{Calculation} \rightarrow \frac{\text{SMEs in CBD}}{\text{SMEs in Nairobi City County}} \times 100\% = \frac{21,100}{98,600} \times 100\% = 21.4\% (0.214)$$

q=1-p (the proportion without characteristics)

d=level of statistical significance (degree of freedom=0.05)

$$n = 1.96^2(0.214)(0.214)/(0.05)^2$$

**n=70 respondents**

A semi-structured questionnaire was used to collect crucial info from the proprietors or managers of the SMEs. The primary data used in this study was gathered with the help of a questionnaire. A Likert scale of five feedbacks set of questions was used. Likert range is an interval scale that specifically utilizes five supports of highly disagrees, differ, neutral, concur as well as highly concur. After data has actually been accumulated with surveys, it was prepared in readiness for assessment by modifying and enhancing, taking care of vacant responses, coding, identifying and also keying right into statistical package for social clinical looks into (SPSS) computer system software program application for evaluation. SPSS was utilized to create uniformities, in-depth and additionally inferential stats which were utilized to get final thoughts in addition to generalizations concerning the population. The particular detailed stats were uniformities; suggest scores as well as additionally standard deviation. The particular inferential statistics were regression and also connection evaluation.

The assessment of difference (ANOVA) was inspected to reveal the basic variation value. Specifically, the computed f number was contrasted to the organized fact. A crucial p worth of 0.05 was furthermore be used to identify whether the basic design was significant or otherwise the specific regression coefficients were checked out to see whether the independent variables considerably influenced the funding decisions. A crucial p worth of 0.05 was likewise used to determine whether the particular variables are considerable or otherwise. The multiple regression model below was used in linking the independent variables to the dependent variable:

$$Y_i = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon$$

Where  $\beta_0$  is the Y intercept of the regression surface

$Y_i$ - Performance

$X_1$ -Collateral security

$X_2$ -Loan-income ratio

$X_3$ - branch penetration

$X_4$ -Credit rating

$\epsilon$  - Error term.

$\beta_1, \beta_2, \beta_3, \beta_4$  are coefficients.

**4.0 Findings and Discussion**

A total of seventy (70) questionnaires were distributed to the sampled 70 respondents. Out of the 70 distributed questionnaires, sixty three (63) questionnaires were dully filled and returned. This

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translated to a response rate of 90 percent, which was line with Orodho (2009) who observed that a feedback rate over 50% adds in the direction of event of adequate information that could be generalized to stand for the opinions of participants about the study problem in the target population.

Demographic characteristics results revealed that most of the respondents (52.40%) were female, while the remaining 47.60% were male. Majority of the respondents (65.10%) had tertiary level of education qualification, 23.80% were secondary school graduates, while 11.10% indicated that they did not study past primary level. In addition, majority (46%) of the respondents were aged between 31-40 years, followed by 39.70% who were aged between 41-50 years, 12.70% of the respondents indicated that they were aged more than 50 years, while 1.60% were found to be within the age bracket of 20-30 years. Moreover, more than half (50.80%) of the SMEs were falling under the category of commercial firms, and majority of the respondents (66.70%) had been engaged in particular industry within the SME sector for between 6-10 years. Most of the businesses (47.6%) were generating an average of more than Ksh. 10,000 per month.

#### 4.1 Descriptive Statistics Results

Table 1 depicts the opinions of the study participants.

**Table 1: Descriptive Statistics on Collateral Security**

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev.
Our firm has tangible assets not limited to land and machinery that can be used as collateral	4.80%	4.80%	7.90%	22.20%	60.30%	4.286	1.113
Our firm has intangible assets not limited to goodwill, shares that can be used as collateral.	4.80%	6.30%	9.50%	19.00%	60.30%	4.238	1.160
Our firm has in the past being denied credit due to unavailable assets	7.90%	0.00%	15.90%	15.90%	60.30%	4.206	1.207
The firm and the owners have joint ownership of the collaterals.	6.30%	11.10%	22.20%	20.60%	39.70%	3.762	1.266
<b>Average</b>						<b>4.123</b>	<b>1.187</b>

From the results in Table 1, most of the respondents (82.50%) agreed that their firms had tangible assets not limited to land and machinery that could be used as collateral. This implies that most of the respondents were agreeing with the statement and their responses did not deviate from the mean response. The results also show that most (79.30%) agreed with the statement that their firms had intangible assets not limited to goodwill, shares that they could use as collateral. The same was affirmed by (M= 4.238; SD= 1.160). This result mean that most of the SMEs in NCC CBD have intangible assets not limited to goodwill, shares that they can be able to use as collateral.

Similarly, a majority of the participants (76.20%) agreed that their firms had in the past been denied credit due to unavailable assets. The responses had (M= 4.206; SD=1.207) respectively. This

<https://doi.org/10.53819/81018102t4195>

implies that most SMEs in NCC CBD have at one point been denied credit for lack of asset to be used as collateral for the credit. Finally under collateral security as a variable, the study found that in most of the businesses (60.30%), firms and the owners had joint ownership of the collaterals. In overall, the responses on security collateral had an average (M= 4.123; M=1.187) respectively. This implies that most of the respondents were in agreement with the statements on security collateral status of their firms and their responses did not deviate so much from the mean response.

These descriptive statistics results are in agreement with the assertions by Ghimire and Abo (2013) that information asymmetry and inadequate collateral are the two major constraints that limit the flow of credit from banks to SMEs which in turn affect performance. The same sentiments were echoed by Kiptugen (2015) who found that microfinance credit is essential for the growth and advancement of Tiny as well as Medium-sized Enterprises (SMEs); nonetheless, access to microfinance credit history is still a difficulty to a lot of SMEs in Kenya, and also it is likewise still a crucial issue both within the personal and also public markets which do not have collateral for debt.

Table 2 displays the descriptive statistics findings on Loan-Income Ratio.

**Table 2: Descriptive Statistics on Loan-Income Ratio**

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev.
We rely on the annual financial statements to gauge our Loan-income Ratio thus avoiding over borrowing.	1.60%	7.90%	36.50%	25.40%	28.60%	3.714	1.023
We do not rely on the annual financial statements to gauge our Loan-income Ratio thus avoiding over borrowing.	1.60%	6.50%	38.70%	27.40%	25.80%	3.694	0.985
The managements has instituted measures that highlight sustainable levels of Loan-income Ratio	9.70%	17.70%	30.60%	22.60%	19.40%	3.242	1.237
The managements has not instituted measures that highlight sustainable levels of Loan-income Ratio	1.60%	6.30%	36.50%	33.30%	22.20%	3.683	0.947
<b>Average</b>						<b>3.583</b>	<b>1.048</b>

Table 2 depicts that most of the respondents (54%) agreed that they were relying on the annual financial statements to gauge their loan-income ratio thus avoiding over borrowing. The responses on the statement recorded (M=3.714; SD=1.023) respectively, implying that most of the respondents were in agreement with the statement and their responses were uniformly spread about the mean response. The results also show that majority (53.20%) of the respondents were positive that their businesses were not relying on the annual financial statements to gauge their loan-income ratio thus avoiding over borrowing.

<https://doi.org/10.53819/81018102t4195>

The results further show that only 42% of the respondents were of the opinion that the managements of their respective businesses had instituted measures that highlighted sustainable levels of Loan-income Ratio and supported with a (M= 3.242;SD=1.237) respectively. Finally, the results show that most of the respondents (55.50%) agreed with the statement that the managements of their firms had not instituted measures to highlight sustainable levels of Loan-income Ratio (M=3.683; SD=0.947). The responses on loan-income ratio had an average (M= 3.583 SD= 1.048), implying that majority of the respondents were agreeing with the statements and their response were uniformly varied about the mean response. These descriptive statistics results concurs with the conclusion by a study by Iopev and Kwanum (2012) that SMEs that do not maintain proper accounts cannot be able to identify, assess and plan the management of their income-loan ratio effectively. This points to the importance of loan-income ratio in accessing microfinance credit.

Opinions of the participants were as depicted by Table 3.

**Table 3: Descriptive Statistics on Branch Penetration**

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev.
Our firm is located near a financial institution	9.70%	3.20%	27.40%	25.80%	33.90%	3.710	1.246
Our firm is not located near a financial institution	3.20%	4.80%	30.60%	24.20%	17.10%	3.871	1.079
Our firm has a direct account associated with this bank	3.20%	0.00%	21.00%	41.90%	33.90%	4.032	0.923
Our creditor’s usually visits our premises to assess our financial needs.	4.80%	1.60%	25.80%	29.00%	38.70%	3.952	1.078
Average						3.903	1.068

From the results in Table 3, it is clear that most of the respondents (59.70%) agreed that their firms were located near a financial institutions (M=3.710; SD=1.246). This implies that most of the respondents agreed with the statement and their responses were uniformly spread from the mean response. The results also show that 41.30% of the respondents indicated that their firms were not located near a financial institution. The results further show that majority (75.80%) of the respondent agreed that their firms had a direct account associated with a particular bank. Finally, the results show that most of the respondents were in agreement (67.80%) with the statement that their creditor’s usually visited their premises to assess their financial needs. The results are consistent with the findings of a study by Minh (2012) which found that in general, businesses in Vietnam depended too much proximity from financing institutions to obtain money for growth and expansion.

Data on Table 4 represents the opinions of the study participants.

**Table 4: Descriptive Statistics on Credit Rating**

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev.
Our firm credit rate is healthy and we can access funds.	0.00%	11.30%	25.80%	32.30%	30.60%	3.823	1.000
Our firm can access an overdraft to service short term liabilities.	4.80%	3.20%	21.00%	35.50%	35.50%	3.935	1.069
Our firm has an existing bank loan default	3.30%	5.00%	28.30%	25.00%	38.30%	3.900	1.085
Our firm plans to borrow to further meet our internal requirements.	3.20%	4.80%	19.40%	30.60%	41.90%	4.032	1.055
We are not listed by CRB for defaulting	6.30%	1.60%	22.20%	27.00%	42.90%	3.984	1.143
<b>Average</b>						<b>3.935</b>	<b>1.070</b>

Based on the findings on Table 4, most of the respondents (62.90%) agreed that their firms’ credit rates were healthy and could access credit, implying that most of the respondents were in agreement with the statement. The results also show that most of the respondents (71.00%) were convinced that their firms could access an overdraft to service short term liabilities, 63.30% of the respondents agreed that their firms had existing bank loan defaults, while 72.50% indicated that their firms had plans to borrow to further meet their internal requirements.

Finally, the results show that most of the respondents (69.90%) agreed that they were not listed by CRB for defaulting on their credits. The results are in agreement with the findings of Vairava (2012) which found that good and high score provides a side to the SME to bargain with the lender for more decrease in interest rate. The research study argued that, if even more financial institutions are approached for financing, then decrease in rates of interest is very feasible given that, no banker will be interested to lose top rated customer.

The respondents’ levels of agreements/disagreements were as shown on Table 5.



**Table 5: Descriptive Statistics on Financial Performance**

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev.
Our firm's profit margin is the highest we have recorded in five years	4.80%	4.80%	17.50%	34.90%	38.10%	3.968	1.092
The business has fulfilled its credit responsibility in time	3.20%	3.20%	29.00%	32.30%	32.30%	3.871	1.016
Our liquidity (financial) has increased and we are able to meet our day to day needs.	3.20%	4.80%	12.90%	40.30%	38.70%	4.065	1.006
The business has standard employee retention rate	3.20%	9.50%	25.40%	25.40%	36.50%	3.825	1.129
The business has recorded growth in number of customers.	3.20%	4.80%	25.40%	19.00%	47.60%	4.032	1.107
<b>Average</b>						<b>3.952</b>	<b>1.070</b>

Based on the descriptive results in Table 5, most of the respondents (73%) agreed that their firms' profit margins within that year were the highest they ever recorded in five years. The results had a (M= 3.968; SD=1.092) showing that most of the SMEs were making improvements in their financial performance. The results also show that majority (64.60%) of the respondents indicated that their businesses had fulfilled their credit responsibility in time. The results further show that most of the businesses recorded improvement in their liquidity (financial) and were able to meet their day to day needs as indicated by 79% of the respondents. Similarly, the results show that most of the businesses had standard employee retention rate (M=3.825; Std. Dev=1.129). Finally, the results show that most of the respondents (66.60%) of the respondents agreed that their businesses had recorded growth in number of customers.

#### 4.2 Inferential Analysis Results

This section presents both correlation and regression results on the relationship between microfinance credit and financial performance of SMEs in Nairobi City County CBD. The results for the correlation in the study are as presented on Table 6.

**Table 6: Correlation Matrix**

		<b>Financial Performance</b>	<b>Collateral Security</b>	<b>Loan Income Ratio</b>	<b>Branch Penetration</b>	<b>Credit Rating</b>
Financial Performance	Pearson Correlation	1.000				
	Sig. (2-tailed)					
Collateral Security	Pearson Correlation	.631**	1.000			
	Sig. (2-tailed)	0.000				
Loan Income Ratio	Pearson Correlation	.681**	.534**	1.000		
	Sig. (2-tailed)	0.000	0.000			
Branch Penetration	Pearson Correlation	.722**	.561**	.695**	1.000	
	Sig. (2-tailed)	0.000	0.000	0.000		
Credit Rating	Pearson Correlation	.571**	.585**	.573**	.643**	1.000
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	

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

As depicted in Table 6 there was a strong positive and significant association between collateral security and financial performance ( $r=0.631$ ,  $p<0.05$ ) at 5% level of significance. The results are in agreement with the conclusion by Rahman, Belas, Kliestik and Tyll (2017) that collateral-based financing can produce benefits for the lending institutions, such as reduction of the company issue through which collateral can prevent possession replacement as well as keep back companies from obtaining excessively. Possession substitution may emerge when the borrowing firms draw away from their intended projects to various other high-risk tasks with expected higher returns.

Based on the results, there existed a positive and significant association between loan-income ratio and financial performance of SMEs in NCC CBD ( $r=0.681$ ,  $p<0.05$ ) at 5% level of significance. This implies that an improvement in status of loan-income ratio has significant association with the financial performance of SMEs in Nairobi City County CBD. The results concurs with the assertions by Ganbold (2018) that absence of credit history information is an element that contributes to the restrictions dealt with by SMEs as evaluating their creditworthiness represents an one-of-a-kind difficulty. Contrasted to bigger companies, it can be more difficult for an SME to create a credit report as they have much less accessibility to typical resources of financing such as banks as well as various other financial institutions whose data is usually utilized in the manufacturing of credit scores reports. At the same time, SMEs do not typically have accessibility to deal with properties, such as land or buildings, which are usually called for by financial institutions as security to protect loans.

The results further show that branch penetration exhibited a strong positive and significant association with financial performance ( $r=0.722$ ,  $p<0.05$ ). Finally, from the results it is evident

that there was a strong positive and significant association between credit rating and financial performance of SMEs in NCC CBD ( $r=0.571$ ,  $p<0.05$ ).

### 4.3 Regression Analysis

This sub-section provides regression results on the effect of microfinance credit and financial performance of SMEs in Nairobi City County CBD. Tables 7, 8 and 8 present the model summary, ANOVA, and regression of coefficient results respectively.

**Table 7: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.795a	0.631	0.606	0.50703

a Predictors: (Constant), Credit Rating, Loan Income Ratio, Collateral Security, Branch Penetration

**Source: Field Data, 2021**

Table 7 show that the coefficient of determination is 0.631 and adjusted R squared of 0.606 at 95% importance degree, implying that the independent variable taken on by the research of collateral security, loan-income proportion, branch penetration, debt score collectively clarified 63.1 % of the variation in monetary efficiency of SMEs in NCC CBD.

**Table 8: ANOVA**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	25.538	4	6.384	24.835	.000 <sup>b</sup>
	Residual	14.91	58	0.257		
	Total	40.448	62			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Credit Rating, Loan Income Ratio, Collateral Security, Branch Penetration

**Source: Field Data, 2021**

In Table 8, ANOVA results are shown. The results program that the model was statistically substantial in discussing the impact of collateral safety, loan-income proportion, branch penetration, credit scores rating on economic performance of SMEs in Nairobi City Region CBD as well as it is suggested by a p-value of  $0.000<0.05$ .

**Table 9: Multiple Regression of Coefficients**

Model	Unstandardized Coefficients		Standardized T Coefficients Beta	Sig.
	B	Std. Error		
(Constant)	0.493	0.372	1.328	0.189
1 Collateral Security	0.251	0.099	0.266	2.542
Loan Income Ratio	0.238	0.103	0.268	2.316
Branch Penetration	0.382	0.127	0.372	3.007
Credit Rating	0.022	0.113	0.022	0.197

a. Dependent Variable: Financial Performance

**Source: Field Data, 2021**

The regression model therefore became;

$$Y = 0.493 + 0.251X_1 + 0.238X_2 + 0.382X_3 + 0.022X_4$$

Where:

Y = Financial Performance

X<sub>1</sub> = Collateral Security

X<sub>2</sub> = Loan-Income Ratio

X<sub>3</sub> = Branch Penetration

X<sub>4</sub> = Credit Rating

Regression coefficients in Table 9 reveal that collateral protection had favorable and substantial effect on the economic performance ( $\beta = .251, p = .014 < .05$ ). The outcome indicates that, a system improvement in collateral safety and security results right into a remodeling in financial performance of SMEs by 0.251 systems. The outcomes additionally show that loan-income percentage had a favorable and also significant result on the financial performance of SMEs ( $\beta = .238, p = .024 < .05$ ). Furthermore, the outcomes recommend that branch infiltration had a positive and also substantial outcome on the monetary performance of SMEs ( $\beta = .382, p = .004 < .05$ ). This was supported by a calculated t-statistic of 3.007 that was greater than the critical t-statistic of 1.96 further confirming the significance. The result implies that, a unit improvement in branch penetration results into an improvement in financial performance by 0.382 units. Finally, the results show that credit rating had a positive but insignificant effect on financial performance of SMEs ( $\beta = .022, p = .844 > .05$ ). This was sustained by a determined t-statistic of 3.007 that was greater than the critical t-statistic of 1.96 additional verifying the importance. The outcome indicates that, a device renovation in branch infiltration results into an enhancement in monetary performance by 0.382 systems. Finally, the results reveal that credit scores ranking had a favorable however irrelevant effect on economic efficiency of SMEs ( $\beta = .022, p = .844 > .05$ ). This was sustained by a computed t-statistic of 3.007 that was more than the crucial t-statistic of 1.96 additional confirming the value.

The outcome indicates that, a unit renovation in branch infiltration results into a renovation in monetary efficiency by 0.382 systems. Ultimately, the outcomes reveal that credit rating had a

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favorable but irrelevant impact on economic efficiency of SMEs ( $\beta = .022$ ,  $p = .844 > < .05$ ). This was sustained by an identified t-statistic of 3.007 that was greater than the crucial t-statistic of 1.96 extra validating the significance. The result suggests that, a gadget renovation in branch infiltration results into an enhancement in financial performance by 0.382 systems. Lastly, the results expose that credit report ranking had a favorable nevertheless unnecessary impact on financial effectiveness of SMEs ( $\beta = .022$ ,  $p = .844 > .05$ ). These regression analysis results concurs with the findings of Copestake, Bhalotra, and Johnson (2018) which indicated that microfinance credit history can play a critical duty in financial growth.

#### 4.4 Hypotheses Testing

*H<sub>01</sub>: Collateral Security has no statistical significant effect on financial performance of SMEs in Nairobi City CBD.*

The hypothesis was checked by utilizing a linear regression model established making use of p-value as well as t-statistic. The acceptance/rejection standards were that, if the p-value is less than .05, H<sub>01</sub> is declined; however, if  $p > 0.05$ , after that H<sub>01</sub> is not denied. So the null hypothesis was that collateral safety has no analytical considerable effect on economic performance of SMEs in Nairobi City CBD. Table 9 show that the p-value was less than 0.05. This was supported by a calculated t-statistic of 2.542 which was above the vital t-statistic of 1.96. The null hypothesis was therefore rejected and the verdict was that collateral safety has analytical substantial effect on financial performance of SMEs in Nairobi City CBD.

*H<sub>02</sub>: Loan-Income Ratio has no statistical significant effect on financial performance of SMEs in Nairobi City CBD*

Table 9 reveal that the p-value was less than 0.05, which was also supported by a calculated t-statistic of 2.316  $> 1.96$ . The null hypothesis was thus rejected and the final thought was that loan-income ratio has significant influence on financial performance of SMEs in Nairobi City CBD.

*H<sub>03</sub>: Branch Penetration has no statistical significant effect on financial performance of SMEs in Nairobi City CBD*

Table 9 reveal that the p-value was less than 0.05. This was sustained by a computed t-statistic of 3.007 which was above the crucial t-statistic of 1.96. The null hypothesis was therefore rejected and the verdict was that branch penetration has statistical significant impact on economic performance of SMEs in Nairobi City CBD.

*H<sub>04</sub>: Credit Rating has no statistical significant effect on financial performance of SMEs in Nairobi City CBD*

Table 9 reveal that the p-value was above 0.05, that was also supported by a calculated t-statistic of 0.197 which was less than the essential t-statistic of 1.96. The null hypothesis was consequently not turned down as well as the final thought was that credit history score has no statistical significant effect on monetary performance of SMEs in Nairobi City CBD.

#### 5.0 Conclusion

Based on the findings, the study concludes that collateral security positively and significantly affects financial performance of SMEs in Nairobi City County CBD. The study concludes that collateral security is important to the SMEs in Nairobi City CBD because it helps them to ensure that they keep up with their financial obligation, in the event that the SME does default, the lender

can seize the collateral and sell it, applying the money it gets to the unpaid portion of the loan. Therefore by having collateral security, the chances of SME accessing microfinance credit are enhanced.

The study in addition concludes that loan-income ratio positively and significantly affects the financial performance of SMEs in Nairobi City County CBD. The study concludes that SMEs with reduced loan-to-income proportions are most likely to handle their regular monthly debt repayments effectively. As a result, financial institutions and monetary credit history service providers want to see low loan-income ratio proportions before issuing finances to a prospective borrower. The preference for reduced loan-income proportions makes good sense given that loan providers want to make sure a consumer isn't exhausted meaning they have a lot of debt payments about their earnings.

Additionally, based on the findings it suffices to conclude that branch penetration positively and significantly affect financial performance of SMEs in NCC CBD. Finally, the study concludes that access to microfinance is important to the SMEs in Nairobi City County CBD. A crucial element in the development of the SMEs in Nairobi City County CBD is access to finance, particularly to financial institutions, given the relative importance of the sector in serving this segment.

## 6.0 Recommendation

Based on the findings and the conclusion, the study makes a number of recommendation. The study recommends that the managers of proprietors of SMEs in Nairobi City County CBD need to aim to utilize the obtained fund for the suggested objectives as well as not otherwise. They need to have previous plan before getting financing and to comply with the preliminary strategy; they should not transform their strategies upon securing funding, this will allow them to repay the finances and also preventing confiscation of their buildings. Members are additionally encouraged to find out as well as apply entrepreneurial skills and also apply them in doing their organization. They must additionally follow all principles needed in doing businesses. The research also suggests that both the federal government and also the banking field need to mutually agree on a debt guaranteed scheme method that will certainly integrate a risk-sharing arrangement as a means of encouraging the financial institutions to transport funds to the SMEs.

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