Determinants of Credit Accessibility of Small and Medium Enterprises in Nairobi County, Nairobi Central Ward

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Abstract: Small and medium enterprises are significant in economic development through micro businesses that are established, run and managed through credit facilities. The study focused on determinants of credit accessibility by SMEs in Nairobi Central Ward in Nairobi County, Kenya. The specific objectives were; influence of firm characteristics and collateral aspects on credit accessibility by SMEs in Nairobi Central Ward. The study used descriptive survey research design and a questionnaire was used for data collections. The methods for analysis were; descriptive, diagnostic tests, correlation and regression analyses. Findings showed that firm characteristics and collateral aspects had significant relationship with credit accessibility. The study concluded that firm characteristics such as operational period and annual turnover were also aspects used to determine credit processing. It was concluded that collateral aspects such as personal guarantors were mostly preferred by financing institutions and high collaterals was concluded to hamper access of credit. The study recommended that all entrepreneurs should acquire relevant education and skills that could assist them in running their respective businesses as well as register with social network so as to promote easy access of credit. In addition, the study suggested that financing institutions should have flexible requirements for credit application rather than demand for collaterals such as title deeds which many SMEs may not have.

Keywords: Firm Characteristics, Collateral Aspects, Credit Accessibility

I. INTRODUCTION

In Kenya, SMEs have been recognized as being great contributors to the economy offering both employment and platform for innovative ideas. They form a larger percentage of the businesses that operate in Kenya as compared to their counterpart, the large companies (Kung'u, 2011). SMEs are estimated to be about 7.5 million in the country. These SMEs helps in providing employment and income generation opportunities to low income sectors of the economy.

In recognition of the critical role small businesses play in the Kenya economy, the Kenya government through Kenya Vision 2030 envisages to strengthening SMEs so that they become the key industries of tomorrow by improving their productivity and innovation (Subeyr&Muturi, 2017). Nevertheless, the Kenyan SME sector usually operates on small-scale, locally and at a subsistence level. They have fewer employees (especially home based enterprises), they operate for a shorter period, and have poor access to water and electricity and few sell outside the establishments where the entrepreneurs live (Kamunge, Njeru&Tirimba, 2014). In addition, despite emphasis on increasing the availability of credit to SMEs and policy mechanism, access to credit by small enterprises remains one of the major constraints they face.

In addition, Subeyr and Muturi(2017) found that investors are unwilling to invest in sole proprietorships, partnerships or unlisted companies, as risk perception about small businesses is high, as well as cost of capital and institution credit and when available, requires collateral which in turn makes the business even more vulnerable to foreclosure. In Kenya, access to credit has in the past been complicated due to stringent conditions imposed by commercial banks (Akhabonje&Namusonge, 2016). According to Afande (2015), SMEs in Kenya suffer from constraints that lower their resilience to risk and prevent them from growing and attaining economies of scale and as a result, most SMEs lack access to capital and money markets.

Credit accessibility

Credit accessibility is the capability of individuals or enterprises to get financial services, including credit, deposit, payment, insurance, and other risk management services (Haron, Said, Jayaraman & Ismail, 2013). Access to finance is considered the catalyst of any enterprise, aiding access to resources, profitability, efficiency, exports, employment generation, productivity and return on assets (Harvie, Narjoko & Oum, 2013).

In Quartey, Turkson, Abor and Iddrisu (2017), one of the most important aspects of credit access is that, it supports SMEs to start up and expand their businesses through inter alia development of new products and production processes, and investment in human capital. This is emphasized in a study by Arinaitwe and Mwesigwa (2015) where it showed that guaranteeing SME’s to have adequate access to financial resources is a key principle of successful development plans. Therefore, adequate access to credit enables SMEs to survive...
and eventually grow beyond their SME status (Shinozaki, 2012). Without adequate access to loans, SME’s face negative shocks, such as droughts, illness or a significant drop in the prices they receive, can lose some of the few assets they do have (Wellalage & Locke, 2017).

Lack of credit access has existed as one of the most significant challenges for entrepreneurs and for the creation, survival and growth of small businesses (Afande, 2015). Most of SMEs rely on internal finance since they cannot afford external finance easily, however despite the availability of finance it is still inadequate for SMEs’ development and profitability (Balogun, Nazeem & Agumba, 2016). Kweyu (2017) noted that SMEs tend to rely on the personal resources of their owners, and or loans from friends and relatives to fund the enterprises. Banks are reluctant to expand credit other than to most credit worthy borrowers which in most cases excludes the SMEs. This adversely affects their attempt to access credit and consequently growth. This study, therefore, focused on the analysis of the determinants of credit accessibility by SMEs in Nairobi Central Ward in Nairobi County, Kenya.

Statement of the Problem
Credit access has been one of the main short coming to SMEs sustainability in Kenya. The major constrains that hinders the smooth access to credit facility from the lenders by the SMEs includes but not limited to lack of valuable collateral, high interest rate, lack of credit history, cash flows and turnovers. The introduction of interest rate capping also negatively influenced the issue of credit access by the SMEs. This is because most banks are hesitant to advance loans with the lowered interest rate in fear of losses in case an SME defaults (Andrieu, Staglian & Zwan, 2015). Moreover, issues such as duration of SMEs, membership with associations, and entrepreneurial education have also been established to hamper access of credit by SMEs. This is so because lenders tend to factor them in when processing loans to SMEs.

Several studies have been carried out on the factors influencing SMEs’ access to credit (Aliero and Yusuf (2017) in Nigeria, Nguyen, Gan and Hu (2015) in Vietnam, Auma and Muturi (2017) and Shikumo and Mwangi (2016) in Kenya). As such, abundant literature exists on factors influencing SMEs credit access, however, most studies results provided conflicting results while studies in Kenya have focused more on the side of financial institutions. Against these backdrops, this study is, therefore, timely as it focused on the analysis of the determinants of credit accessibility by SMEs in Nairobi Central Ward in Nairobi County, Kenya.

Objectives of the study
I. To establish the relationship between firm characteristics and credit accessibility of small and medium size enterprises in Nairobi central ward, Nairobi County.
II. To determine the extent in which collateral aspect influence credit accessibility of small and medium size enterprises in Nairobi central ward, Nairobi County.

Conceptual Framework
The conceptual framework of the current study will comprise of owner characteristics, firm characteristics, availability of collateral and networks among SMEs as the independent variables while access to credit will be incorporated as the dependent variables as shown by figure 1.

Figure 1: Conceptual model

Independent variable

Firm characteristics
- Age
- Size

Collateral availability
- Value of asset

Dependent variable

CREDIT ACCESSIBILITY
- Amount of loan

Author (2019)
II. LITERATURE REVIEW

Review of Theories

Credit Rationing Theory

The theory was put forward by Stiglitz and Weiss in 1981. According to the theory, asymmetric information arises in credit markets between the borrower and lender when one of the counterparties (usually the lender) does not have sufficient information or knowledge of the other counterparty involved in the loan transaction, which makes it difficult to make accurate lending decisions (Cowling, 2010). For example, a borrower who seeks a loan is believed to have better information about the potential returns and risk associated with the investment project for which the loan is sought than the lender does (Ekpu, 2015).

Credit rationing originates from the prevalence of informational asymmetries: the firm knows the expected return and risk of the project for which they want bank finance while the bank only knows the average expected return and risk of an average project in the economy (Steijvers & Voordeckers, 2009). In the current study the theory highlights and informs all possible ways that SMEs face as hard situations while seeking credit, example high interest rates on credits and lack of credit for those who can’t afford the interest charged. In relation to this study, the theory shows how an SME is credit constrained or rationed if its terms of access to the credit market imply that it is unable or unwilling to exploit some socially profitable investment.

Adverse Selection Theory

The theory originated from Stiglitz and Weiss in 1981. The theory argues that borrowers have inside information about the nature of the project they want financed and may reap substantial rewards from taking up their projects. Moreover, while the lender gains if the loan is repaid with interest, it is not a beneficiary of any upside gain in the firm’s performance; it is, however, a victim of any downside losses in the case of default (Malhotra, 2014). The theory states that adverse selection occurs when lenders are unaware of particular characteristics of the borrowers such as their preferences for undertaking risky projects. In that case, banks attempt to minimize problems by charging all borrowers exceedingly high interest rates.

In the theory, borrowers have different probabilities of repayment but banks cannot identify or separate the good borrowers from the bad (Cowling, 2010). Thus, since, the expected return of the lenders depends on the probability with which borrowers repay their loan, it is in the interest of the bank to identify those borrowers who are more likely to repay. This theory therefore addresses both the determinants as independent and credit accessibility as dependent variables from a balanced point of view to avoid one side favor or the other side oppression.

Empirical Review

Credit accessibility

SMEs credit accessibility focus mainly on bank finance, and therefore there is growing necessity to address determinants of SMEs’ ability to obtain microfinance and informal credits as it has shown that obtaining bank financing is not popular for small scale enterprises. Therefore, SMEs are more likely to borrow from informal sources such as borrowing from friends, personal savings and donations if their owners are younger, less educated and experienced (Rahman, Twyeafur & Jaroslav, 2017).

In a rejoinder, Pham (2017) found out that new SMEs do not get any bank loan because of high collateral requirements, unfavorable interest rate, poor business plans, limited networking and lack of the government support. Further, assessment done by Adeyeye, Azeez and Aluko (2016) from a macroeconomic perspective showed that only commercial banks’ deposit mobilization, depth of the financial sector and size of the banking sector act as determinants of SMEs financing by commercial banks.

SMEs Characteristics and credit accessibility

Firm characteristics are factors used to differentiate firms such as size and age of the firms. In their study, Balogun, Nazeem and Agumba (2016) examined the impact of firm characteristics in access to credit by the South African SMEs in the construction industry. The study used primary data collected using structured survey questionnaires supplemented by secondary source of data. The structured survey questionnaire was administered to 179 construction small and medium organizations and binary logistic regression applied to determine the influence of demographic variables on credit accessibility (Haron et al, 2013; Kweyu, 2017). The results established that firm characteristics like large firm and old firms have positive influence access to finance.

In Kenya, Thuku (2017) examined factors affecting access to credit by SMEs from financial institutions in Nyeri County using a descriptive research design. The study used questionnaires to gather data from a sample of 67 respondents. The Pearson correlation and regression analysis were employed to analyze data. The findings revealed that the size of a firm and location affects access to finance and older firm (more than 3 years) have more experiences of applying for loans than younger firms below 3 years. The findings on financial characteristics and access to credit revealed that respondents agreed that they have adequate book keeping records hence easy access to credit but lack of collateral affects access to finance.
Collateral Requirements and credit accessibility

The collateral requirement by financial institutions has varied implication on the growth of SMEs. A number of studies have been carried out, Pham (2017) carried out a study that investigated the determinants of credit access by SMEs existing for less than forty-two months in the PhuTho province located in Northern Vietnam. The study collected primary data from 259 SMEs in 2015. Using regression analysis, the study revealed that a business plan, the firm size, and networking (emotional trust, knowledge trust, and approachability) are the main drivers of access to bank loans by new SMEs.

An assessment was done by Adeyeye, Azeez and Aluko (2016) from a macroeconomic perspective which showed the determinants of small and medium scale enterprises (SMEs) financing by the banking sector in Nigeria between 1992 and 2014. The empirical model specifies commercial banks’ lending to SMEs as a function of selected macroeconomic indicators which include commercial banks’ total deposits, financial deepening, interest rate spread, transactions costs, lending rate, monetary policy rate, commercial banks’ total assets and inflation rate. The 2SLS estimation results showed that only commercial banks’ deposit mobilization, depth of the financial sector and size of the banking sector act as determinants of SMEs financing by commercial banks.

III. METHODOLOGY

Research Design

The study employed quantitative research design. Descriptive survey research design was suitable in determining and reporting the way things are in the current state and also helps a researcher to describe a phenomenon in terms of attitude, values, opinion, motivation and characteristics (Bunyasi, Bwisa&Namusonge, 2014).

Target Population

The target population in this study constituted all SMEs at the Nairobi Central Ward in Nairobi County as listed in Nairobi city county licensing department in the year 2017. According to a research done by (Waithaka, 2017), there were estimated 98,600 SMEs within the Nairobi county and about 21,000 in Nairobi Central Ward. The 21,000 SMEs was the target population.

Description of Sample and Sampling Procedures

The study used Yamane’s formula of sample size with a margin of error of 0.05% and a desired level of confidence of 99.95% (Yamane, 1967). The sample was selected using stratified random sampling method where I stratified the SMEs within Nairobi central ward by sectors that is, service, trade, production and manufacturing. I then picked 20 major streets using purposive sampling to ensure they all have at least most of sectors and used the thirty percent rule to reduce the number to six streets (Tom Mboy, Moi Avenue, Ronald Ngala, Accra road, Luthuli street and Haile Sellassie Avenue). The respondents were the manager of the SME since they are more informed on the daily activities. Yamane’s formula: n = N/1+Ne²

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

Sample size =393 respondents

Description of Research Instruments

Questionnaires were used to collect data since it can collect large amounts of information from a big number of people in a short period of time and it’s cost effective. The questionnaire comprised of two sections where section one collected data on the respondent’s background information while the second part collected data on the research variables among them collateral aspectand ownership characteristics of SMEs. To ensure the validity of the questionnaires, questions were drafted in accordance with the objectives and research questions and the input of the project supervisors and other lecturers was sought and incorporated. The questionnaire was tested on its reliability and validity through a pilot test on a subset of the intended population with a sample size of 20 participants.

Description of Data Collection Procedures

Before collecting data, an authorization letter allowing this process was obtained from the school of business at Catholic university of Eastern Africa and then the questionnaires were administered to the sampled respondents by the researcher.

Description of Data Analysis Procedures

To analyze the collected research data, both descriptive and inferential statistics were used. Descriptive statistics was used to estimate the magnitude of variables under study while correlation was used to determine the preliminary relationship between two variables and multiple regression models was used to estimate the relationship between credit accessibility and its determinants which are firm characteristics and collateral aspects.
Diagnostic tests

**Normality test**

The study utilized normality tests to establish if the sample data was drawn from a normally distributed population. Therefore, the assumption of statistical tests is that for data to be reliable it must be approximately distributed normally.

**Heteroskedasticity Test**

The study used heteroskedastic tests to determine if data had a problem of heteroscedasticity. In the test, if the value significance is > 0.05, then there is no problem of heteroscedasticity. In the contrary if the value of significance is <0.05, then there is a problem of heteroscedasticity hence subsequent assumption test follows.

**Multicollinearity Test**

The study used multicollinearity to test whether the independent variables in the chosen models are correlated. For instance, if Variance Inflation Factor (VIF) is between 1 and 10 then there is absence of multicollinearity. However, if the VIF is > 10, then there is multicollinearity.

**Correlation Analysis**

Correlation method was preferred because it allowed the researcher to determine the preliminary strength of a relationship between two variables so that later studies can narrow the findings down and, if possible, determine causation experimentally (Bryman, 2011).

**Regression analysis**

The study preferred the application of regression analysis over other methods because it helped in enhancing understanding on how independent variables were associated with dependent variable and also assisted in determining the strength or level of associations or effects in the dependent variables. The regression model that was used is as below:

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon \]

Where

- \( Y \) = Credit accessibility
- \( \alpha \) = Constant of the regression model
- \( \beta_1 - \beta_2 \) = Coefficients of the regression model
- \( X_1 \) = Firm characteristics
- \( X_2 \) = Collateral requirements
- \( \varepsilon \) = error term

IV. PRESENTATION, DISCUSSION AND INTERPRETATION OF FINDINGS

**Descriptive Statistics for Owner’s Characteristics**

The characteristics were; age, education level, bank’s preferences on the gender in relation to accessibility of the credit. The results are presented in table 1

**Descriptive Statistics for Firm Characteristics**

This section presents the business or firm characteristics that an SME has that can either be a requirement to credit accessibility or not. It includes the period the firm has operated, the number of employees in the business and the annual turnover of the business.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational period of the business</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-5 years</td>
<td>39</td>
<td>13.0</td>
</tr>
<tr>
<td>6-10 years</td>
<td>147</td>
<td>49.0</td>
</tr>
<tr>
<td>11-15 years</td>
<td>84</td>
<td>28.0</td>
</tr>
<tr>
<td>Over 15 years</td>
<td>30</td>
<td>10.0</td>
</tr>
<tr>
<td>Number of employees in the business</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 5</td>
<td>151</td>
<td>50.3</td>
</tr>
<tr>
<td>5-10</td>
<td>71</td>
<td>23.7</td>
</tr>
<tr>
<td>11-15</td>
<td>52</td>
<td>17.3</td>
</tr>
<tr>
<td>Over 15</td>
<td>26</td>
<td>8.7</td>
</tr>
<tr>
<td>Older firms have chance of acquiring credit than young firms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>185</td>
<td>61.7</td>
</tr>
<tr>
<td>No</td>
<td>115</td>
<td>38.3</td>
</tr>
<tr>
<td>Annual turnover</td>
<td></td>
<td></td>
</tr>
<tr>
<td>500,000</td>
<td>131</td>
<td>43.7</td>
</tr>
<tr>
<td>500,001-1,000,000</td>
<td>52</td>
<td>17.3</td>
</tr>
<tr>
<td>1,000,001-5,000,000</td>
<td>100</td>
<td>33.3</td>
</tr>
<tr>
<td>Over 5,000,001</td>
<td>17</td>
<td>5.7</td>
</tr>
</tbody>
</table>

The results presented in table 1 indicate that some SMEs had operated for between 6-10 years as represented by 49.0% hence an indication of sufficient experience. Others had been in operation for between 11-15 years as represented by 28.0% while still others had been in the business for between 0-5 years at 13.0% and...
this group were deemed to be less experienced. Only 10.0% had been operating for more than 15 years. The mean value for operational duration was 2.35.

The results show that most SMEs that took part in the research have below 5 employees as indicated by 50%. This is an indication that half of the SMEs are still young hence the fewer employees. Those with employees between 5-10 are represented by 24%. Those who had 11-15 employees were represented by 17%. Only 9% of the SMEs had over 15 employees. The mean for number of employees was 1.84. From the results it can be said that half of the SMEs had large sales turnover hence the high number of employees they had.

The results show that majority of the respondents (62%) reported that indeed older firms that have been in operation for more than 3 years have more chances of acquiring credit than younger firms. Only 38% of the respondents said that older firms that have been in operation for more than 3 years did not have more chance of acquiring credit than younger firms. The mean value for preference for the older firms in acquiring loan was 1.38. Overall, the results could be interpreted to imply that financing institutions were keen on age of the firms so as to determine the SMEs they allow access to credit.

The results indicated that majority of the SMEs attain a turnover of 500,000 as represented by 43.7% followed by those SMEs that attained turnover between 1,000,000-5,000,000 with a representation of 33.3%. Those who fall in the category of between 500,000-1,000,000 were 17.3% and over 5,000,001 were 5.7%. The mean value for annual turnover was 2.01. The results could mean that most SMEs had high annual turnover and this was indicating that majority of them had been demonstrating commendable growth thus the high representation of a total of 56.3% for SMEs that had more than 1,000,000 turnovers.

### Descriptive Statistics for Collateral Aspect

This section sought to establish the value of collateral given for the loan, the kind of collateral that banks and other lenders want, whether SMEs with high collateral value acquire credit easily and finding out whether an SME can access credit without collaterals.

<table>
<thead>
<tr>
<th>Value of the collateral given for loan</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 500,000</td>
<td>122</td>
<td>40.7</td>
</tr>
<tr>
<td>500,001-1,000,000</td>
<td>96</td>
<td>32.0</td>
</tr>
<tr>
<td>1,000,0001-5,000,000</td>
<td>36</td>
<td>12.0</td>
</tr>
<tr>
<td>5,000,000</td>
<td>46</td>
<td>15.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Kind of collaterals</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title deeds</td>
<td>83</td>
<td>27.7</td>
</tr>
<tr>
<td>Personal guarantors</td>
<td>138</td>
<td>46.0</td>
</tr>
<tr>
<td>Personal assets</td>
<td>55</td>
<td>18.3</td>
</tr>
<tr>
<td>Intellectual property</td>
<td>24</td>
<td>8.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SMEs with high value collateral acquire credit easily</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>106</td>
<td>35.3</td>
</tr>
<tr>
<td>No</td>
<td>194</td>
<td>64.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SMEs acquire credit access from a lender without collateral</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>60</td>
<td>20.0</td>
</tr>
<tr>
<td>No</td>
<td>240</td>
<td>80.0</td>
</tr>
</tbody>
</table>

The results presented in table 2 shows that 40.7% respondents indicating that value given was below 500,000 and this could mean that their financial strength was still low hence could not acquire higher credit. Again 32.0% indicated that value of collateral given for loan was between Ksh 500,001-1,000,000 while those who reported that the value of collateral given for loan was between Kshs. 1,000,001-5,000,000 was 12.0%. Further, 15.3% reported it to be over Kshs. 5,000,000. The results show that majority of the SMEs owners had total collateral loan value of less than or equal to Ksh. 1,000,000. The mean value was 2.02.

Results show that personal guarantor is major collateral that is applied in most lending process with a score of 46.0% followed by title deeds with 27.7%. Personal asset and intellectual property were the least mentioned with 18.3% and 8.0% respectively. The mean score for kind of collaterals required was 2.07.

The results presented indicate that 64.7% stands for No while 35.3% agreed that SMEs with high value collateral acquire credit easily with a mean score of 1.65. From the results, it is evident that there is no guarantee that those SMEs with high collaterals value acquire credit easily. Responses on acquiring credit without collaterals show that a high percentage of 80.0% rejected the statement while only 20.0% felt that SMEs acquire credit access from a lender without collateral and this had a mean score of 1.80.

### Diagnostic tests

#### Normality test

The study utilized normality tests to establish if the sample data was drawn from a normally distributed population. The results are presented in Figure 1.
The results in Figure 1 show that the data was normally distributed along the diagonal line. The data is, therefore, reliable hence good fit for analysis.

**Multicollinearity Test**

The study used multicollinearity to test whether the independent variables in the chosen models are correlated. The results are shown in Table 3

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>(Constant)</td>
<td>566</td>
</tr>
<tr>
<td>Firm characteristics</td>
<td>0.763</td>
</tr>
<tr>
<td>Collaterals</td>
<td>0.801</td>
</tr>
</tbody>
</table>

Results show that VIF for all the variables is less than 3. This can therefore be interpreted to mean that there are no problems of multicollinearity since all the independent variables have their VIF values falling between 1 and 10.

**Heteroskedasticity Test**

The study used heteroskedastic tests to determine if data had a problem of heteroscedasticity. The results are presented in Table 4

<table>
<thead>
<tr>
<th>Variables</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.021</td>
<td>0.7</td>
</tr>
<tr>
<td>Firm characteristics</td>
<td>0.11</td>
<td>0.367</td>
</tr>
<tr>
<td>Collaterals</td>
<td>0.05</td>
<td>0.611</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Credit Accessibility

As shown in Table 4 the results show that owner characteristics, firm characteristics, collaterals and social networks have their significance levels > 0.05. This implies that there is no heteroskedasticity. Therefore, there is need to perform both correlation and regression analyses due to the fact that data has been found to be normally distributed, have no problems of multicollinearity and all the variables were not heteroskedastic.

**Pearson Correlation Analysis**

Correlation is a statistical measure that indicates the extent to which two or more variables fluctuate together. Table 5 presents the results of correlation analysis.
Table 5: Correlation Analysis Results (N=300)

<table>
<thead>
<tr>
<th></th>
<th>Credit accessibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm characteristics</td>
<td>Sig 0.317</td>
</tr>
<tr>
<td></td>
<td>r -0.206**</td>
</tr>
<tr>
<td>Collateral aspects</td>
<td>Sig 1.001</td>
</tr>
<tr>
<td></td>
<td>r 0.153**</td>
</tr>
</tbody>
</table>

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

The results in Table 5 show that firm characteristic was not statistically significant with credit accessibility as represented by 0.317. Collateral aspect was revealed to be significantly related with credit accessibility at 0.000, significant at the 0.01 (1%). This may be interpreted to mean that as collateral aspects decrease the accessibility of credit increases and vice versa.

**Regression Analysis**

Regressions were to determine the relationship between independent and dependent variables. The results are shown in Table 6

<table>
<thead>
<tr>
<th>Dependent variable = Credit Accessibility</th>
<th>Standardized Coefficient</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>4.754</td>
<td>4.519</td>
<td>.000</td>
</tr>
<tr>
<td>Firm characteristics</td>
<td>.184</td>
<td>3.122</td>
<td>.002</td>
</tr>
<tr>
<td>Collateral aspects</td>
<td>-.342</td>
<td>-5.927</td>
<td>.000</td>
</tr>
</tbody>
</table>

Model summary:
- R
- Adjusted R square
- F-statistic (p-value) 20.32 (0.000)<sup>2</sup>

As presented in Table 6 the results showed that the model was good fit as explained by an R (coefficient of correlation) of 0.465% (about 47%) of the variation in credit accessibility. The ANOVA results showed that the significance of the F statistics (20.32) is 0.000 and it is less than 1% which means that the model is reliable.

Firm characteristics was positively and significantly related with credit accessibility (β = 0.184, p-value = 0.002) at the 1% level. This could be interpreted to imply that increase in firm characteristics such as operational period and the older the firm could lead to increased chances in the accessibility of credit by SMEs. Collateral aspects was negatively and significantly related with credit accessibility (β = -0.342, p-value = 0.000) at the 1% level. This infers that a decrease in the collateral requirements such as number of guarantors, title deeds, properties could enhance credit accessibility. This basically means that financing institutions can lower collateral aspects to accommodative level that could ultimately result to increased chances of SMEs’ access of credit. Based on the results, the null for hypothesis for firm characteristics and collaterals is rejected because their p-values are < 0.01.

**Discussion of the Findings**

The first objective was on the relationship between the firm characteristics and credit accessibility. The correlation found that firm characteristics was not statistically significant with credit accessibility while the regression analysis found that firm characteristic was positively related with credit accessibility thus an increase on one variable could lead an increase in the other. In agreement another study by Gamage (2013) found that operational duration of firms has linear relationship with the propensity to apply for loans by micro-enterprises.

According to information asymmetry theory, information arises in credit markets between the borrower and lender when one of the counterparties (usually the lender) does not have sufficient information or knowledge of the other counterparty involved in the loan transaction (firm characteristics), which makes it difficult to make accurate lending decisions (Ekpu, 2015).

Regarding collateral aspects, the study found that both correlation and regression results showed that collateral aspect was significantly related with credit accessibility. The results concur with yet another study by Subeyr and Muturi (2017) that established that collateral requirements have significant association with loan uptake.

Further, the credit rationing theory that was developed by Stiglitz and Weiss (1981) opines that tend to regulate the provision of credit based on its availability. Consequently, if a lender is unable to get sufficient back up requirements from the entrepreneurs on the need for loan applied for there is a possibility of full denial or partial
provision of loans. Hence collateral requirements must be fulfilled to the satisfaction of the lender so that loan applied for can be processed.

**V. CONCLUSIONS**

It was concluded that firm characteristics such as operational period and annual turnover formed part of factors that financing institutions looked at when processing credit. Again, study concluded that collateral aspects such as personal guarantors were mostly preferred by financing institutions while most SMEs were still young as indicated by the total value of collateral given for loans.

**Recommendations**

The study recommends that all entrepreneurs should acquire relevant education and skills that could assist them in running their respective businesses. This study recommends that financing institutions should have flexible requirements for credit application rather demanding for collaterals such as title deeds which many SMEs may not be in possession. This will enhance the accessibility of credit by SMEs which in turn could help in promoting their growth.

**Areas for Further Research**

The study was aimed at investigating the determinants of credit accessibility of small and medium enterprises in Nairobi County, Nairobi Central Ward. The study was limited firm characteristics and collateral aspects. Therefore, the study recommends that further study should be carried out on a similar topic but by use of other variables that can employ secondary data collection approach. This is because secondary data is deemed as more reliable in comparison to primary data. This will help in determining how such variables relate with accessibility of credits.

**VI. REFERENCES**


