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Influence of Collateral Security on Performance of SMEs in Turbo Sub County, Kenya

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Abstract

Access to credit is a prerequisite for growth of any firm within the economy. It improves firms' performance, facilitate market entry, growth of companies and promotes innovation and entrepreneurial activity. Small and medium enterprises play an important role of economic growth and on a macro level bring about employment within the economy. SMEs have been unable to access credit to lubricate their businesses due to their limited track record, limited acceptable collateral security, and inadequate financial statements, business plans among others. This has hence attracted the attention of scholars and policy makers. However, there has been disagreement among scholars on the relationship between access to credit and performance of SMEs in Turbo s sub county, Kenya anchoring on the credit access theory. The study used a sample of 340 from a population of 2,901 entrepreneurs using both descriptive and correlational research design. From the regression results, the study concluded that collateral security had a positive and significant influence on access to credit hence performance of SMEs. Firms with collateral security accessed loans easily as opposed to those with none. The research hopes that the findings of this study will contribute significantly to the existing literature on access to credit and performance of SMEs. **Keywords:** Credit, SMEs, Collateral security, Kenya

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1.0 Introduction

Credit provision requires due consideration as credit risk administration is one of the basic viewpoints and hot issue among the issues looked at financial institutions (FIs). The hazard administration perspective isn't pivotal for supportability, however, development of financial sector related area too (Greuning and Bratonovic, 2003). FIs have hence come up with credit access terms and policies that help minimize these risks. These policies are in form of interest charged on loans, collateral provisions requirements, loan amount limits, late payment penalties, insurance fees, collateral insurance fees, legal fees, excise duty and application fees. All these have an influence on the overall performance of businesses and economic growth and development of a nation.

Financial institutions perform a key role in economic growth by mobilizing savings for investments through capital flows towards various sectors of the economy (Sufian & Parman, 2009). It is also worth noting that commercial banks globally are dominant as a financial institution providing installment loans compared to any other financial institution (Greuning & Bratanovic, 2003). The role played by banks and non-bank financial institutions in an economy may not be underscored as they are institutions, which provide liquidity for both lender and borrower. Banks involve continuously in corporate governance to monitor, screen and recovery of loan for better performance of loan (Mohammad, 2014). Performance of FIs influences economic growth positively. Barth, Caprio and Levine (2004) argue that provision of credit services to businesses accelerates growth of the enterprises and eventually the whole economy. Hence performance is critical for both micro enterprises and commercial banks for achieving their objectives. However, Kinimi (2014) agrees with Suberu, Aremu and Popoola, (2011), that in the Democratic republic of Congo, SMEs are faced with the challenge of accessing credit from financial institutions.

Given the important role played by SMEs to the world economy, countries have adopted reform regimes to address their existence and contribution. SMEs have been completely recognized by those legislatures and advancement specialists as the primary motor of monetary development and a main consideration in advancing private public partnerships. Their advancement is in this way, a fundamental component in the development technique of those economies. They contribute altogether to enhanced expectations for everyday comforts, as well as realize significant local capital development and accomplish elevated amounts of efficiency and capacity, (Zainab, 2011).

A study by Shirley and Namusonge (2016), to establish the factors influencing access to credit among SMEs in Kitale and found out that collateral requirement by financial institutions significantly influence access to credit facility by SME from Financial institutions. This meant that businesses who lacked collateral could not access credit hence affecting performance negatively. This contradicts Hall and Fang (2004) who found a positive but insignificant relationship between collateral and performance of SMEs in Thailand. It is also evident that all these scholars are discussing collateral availability and performance of SMEs. In reality, it is the value pegged to that collateral and cost associated with that collateral that has an influence on performance, hence the reason why the

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current research studied collateral values, collateral insurance fees and collateral registration fees. This together with the contradiction by various scholars has been a driving force for the current study to establish the influence of collateral security on the performance of small and medium enterprises in Turbo sub county, Kenya and hope to contribute to the little existing academic body of knowledge on collateral and performance of firms. The remainder of this article paper is organized as follows. Section 2 covers review of past studies and defines the study question. Section 3 covers materials and methods. Section 4 covers the results and discussion. Section 5 presents the conclusion and section 6 covers the recommendations.

2.0 Literature Review

2.1 Theoretical Framework

This study reviewed the credit access theory so as to put collateral security into perspective.

2.1.1 Credit Access Theory

The credit theory was postulated by Stiglitz and Weiss (1981). They provided a framework for analyzing financial market inefficiencies. According to this framework, information asymmetry is the main cause of financial market malfunctioning in developing economies. Financial institutions are not only interested in the interest they receive on loans, but also the risks of such loans. Most Financial institutions therefore screen and monitor borrowers before advancing any credit. Since they manage deposit accounts for these borrowers, financial institutions own highly strategic information on firms' receipts and expenditures as well as the way that firms develop. Despite having this information, relationships between bankers and firms are not perfect. Banks suffer from informational asymmetries such that evolution of prices (interest rates) cannot clear the credit market.

In reference to Stiglitz and Weiss antagonistic choice and consequently credit apportioning still happens if banks require security. They contend that generally safe borrowers expect a lower rate of profit for normal. Therefore, they are less well off than high-hazard borrowers by and large after a few periods. Okay borrowers are subsequently not ready to give more security. Expanding security necessities may have the same unfriendly choice impact as a higher loan cost. However, Walsh (1998) argues that banks only offer contracts in which they simultaneously adjust interest rates and collateral requirements. He proved that there is always a combination of interest rate and collateral requirements so that credit rationing does not occur.

2.2 Access to Credit and Performance of Small and Medium Enterprises

The 2008 financial crisis and subsequent widespread economic downturn had a huge impact on the accessibility of finance to SMEs. SMEs in many developing countries before the crisis had been strongly restricted in accessing the capital that they needed to grow and expand. Performance of firms is positively related to access of finances. However, banks do not provide SMEs with adequate capital in many of these countries. In fact, only 20% of African SMEs have a line of credit from a financial institution. The financial crisis has further increased the financing gap for SMEs in developing countries (AfDB, 2012).

The recent global financial crisis created a tough environment for SMEs, with a reduction in demand for goods and services and a contraction in credit by banks and other financial institutions. SMEs by number, dominate the world business stage. It is worthwhile noting that, SMEs tend to be more labour intensive and at a macro level, therefore, provide a substantial contribution to employment (Ayyagari, 2011). However, they are strongly hampered in accessing the capital that they require to grow and expand, with nearly half of SMEs in developing countries rating access to finance as a major impediment. In addition, Suberu, Aremu, and Popoola (2011) stated that a shortage of financing is one of the major barriers to rapid development of the small and medium enterprises. On the other hand, Financial institutions in developing countries are in turn hampered by the lack of credit information and regulatory support to engage in SME lending (DGDA, (2011); Ledgerwood, Earne and Nelson, (2013).

In his study, Perkowski (2012) asserts that access to finance is a challenge for businesses in any country and specifically in China. Provision of credit and other services to small and medium enterprises has traditionally been challenging for financial institutions. On the one hand, the challenge may be related to a lack or non-existence of financial history and the inability to provide required collateral among small and medium enterprises. This was in agreement with Madole (2013) who did a similar study in Tanzania and found out that there was a positive and significant effect of access to loan on sales volume, profitability and number of employees of firms. This study focuses on collateral and lack of financial credit history as the major hindrances to credit access. The study did not take into account that access to credit can be influenced by credit history, age and size of the firm, education levels of firm owners and managers, sales turnover among other factors such as the time the lender takes to process the credit facility, or the repayment period. The current study used a wider range of factors determining access to credit to establish access to credit on performance of SMEs, in Turbo sub county, Kenya.

There was a significant positive association between access to credit and financial performance of small and medium enterprises in Uganda (Nyangoma, 2012). It was revealed that favorable credit terms facilitated ease of access to credit by SMEs and therefore improved financial performance in terms of sales volumes and profitability.

Limited access to credit could also negatively affect profitability and financial survival if firms operate under poor economic conditions and high interest rates. This was in agreement with a study on the factors affecting performance of small and micro enterprises in Limuru town market of Kiambu County, by Kamunge, Njeru and Tirimba (2014). These studies largely based their decisions on lending interest rate as the determinant that hinders access to credit. However, there are other factors related to access to credit. It is against this background that the current study sought to establish access to credit and performance of SMEs in Turbo sub county Kenya by introducing other costs of credit such as loan insurance fees, loan application fees, firm characteristics and size of the firm.

Using a sample of 120 micro businesses in Madina, Ghana, Sampong (2011) sought to establish the impact of micro credit on small businesses with evidence from Microfinance and small loans Centre. The study used a causal and descriptive design to establish the relationship between sales performance and access to credit in the SME sector in Ghana. The study revealed that on the effects of credit access on sales, sales tend to increase after capital injection from the centre. The impact of access to credit had statistically significant influence on sales performance. This study focused on sales volume as a measure to performance which is not conclusive. In addition to this, the current study used change in sales volume, change in number of employees and profitability of the firms to measure performance of SMEs in Turbo sub county, Kenya. Profitability is rather conclusive as this is the main objective of SMEs.

A study carried out in Nairobi county by Nyabicha (2015) to establish the effect of commercial bank loans on the performance of micro and small enterprises using descriptive research design and a sample of 50 entrepreneurs, found out that entrepreneurs who utilized their loan entirely for business purposes saw their sales turnover move from low to high. The study concluded that access to finance positively affected the performance of businesses in Nairobi. This study focused on collateral and interest rate as proxy for access to credit. However, it is notable that we have other parameters used to measure access to credit like, age of the firm, cash flows (turnovers), size of the firm, collateral security being used and education levels of the SMEs running those firms. The current study used a wide range of parameters to establish access to credit and performance of SMEs in turbo sub county, Kenya.

Though all the scholars under review agree on the overall findings on access to credit and performance of SMEs they differ on the exact determinants of access to credit. Apart from the indicators studied the current study addressed the issue of collateral security in addition to the ones already discussed by various scholars as determinants for access to credit and hence performance of SMEs in Turbo sub county, Kenya.

2.3 Collateral Security and Performance of Small and Medium Enterprises

Research on collaterals can be traced as back as Barro's study in 1976 which focused on pricing issues when collateral value was stochastic. However, the practical significance of collateral is recognized in recent studies on financial contracts in securing repayments, which put collateral as a primarily important factor in determining external financing and investment (Leitner, 2006).

Firms with tangible collateral seem to be doing well in terms of access to credit than those that don't. There is therefore a positive but insignificant relationship between collateral and performance of SMEs generally. Collaterals are used as a mechanism to reduce equilibrium credit rationing and other problems that arise due to asymmetric information between borrowers and lenders. Besides, increases in a firm's collateral value relax the credit constraint faced by the firm, enabling the firm to borrow more (Chen, (2001); Hall and Fang, (2004). According to the CBK (2013), collateral is regarded as a secondary source of repayment, and therefore is only used in assessing the amount of loan loss provision required for non-performing loans. Where securities are obtained, they should be perfected in all respects, namely; duly charged, registered and adequately insured.

The greater the amount of collateral possessed by an SME, the lower is likely to be the extent of the financial limitation. In more general terms it can be postulated that the greater the financial depth or development of a financial system, the greater will be the availability of loans to firms, including SMEs, and, therefore, the lower will be the extent of any financial gap. Access to collateral can be postulated to be positively related to firm performance, as with business transparency, preparation of business plans, the skill level of the entrepreneur and credit rating of the business (Harvie, 2015)

Lending decisions of Thai financial institutions are traditionally based on the availability of collateral security, a sound business plan with sufficient cash flow, and personal guarantors for loans. Full collateral, using land and buildings are often required by banks to cover losses in case of default. The effect of collateral security on performance of small firms is negative as it is a major deterrence to access to credit (Punyasavatsut, 2011). Though they agree on the level of significance, Haron, Said, Jayaraman and Ismail, 2013) contradict with Punyasavatsut and Ackah and Vuvor, (2011) in Ghana on the relationship and direction of significance. These results are in complete agreement with Anyieni (2014) who did a similar research in Kisii town and Nyabicha (2015) in Nairobi who found a positive relationship. These studies however, focused on collateral availability alone. However, it is the cost the business incurs in the event of using collateral to secure a loan that affects its performance in the real

sense. It would have therefore been prudent to use collateral insurance fee and registration fee to measure the effect. The current study sought to evaluate collateral security and performance of SMEs in Turbo sub county, Kenya.

In his study on the effect of microfinance institutions lending on the growth of Small and Medium Enterprise in Somalia using descriptive design on 60 SMEs Siyad (2013) found out that most of the requirements as collateral for loan application could not be afforded by most SMEs, hence opting for cheaper sources of capital hence the low adoption of the loan services by businesses. Financial institutions loans led to the improvement in performance among the beneficiary SMEs, as well as profitability and the high number of entrepreneurs starting up new ventures. There exists negative relationship between ROA and collateral of FI lending. This contradicts Nyabicha (2015) and Hall and Fang (2004) who asserts that collateral requirements positively affects the performance of businesses in Nairobi. Apart from the mixed results found by the scholars, the study of collateral security and their influence has received less attention by scholars. Collaterals are increasingly becoming important to financial institutions as a secondary source of repayment and cannot be overlooked as lack of it may deny SMEs the much sophisticated capital required for business growth. The current study therefore assessed the influence of collateral on performance of SMEs in Turbo sub county, Kenya.

The study sought to answer the following question:

How does collateral security influence the performance of SMEs in Turbo sub county, Kenya?

2.4 Conceptual Framework

This study conceptualizes the relation between the performance of SMEs (dependent variable) and collateral security (independent variable). Government regulation is introduced as an intervening variable as outlined in figure 1.1.

Independent variable	Dependent variable
Insurance FeeRegistration FeeProperty Value	 Performance of SMEs Profitability index Sales Turnover Growth in Number of Employees

Figure 1.1: Influence of collateral security on performance of SMEs in Turbo sub county, Kenya

3.0 Materials and Methods

This study used both descriptive and correlational research design and it adopted a linear regression model relating performance of SMEs (dependent variable) as a function of collateral security (independent variables). The expression took the following linear form as proposed by Babajide (2012):

 $Y = f(X_1)$

Where;

Y Performance

 X_1 Collateral Security

The linear relationship from the above function was as follows:

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where;

 β_0 Constant

- β_1 Beta coefficient which measure the percentage of responsiveness of the dependent variable to changes in the independent variables.
- ε Error term

Performance was measured as growth in profitability using monthly averages, sales volume and number of employees.

The target population was 2,901 small and medium enterprises operating within Turbo sub county respondents consisting of both registered and non-registered SMEs businesses. This were SMEs who had accessed credit before or currently servicing loans. The sample size was drawn from this population as illustrated in table 3.1. in accordance with Mugenda and Mugenda (2003) formula.

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Table 3.1: Target population and sample size			
Ward	Target Population	Sample size	
Ngenyilel	87	20	
Tapsagoi	313	37	
Kiplombe	332	39	
Huruma	1378	151	
Kapsaos	424	50	
Kamagut	367	43	
Totals	2901	340	

Source: Uasin Gishu County, Directorate of Licensing and Compliance, 2017

This study used a stratified sampling technique. The sub county was stratified into 6 strata (wards). This research study adopted systematic sampling procedure in which every 3rd member was selected after selecting the first through simple random sampling. The researcher preferred this procedure because it was representative of population and more precise (Kothari, 2004). Primary data was obtained by use of structured questionnaires containing both open-ended and closed questions. The questionnaire was divided in two sections. The first section contained general information about the business and those operating the business. The second part was specific to access to credit and performance of SMEs in accordance to the objectives of the study. To establish the reliability of instruments, a pilot study was conducted by administering the questionnaires to 20 SME owners. During the survey, the 20 business owners were identified but only 16 were willing to be interviewed the second time.

4.0 Empirical Results

This study sought to access the influence of collateral security on performance of SMEs in Turbo s sub county, Kenya.

4.1 Questionnaire Return Rate

The study focused on selected registered and nonregistered Small and Medium Entreprises. The study examined a total of 340 respondents across Turbo Sub County. Of the 340, 296 questionnaires were returned of which 23 were incomplete. This narrowed down to 273 completed questionnaires indicating a return rate of 80% as summarized in the table 4.1. This was sufficient to give reliable conclusion as asserted by Mugenda and Mugenda (2003) that a return rate of 70% or more is sufficient in conducting research.

Table 4.1: Ouestionnaire Return Rate

Questionnaire	Questionnaire	Incomplete	Complete	Return rate
issued	returned	Questionnaires	Questionnaires	
340	296	23	273	80%

Primary data was collected through both structured and unstructured questionnaires.

4.2 Background Information

The following were the findings of the demographic characteristics of respondents as summarized in Tables 4.2 -4.7 **—** • •

Table 4.2: Distribution of	Respondents by Gender
Gender	Frequency

Gender	Frequency	Percent
Male	153	56.0
Female	120	44.0
Total	273	100.0

Out of the 273 respondents issued with questionnaire in the study, 153 were male while the remaining 120 were female. This accounted for 56.0% and 44.0% respectively. From the data collected one can conclude that women are equally and significantly contributing to economic growth through operation of various businesses. Table 4.3: Distribution of Respondents by Age

Age	Frequency	Percent
<20	17	6.2
21-30	100	36.6
31-40	121	44.3
41-50	30	11.0
51 - 60	5	1.8
Total	273	100.0

All respondents were willing to disclose their ages without problems. One's age is always related to experience and understanding of a given issues of interest. Individuals of different age groups usually have different opinions of a given topic of study and this provides comprehensive data on the topic from all dimensions. Most of the respondent ages ranged between 31- 40 years which comprised of 121 (44.3%), 100(36.6%) were aged between 21 – 30 years, 30(11%) aged between 41 -50, 17(6.2%) aged below 20 and 5 (1.8%) were aged between 51-60 years.

Table 4.4:	Distribution	of Res	nondents	by F	Rusiness	Ownershin
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Business Ownership	Frequency	Percent
Yes	262	96.0
No	11	4.0
Total	273	100.0

The researcher sought to find information on business ownership and 262(96.0%) of the respondents owned their business and 11 (4.0%) did not own the business. 203(74.4%) stated that the business they run was their main occupation while 70(25.6%) had other occupation besides the business they run. Understanding business ownership is very important in understanding issues to do with sources of financing, taxation and other related issues like personal commitment to its success.

Table 4.5: Distribution of Respondents by Nature of Business

Nature of Business	Frequency	Percent
Sole Proprietor	244	89.4
Partnership	29	10.6
Total	273	100.0

Majority of the respondents 89.4% (176) were sole proprietors, 10.6 % (29) were in a partnership type of business. This was necessary as it gives an overview on how business decisions are made. Partnerships have their own disadvantages including possibility of breakdown due to disagreements amongst the partners on the cause of action to take. Most of them must operate a joint account and provide a partnership deed for them to access credit. This in most cases discourages such businesses from accessing credit and in the long run affecting their performance negatively.

Table 4.6: Distribution of Respondents by the Type of Business

Type of Business	Frequency	Percent
Retail	237	86.8
Manufacturing	9	3.3
Wholesale	18	6.6
Other (s)	9	3.3
Total	273	100.0

Retail was the main type of business 237(86.8%), 18(6.6%) were wholesalers, 9(3.3%) were in manufacturing and 9 (3.3%) had other type of businesses other than retail, wholesale and manufacturing. This category was important as it gives a measure of social welfare. Many retail business means many people are in business as a means of survival; that their households may get their daily utilities. This is the kind of business that cannot be easily separated from their business. Most of them lack financial records and hence cannot give a clear account of their profit and loss accounts. They only approximate. Financial institutions tend to shy away from such and hence cannot get credit easily hence affecting their performance.

Table 4.7: Distribution of Respondents by the Number of Employees

Number of Employees	Frequency	Percent
Less than 2	51	18.7
2	61	22.3
More than 2	138	50.5
None	23	8.4
Total	273	100.0

Finally, the researcher was interested in the number of employees each SMEs had and the findings are 138 (50.5%) had more than two employees. 61(22.3%) had 2 employees, 51(18.7%) had less than two employees and 23 (8.4%) had no employees. Businesses with more employees are likely to be stable than those with less because they can be in a position to sustain the employee wages. Such businesses are said to be performing well and expanding and hence need more human resources to carry out the business activities. Financial institutions tend to trust such businesses and hence make available to them finances more easily than those with little or no employees other than the owner.

4.3 Descriptive Analysis for the Study Variables

To establish the responses opinion on independent and dependent factors, the responses were tabulated descriptively where measures of central tendency were used to rank them as per the number of positive responses.

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According to the standard deviation represents the amount of deviation from the mean, Gujarat (2004), (the smaller the standard deviation the more accurate future predictions may be, because there is less variability). The descriptive analysis and ranking is as below;

4.3.1 Collateral Security and Performance of Small and Medium Enterprises

The researcher sought to access the influence of collateral security and the performance of SMEs in Turbo Sub County, Kenya. Collateral security was operationalized into a number of indicators so as to get the grim light of how collateral security influences the performance of the SMEs. The results of the findings are shown in Table 4.8

n = 273	Min	Max	Mean	Std. Deviation
they do not take collateral	1.00	2.00	1.0813	.27401
collateral requirement	1.00	3.00	2.0909	.99825
favorable collateral insurance terms	1.00	2.00	1.0813	.27401
collateral requirement	1.00	2.00	1.0813	.27401
Composite			1.3337	

The results indicated that collateral requirement was ranked first with a mean of 2.0909 and standard deviation of 0.99825. The findings indicate clearly that most financial institutions considered presence of collateral security as an important aspect before lending money to SMEs. Firms that provided collateral could easily access credit compared to those that lacked collateral security. From the findings it is also evident that not all firms were stringent on the collateral requirement and that some FIs had favorable collateral security terms which favored the small and medium enterprises within Turbo Sub County and thus the inability to provide collateral, favorable collateral insurance terms and collateral requirement as factors considered before access to the loan were ranked second with a mean of 1.0813 and standard deviation of 0.2701 as indicated in the table above.

4.3.2 Performance of Small and Medium Enterprises

The study sought to examine the response of the respondents on performance of SMEs who had accessed credit. Performance was operationalized into; number of employees, sales volume, profitability. The mean which is a measure of central tendency was used to identify among the components of performance which was ranked first and last. Results are as shown in table 4.9

Table 4.9: Performance of Small and Medium Enterprises

Performance of SMEs					
n= 273	Minimum	Maximum	Mean	Std. Deviation	
number of employees	1.00	3.00	1.9952	1.00239	
sales volume	1.00	2.00	1.0813	.27401	
Profitability	1.00	2.00	1.0813	.27401	
Composite			1.3859		

From the study findings the results indicates that number of employees, sales volume and profitability were the main measures of performance respectively. Firms which had the highest number of employees indicated growth and performance of the enterprise and therefore were able to access credit with ease and improve its performance growth. Number of employees therefore with a mean of 1.9952 and standard deviation of 1.00239 was ranked first. Sales volume and profitability index had a mean of 1.0813 and standard deviation of 0.27401 were ranked second.

4.4 Correlation analysis of Performance Versus Access to Credit

Correlation analysis of variable under study was conducted to establish where there was any significant relationship between dependent and independent variables under study. Correlation is a powerful tool to measure presence of a relationship between two or more variables though it may not be able to measure the cause of the relationship. It tries to establish whether there is positive or negative relationship between variable and using statistical correlation coefficient determine the strength of this relationship. This was then tested for significance at 1% (0.01) and 5% (0.05). The result of the analysis is tabulated in table 4.10 **Table 4 10: Correlation between Access to Credit and Performance**

Table 4.10: Correlation De	tween Access to Credit and Perior	mance	
Correlation=273		Performance	Collateral Security
Performance	Pearson Correlation	1	
Collateral Security	Sig. Pearson Correlation Sig.	451** .000	1
**. Correlation is significant	nt at the 0.01 level.		
*. Correlation is significant	at the 0.05 level.		

The study involved identifying the existence of relationship between and collateral security using correlation

coefficients obtained from the correlation matrix. Analysis of data with regard to correlation was based on the null hypothesis of no correlation in line with the objective of study.

Collateral security and performance of SMEs indicated a weak negative correlation between collateral security and performance of SMEs in Turbo Sub County, Kenya(r = -0.451). From the results in Table 4.10, the study therefore rejects the null hypothesis of no correlation between collateral security and performance of SMEs in Turbo Sub County, Kenya at 1 % level of significance with the correlation between collateral security and performance of SMEs being significant thus $r \neq 0$. This study is in tandem with the findings of Leitner (2006) that collateral is a primarily important factor in determining external financing and investment. The study further agrees with Chen (2001); Hall and Fang, (2004) that increases in a firm's collateral value relax the credit constraint faced by the firm, enabling the firm to borrow more. Finally, the current study affirms that access to collateral positively improves firm performance, as with business transparency, preparation of business plans, the skill level of the entrepreneur and credit rating of the business.

4.5 Reliability Analysis for the Study Variables

Confirmatory factor analysis was first conducted on the data to check reliability of the research instruments to ensure they were consistent with the study. The study established that the variables were highly consistent with study. The Cronbach coefficients alpha was at 0.906(90.6%) which was above the minimum required value of 0.7(70%). This ascertained that the research tools were reliable and hence further analysis could be done. **Table 4.11: Reliability Analysis of Each Variable**

Item	Cronbach's Alpha	No. of items
Collateral Security	.892	2
Composite	.892	2

4.6.1 Model Summary

The results from multiple regression analysis are as displayed in table 4.20

Table 4.12: Model Summary

Model	R	R Square	Model Summary Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.513ª	.263	.248	1.98305	1.598
a. Predicto	rs: (Constant),	collateral securit	У		
b. Depende	ent Variable: P	PERFOM	-		

From table 4.12, the value of R-square is 0.263 which indicates that the model explains 26.3% of performance from collateral security. The remaining 73.7% is explained by other factors not determined within this model (error term). The Durbin-Watson's d tests the null hypothesis that the residuals are not linearly auto-correlated. The value of Durbin-Watson (DW) was at 1.598 which indicates no autocorrelation among the indicators. According to Gujarat (2004) a DW of 2 means the error term is not correlated (the limit 2 ± 0.5 .) is acceptable.

4.6.2: Coefficient Analysis

Coefficient analysis from multiple regression analysis are as shown in table 4.22

Table 4.13: Coefficient Analysis

		Coefficients ^a			
Model	Unstandard	ized Coefficients	Standardized Coefficients	Т	Sig.
	В	Std. Error	Beta		•
1 (Constant)	-5.435	7.010		775	.439
Collateral security	2.826	.785	.310	3.598	.000

The model was found to be statistically significant. Further, the regression model can be outlined as follows; $Y = -5.435 + 2.826X_1 + 0.737$

Collateral security significantly influences access to credit which in turn affects the performance of the SMEs in Turbo Sub County with a p value of .000 each. A unit increase in collateral security would increase access to credit by 2.826 units hence increase in performance.

5.0 Conclusion

Collateral security was operationalized into a number of indicators so as to get the grim light of how collateral security influences the performance of the SMEs. Collateral requirement was ranked first with a mean of 2.0909. The inability to accept collateral, collateral insurance terms and collateral requirement as factors considered before access to the loan were ranked second with a mean of 1.0813. The study found out that presence of collateral

security by a firm increased their chances of receiving credit and improving their performance. The regression findings showed (r = -0.451) implying that there existed a weak negative but significant relationship between collateral security and performance of small and medium enterprises. Firms that lacked collateral security to pledge to financial institutions were significantly affected in accessing credit and hence their performance also affected within Turbo Sub County Kenya.

6.0 Recommendation

SMEs face numerous challenges, which if not redressed will seriously undermine the performance of SMEs businesses.

The rationale behind the emergence of the micro finance sector was to ensure financial inclusivity. From the findings of the study it was evident that the concept of micro financing had not been embraced fully by the SMEs. The researcher recommends that micro finance institutions should work on publicity and other modes of information dissemination. Terms and condition of their loan products and services should be custom tailored to meet the needs of their clientele. This will in turn increase access to credit by the SMEs. From the findings it was evident that majority of the SMEs did not have enough assets to pledge as security therefore financial institutions should educate SMEs on various forms of collateral that are acceptable by the financial institutions before extending credit to the SMEs. Financial institutions should come up with modalities and other forms of collateral convenient to SMEs other than purely assets that SMES' can use as collateral as they seek financial assistance.

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