

# THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT

## Effects of Debt Financing on Financial Performance of Small and Medium-Sized Enterprises in Homa Bay Town, Kenya

**Kelvin Otieno Okelo**

Post Graduate Student, Department of Business and Economics,  
Tom Mboya University College, Kenya

**Dr. Micah Nyamita**

Lecturer, Department of Business and Economics, Tom Mboya University College, Kenya

**Dr. Alphonce Odondo**

Lecturer, Department of Business and Economics, Tom Mboya University College, Kenya

### **Abstract:**

*The SMEs in Kenya account for 98% of businesses and create about 30% of jobs annually. Many SMEs face challenges of a stable financing cycle, and are unable to adjust to sales cycles that are available in the market, hence affecting their financial performance. Although SMEs have numerous accesses to debt financing in Kenya, they still struggle to remain into operation due to poor financial performance. Further, studies also have emphasized that despite the fact that debt financing is readily available in Kenya, most SMEs cannot access them due to lack of collateral and ignorance of the various financing options available in the country. Therefore, this study sought to establish the effect of debt financing on financial performance of small and medium-sized enterprises (SMEs) in Homa Bay Town, Kenya. Specifically, the study sought to identify the effect of long term financing on financial performance of SMEs in Homa Bay Town, identify the effect of trade credit on financial performance of SMEs and examine the effect of short term financing on performance of SMEs in Homa Bay Town. The target population was made up of 825 retail SMEs in Homa Bay Town. The study adopted Yamane's formula to derive the sample size of 296 SMEs. Primary data was obtained from the sampled SMEs using structured and semi structured questionnaires. The study concluded that there is a great effect of debt financing on the financial performance of SMEs in Homa Bay Town, with long term and short term financing having the highest effect and trade credit ranked lowest in terms of statistical significance.*

**Keywords:** *Small and medium sized enterprises, debt financing, financial performance, long term financing, short term financing, trade credit*

### **1. Introduction**

The Kenyan Constitution (2010), defines SMEs as enterprises with employees between 10-100 people and have a turnover of between 5,000 USD and 8 million USD. According to Central Bank of Kenya financial report of 2017, the overall GDP of Kenya was 6.4% of which SMEs contributed 3%. The report also stated that SMEs contributed 98% of businesses in Kenya creating 30% of jobs annually. Many SMEs face challenges of a stable financing cycle, most firms are unable to adjust to sales cycles that is available in the market. Payment to businesses is always done within 90 days which may not work well with most SMEs. Many SMEs opt for debt financing that is less risky and easily available, and contribute to their cash flows positively in the short run as well as in the long run.

Financial performance is the deed of performing financial activity in order to realize financial objective within a specified period of time (Metcalf, R. W. and P. L. Titard 1976). They further emphasized that it's a process of assessing the results of a firm's policy and operations in monetary terms. Financial performance may be measured using ratios like Liquidity, Leverage and profitability (Dobbins and Barnard, 2000). Liquidity describes the degree to which an asset can be quickly bought or sold in the market at a price reflecting its intrinsic value i.e. the ease of converting it to cash (Dobbins and Barnard, 2000). Cash flow of the firm determines how well the firm is able to meet its current obligations. A firm with sound cash flow has no difficulties in meeting its immediate obligation. This is testable by the liquidity ratios of the firm. A firm with right composition or preposition of the liquidity ratio is said to have better going concern as opposed to a struggling one. Debt financing ensures that SMEs are liquid at all times; since firms get additional cash from financial institutions. At the same time same time, banks are exposed to risk since the SMEs may not be solvent enough. Therefore, this sought to establish the effect of debt financing on financial performance of SMEs in Homa Bay Town, Kenya.

There are two major sources of financing, internal and external sources. Internal sources include profits and financing from the director or business owners. In order to have internal financing, there must be growth in profits and cash flows so that the excess cash can be ploughed back into the business. SMEs can also seek for financing from external sources which can either be formal or informal. Informal sources may be from friends and families, while formal sources include debt financing, capital ventures, new shareholders, debt factoring and many others. Debt financing is always used in case the internal sources are not sufficient or available (Robb and Robinson, 2008). Debt financing involves the

procurement of interest bearing instruments. They are secured by asset-based collateral and have term structures which are either short or long term. The equity component of external finance gives the financier the right of ownership in the business and as such may not require collateral since the equity participant will be part of the management of the business (Ogugiuba, Ohuche, and Adenuga, 2004). Therefore, debt financing option is the acquisition of capital from a particular lender to run a business and repay it back within a specified period of time with interest, in the event of SMEs' retained earnings are inadequate (Hussain, Millman and Matlay, 2006).

Conferring to Pecking Order theory, SMEs will opt for retained earnings before proceeding to any other source of financing. KPMG (2011) found that most SMEs in Kenya rely heavily on their internal saving than on bank loans for expansion of capital. This characteristic is believed to be unique all over Africa. External sources of financing however increase growth possibilities, since it comes in lump sum, helping the firm increase its productivity. Nevertheless, this financing comes at a cost. Wanjohi & Mugure, (2008) illustrated that credit constraints leads small businesses to opt for internal borrowing due to their previous experience with accessing highly rated financing.

Debt financing has been on the upsurge in Kenya for the last seven years, since the introduction of county governments (Gitari, 2012). The opening up of county headquarters have led to many SMEs taking advantage of various growth opportunities available. County governments have also lead to creation of both self and formal employment. Homa Bay Town has seen an increase in number of businesses since the establishment the county headquarter. Study by Gitari (2012) on challenges of accessing financial service on growth of SMEs in Nairobi County highlighted a major challenge as being lack debt facilities by the firms. Dennis (2003) examined different choices in financing including debts, investors and use of public finance. In this study it was found out that firms still opt for options to choose from the available financing options and also had an appetite to take financing from banks and other financial institutions.

Financing is always difficult for these small firms despite contributing 98% of businesses in Kenya and 30% of employment. There are different types of financing which includes internal and external debt financing that improves business revenue and enables it to get enough cash flows to repay the debt within the specified period at a specified cost. At the same time, the improved revenue from debt financing will benefit the owners of the business by having additional retained profits on their sleeves. Debt financing also led to additional cost which is specified while receiving the financing from the lenders, its normally called loan interest. For a firm to survive, a favorable capital mix is required in order to cater for the owners' interest and the business doesn't fall into financial trap. If high levels of debt are used in capital structure, there will be a fall in the percentage of owners' equity.

Debt is always desired if a firm achieves relatively high profits as this result in higher profits to shareholders, positive leverage. If a company experiences a major drop in income, taking more debt in the capital structure will be harmful as the firm will not be able to cover the cost of debt, negative leverage. According to World Bank, (2015), 80% of SMEs collapse within 2 years. The SMEs financial performance in Kenya has also been dropping significantly with the last decade. It is believed that the main reason for the fall and instability is lack of a proper equity structure. SMEs have a high bankruptcy rate at the same time they have the potential to grow faster than other players in the industry. To manage these two factors, SMEs have always opted for external financing in order to increase their growth and also be able to pay their financial obligation when required to. Debt is always attractive to SMEs but at the same time if the financial structure is not balanced out, it may pose a problem to the SMEs' financial health.

Previous studies on debt financing and financial performance have only focused on large firms but ignored SMEs yet they are the main drivers of the economy. It is still unclear if debt financing mends the financial performance of an SME or drags it deeper into poor financial performance crisis. Studies have shown that although SMEs have numerous accesses to debt financing in Kenya, they still struggle to remain into operations due to poor financial performance. Furthermore, no study has been carried out in Homa Bay Town to examine the correlation between debt financing and the financial performance of SMEs in the region. Therefore, the study aimed to ascertain the effect of debt financing on financial performance of SMEs in Homa Bay Town, Kenya. The study focused on identifying the effect of long-term financing on financial performance of SMEs in Homa Bay Town, examining the effect of trade credit on financial performance of SMEs in Homa Bay Town and determining the effect of short-term financing on financial performance of SMEs in Homa Bay Town.

## 2. Literature Review

There is evidence that debt financing existed more than 4,000 years ago, during the reign of king Hammurabi (Papadimitriou, Phillips, and Wray 1994), some activities of the same was noted in Roman empire (Rutberg 1994).

Debt financing option is the acquisition of capital from a particular lender to run a business and repay it back within a specified period of time with interest in the event of SMEs' retained earnings are inadequate (Hussain, Millman & Matlay, 2006). Different financing may attract different charges according to the amount and the duration awaiting payment. There are different debt financing theories that have been developed over the years. In this study three theories were used i.e. pecking order theory, agency theory and trade off theory.

### 2.1. Pecking Order Theory

Pecking order theory was developed by Myers (1984) and Myers & Majluf (1984) based on the premise that 'inside' management are better informed of the true value of the firm than the 'outside' investors. This theory noted that potential investors perceive equity to be riskier than debt. This theory also emphasizes that a firm need to exhaust its internal borrowing before sourcing for funds from external sources such as loans and financing from investors.

Authors state that the Pecking Order Theory is even more relevant for the SME sector because the relatively greater information asymmetries and the higher cost of external equity for SMEs (Ibbotson, Sindelar & Ritter, 2001). Furthermore, owners of the firm always want to retain the ownership share and avoid dilution of Capital (Jordan & Taylor,

1998). This theory suggest that SMEs owners source their capital from a pecking order of, first, their own finance which include savings and retained profits; then, short-term loans; third, long-term borrowings; and lastly from the introduction of new equity investors, which represents the maximum intrusion. Various studies have shown that firms always would rather have financial constraints as long as they are relying on internal sources of borrowing (Howorth, 2001). Adherence to the Pecking Order Theory depends on demand-side preferences as well as the availability of source of financing. The supply of finance depends on many factors, particularly the stage of development of the firm.

Cassar and Holmes (2003) determined a number of variables that effect the firm's capital structure are size, asset structure, profitability, risk and growth. In relation to size, small firms are hit harder by the transaction cost which are at times fixed on amounts or percentage of the financing offered. In this regard, if financing is offered, it will change the capital structure and gearing levels of a firm which may affect its profitability. But firms with large Non-current assets will always opt for external financing since their ratios favor them in the long run. Relating to risk, firms that are exposed to bankruptcy due to their liquidity problems should be avoided and only access lower levels of external financing. It is also known that firms which are growing fast in terms of revenue and production will tend to access external financing so as to extend their growth (Cassar and Holmes 2003).

Bhaidr and Lucey (2008) established a relationship between age, size and retained profit of a firm. They indicated that in order for survival, firms are increasingly using internally generated profits to finance their operations. This has minimized intrusion and dilution of equity. If the firm doesn't have internally generated profits, the owners of the business will opt for, personal financing, friends financing or family financing since their level of interest and risk associated with them are low.

## 2.2. Agency Theory

An agent is considered to act on the interest of the principle. According to Jensen and Meckling (1976), agent principle agreement also attracts costs that may be due to the agents' conduct not being consistent with the principle's interest. It should be noted that SMEs are always ran by the owners but may seek funding from external sources Hand (1982:27), indicated that because of this the Agency conflict exist between internal contributors and external contributors of equity. The objective of the shareholders is to increase wealth but the objective of the managers is to increase profitability, Miller (1977). At the same time Baas and Schrooten (2006) noted that debt providers tend to minimize agency cost arising from their relationship by having several techniques. The first technique is asset based lending.

In practice lending to small businesses by financial institutions is collateral based (Kon and storey 2003). In his study he showed ratio of loans to total equity in SMEs exceeded 85 % in the UK, Udell and Berger (1990) showed that in all the financial support offered by banks in UK, 80% are collateralized. Manove (2001) also concluded that even firms with positive cash flows require collateral in order to access financing. As industries of firms grow, the accumulated profits are always retained into assets like stock, accounts receivables, land, and building. This in turn can be used as collateral to secure more funding from financial institutions (Berger and Udell 1998). Agency theory is relevant due to the fact that there can exist a conflict between owners and investors. There is a potential risk associated with this arrangement that needs to be considered when accessing finance from financial institutions.

## 2.3. Trade off Theory

This theory states that there is an advantage of debt financing, the tax benefits of debt and there is cost of financing with debt (Modigliani and Miller 1963). The amount of debt reduces the amount of tax payable for the period due to the tax relief. The marginal benefit increases in debt declines as debt increases. Titman and Wessel 1988, however concluded that firms with higher profitability should borrow more to reduce tax liability. A firm experiences financial distress when the firm is unable to cope with the debt holder's obligations. A firm must always make payment in time failure to which it may make it insolvent. Financial distress is always considered as an element in trade off theory. Financial distress includes the bankruptcy and debt cost.

## 2.4. Long Term Financing and Financial Performance

Previous studies have shown that lack of financing is a major constraint of growth in Many Countries (National baseline survey, 2018). SMEs may get different financial assistance from banks. While this occurs, it attracts different finance cost that the firm is supposed to bear the burden. According to Pecking Order theory SMEs will opt for retained earnings before proceeding to any other source of financing. KPMG (2011) found that most SMEs in Kenya rely heavily on their internal saving then on bank loans for expansion of capital. This characteristic is unique all over Africa. External sources of financing however increase growth possibilities since it comes in lump sum helping the firm increase its productivity.

Long term financing limits managerial decisions since they will be tied with this debt for a longer period of time hence making dynamic decisions may be limited (Hart and Moore, 1995). Long term debts are favorable to high productivity since it is mostly invested in capital assets (Schianterelli and Srivastava, 1996). Studies by Dennis (2017), the effect of debt financing on financial performance of private secondary schools in Kajiado county, established a strong relationship financial performance of secondary school and loans.

## 2.5. Trade Credit Financing and Financial Performance

Trade credit arises when a buyer delays payment for purchased goods or services. Trade credit is a regular component of market transactions and constitutes a major source of short-term financing. Estimates suggest that more than 80% of business-to-business transactions in the United Kingdom (UK) are made on credit (Wilson & Summers, 2002),

while about 80% of United States (US) firms offer their products on trade credit (Tirole, 2006). Large, non-financial businesses in the US generate 15% of their financing from accounts payable and small businesses rely even more on it (Elliehausen and Wolken, 1993; OECD, 2006). Internationally, these levels can be even higher and trade credit exceeds, by far, short-term bank credit (De Blasio, 2005; Rajan and Zingales, 1995).

The average level of trade credit in use, however, varies significantly from country to country. A comparison of accounting data of industrialized nations shows that median accounts receivable ranges from 13% to 40% of sales and, with the exception of Italy, are relatively stable over time. Similarly, trade credit varies from industry to industry. US data suggest that relative accounts receivable increase in the distance to the end-consumer. While accounts receivable tend to exceed accounts payable in most sectors, the retail sector is a notable exception; this is most likely due to the proximity to end-consumers. Ng, Smith, and Smith (1999) found that credit terms show high variation between industries but low variation within them. The degree of within-variation seems to differ from industry to industry, at least as indicated by actual payment delays (Seifert & Seifert, 2011).

### 2.6. Short Term Financing

The market mechanisms with normal market movements, will change after every 3 months (World Bank 2015). The Kenyan central bank adjusts the inflation after every 3 months so as to cater for any variable. In this effect, an SME may have difficulties in embracing to the new environment and may need quick financing so as to face the potential and existing market (World Bank, 2015) short term debt is positively correlated with the firm's growth prospects. Short term debt is the best financing tool offered by financial institutions because it's observed to be cheaper. Thus, both the firm and the bank prefer short term financing (Landier & Thesmar, 2009). Waweru, (2018) on the on impact of overdraft on liquidity of start-up firms, established strong significant evidence to believe that those liquidity was influence by the overdraft advance to these start up. This assertion were confirmed by Dennis (2017) the effect of debt financing on financial performance of private secondary schools in Kajiado county, established a strong relationship financial performance of secondary school and loans.

### 2.7. Conceptual Framework

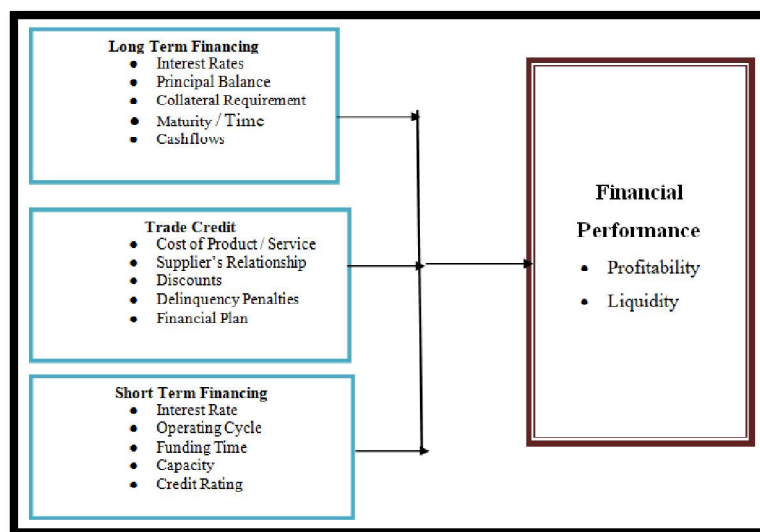


Figure 1: Conceptual Framework

### 3. Research Methodology

Descriptive and correlation research design was considered appropriate for this study as it allows for collection of data from samples and drawing of objective conclusions. Relationship between variables to financial performance for SMEs was considered. The descriptive design is believed to describe the phenomena as noted by Cooper & Schunder, (2006). The objective of this design is to portray a precision profile of person, events or situation and therefore this case study adopt it, since background information of the respondent was required, events being described by Likert scale questionnaire. The target population consisted of all SMEs who have business premises in Homa Bay Town. There are approximately 824, registered businesses at Homa Bay Town, operating as retail businesses according to Homa Bay Town Single Business Licensing office, (2019). The businesses are clustered as follows:

Class of SMEs	Population	Percentage
Micro Enterprises: 1 to 9 Employees	463	56.18%
Small Enterprises: 10 to 49 Employees	236	26.82%
Medium-Sized Enterprises: 50 to 100 Employees	125	12.86%
Total	824	100%

Table 1: population of SMEs in Homa Bay Town, Kenya  
Source; (Homa Bay County Licensing Office, 2020)

### 3.1. Sampling Frame and Sampling Size

According to (Cooper & Schindler, 2006) the sampling frame is closely related to the population. It is the list of elements from which the sample is actually drawn. The study adopted a stratified random sampling technique.

Sample size is achieved by selecting an observation count for use in a statistical sample. The study adopted Yamane's (1973) formula to derive the sample size  $n$  was be used to represent the sample size,  $N$  referred to the population size and  $e$  was the margin of error. The formula assumed a confidence level of 95% and a margin of error set at 0.05 as shown below:

$$\begin{aligned} n &= \frac{N}{1 + N(e)^2} \\ n &= \frac{824}{1 + 824(0.05)^2} \\ &= \frac{824}{1 + 824 \times .0025} \\ &= \frac{824}{1 + 2.06} \\ &= \frac{824}{3.06} = 269.2810458 \\ \therefore 269.2810458 &\cong 269 \\ \therefore n &= 269 \end{aligned}$$

The sampled population was sized as shown below.

Class of SMEs	Sample Size	Percentage
Micro Enterprises: 1 to 9 Employees	151	56.18%
Small Enterprises: 10 to 49 Employees	77	28.62%
Medium-Sized Enterprises: 50 to 100 Employees	41	15.20%
Total	269	100%

Table 2: Sampling Size  
Source; (Author, 2020)

Both primary and secondary data was collected. The primary data was used due to its nearness to truth and ease for control over errors. The primary data was administered by questionnaires containing mainly structured and unstructured question to be responded to by the respondents. Secondary data was sourced from the financial statements, newsletters, and unpublished report of the businesses.

## 4. Results and Discussions

This section summarizes the results of data analyzed from SMEs in Homa Bay Town as follows:

### 4.1. Long Term Financing

	Minimum	Maximum	Mean	Std. Deviation
Long term financing attracts less interest compared to short term financing and other terms	1.00	5.00	3.7975	.91526
The interest on long term debts have the possibility of making the cost of debt high	1.00	5.00	4.0063	.80204
The collateral requirement for long debts is high, which makes less attractive to most business	1.00	5.00	4.0764	.72978
Long term debts bring with it, large sum of capital for expansion and growth	1.00	5.00	4.0256	.80281
Due to large sum of money comes with higher principal balances	1.00	5.00	3.9045	1.03021
With large sum of investment comes with great profitability for business	1.00	5.00	3.5506	1.05606
Poor management of debt leads to bankruptcy and insolvency of business	1.00	5.00	4.1230	1.000
Lack of collateral to secure loan term debt leads to many business owners shying away this financing models	1.00	5.00	4.6006	.08945
Long term finances have impact on monthly cash flows of business	1.00	5.00	3.3523	.91236
When a business has enough capital, the possibility of poor liquidity, low turnovers are eliminated	1.00	5.00	4.0001	1.2300
Most of long-term debts have longer maturity period, giving businesses opportunities invest more	1.00	5.00	4.2516	.81010

Table 3: Descriptive Analysis of Long Term Financing  
Key 5 Strongly Agree; 4 Agree Neutral; Disagree, Strongly Disagree

Long term financing as component of debt financing was operationalized by other sub variables which were put into the Likert scale of one to five: A scale closer to five means that the respondent confirms a strong agreement with the construct or the statement in terms of long term debt of a SMEs and the further from five means disagreement of the construct in terms of the SMEs.

From table 3 on long term financing attracting less interest compared to short term financing and other terms, a mean 3.7975 and standard deviation .91526 meaning that most respondents agreed that long term financing attracts less interest compared to short term financing and other terms. Next on the scale was interest on long term debts have the possibility of making the cost of debt high, the respondents agreed in a large extent with a mean of 4.0256 and deviation of .80204. The collateral requirement for long debts is high, which makes less attractive to most business with mean 4.0764 agreeing in a large extent, that long term debt bring with it, large sum of capital for expansion and growth .72978 being of contra opinion.

Other operationalization components such Long term debts bringing with it, large sum of capital for expansion and growth, the large sum of money yielding higher principal balances, With large sum of investment comes with great profitability for business, poor management of debt leads to bankruptcy and insolvency of business, long term finances have impact on monthly cash flows of business, When a business has enough capital, the possibility of poor liquidity, low turnovers are eliminated, and Most of long-term debts have longer maturity period, giving businesses opportunities invest more having a mean above 3.3 and standard deviation of below 1. On very large extent was lack of collateral to secure loan term debt leads to many business owners shying away this financing models had 4.6006 out 5 meaning that almost respondent agreed strongly that lack of collateral to secure loan term debt leads to many business owners shying away these financing models. In conclusion the study can confidently conclude that long term financing is a major factor of debt financing within an SME in Homa Bay Town with An average of 4.2 and standard deviation of 0.12

#### 4.2. Trade Credit

	Minimum	Maximum	Mean	Std. Deviation
Trade credit are dependent on the relationship between the buyer and the sellers	1.00	5.00	3.6918	1.11916
The stronger the relationship between the two the more increased trade and vice versa	1.00	5.00	3.5346	1.20537
In trade credit the terms by the suppliers always prevail and crippling the buyer's business	1.00	5.00	3.2089	1.04091
Trade credit attracts cash discounts which compared to trade discounts are low	1.00	5.00	3.9490	.90438
When delinquency penalties are passed to buyer, the relationship may be affected and may lead to loss of business between the two parties	1.00	5.00	3.600	1.0401
In instance where the buyer and the suppliers have no relationship; the buyer may draw up financial plan for presentation to the suppliers aimed in initialing the relationship	1.00	5.00	4.1234	1.0346
Time is the great resource in trade credit arrangement, the longer the time better the trade and vice versa	1.00	5.00	3.3489	.64091

*Table 4: Descriptive Analysis of Trade Credit  
Key 5 Strongly Agree; 4 Agree Neutral; Disagree, Strongly Disagree*

From table 4 above, Trade credit is second component of debt financing was put into scale to assert whether the respondents agreed or disagreed with statement. Trade credit being business to business transaction was also operationalized with sub variables: cost of product / service, supplier's relationship, discounts and delinquency penalties. Further questions were formulated for each sub variable and Likert scale, they were ranked. First was, trade credit is dependent on the relationship between the buyer and the sellers had many respondents agreeing with mean of 3.6918 and standard deviation of 1.11916. There lacked strong agreement, since the mean is just above the natural level. Turning onto strength of relationship between suppliers and purchasers increasing trade was subjected to further analysis and the respondent were for the opinion relationship is important but trade enhancement is core as demonstrated by the mean of 3.5346 and standard deviation of 1.20537.

Thirdly was, terms by the suppliers always prevail and crippling the buyer's business if proper negotiations are detailed well. The suppliers have always an upper hand when it comes to trade credit, this was confirmed by the mean of 3.2089 and standard deviation 1.04091. But if, the negotiations are properly done the mean may change. A win, win situation between supplier and the buyer is recommended. Other operationalized variables included trade credit attracting cash discounts which compared to trade discounts are low, delinquency penalties being passed to buyer, the relationship may be affected and may lead to loss of business between the two parties, buyer and the suppliers have no relationship; the buyer may draw up financial plan for presentation to the suppliers aimed in initialing the relationship

and time is the great resource in trade credit arrangement, the longer the time better the trade and vice versa. They all shared a mean between 4.1234 and 3.3489; meaning that the respondents agreed in large extent, while the standard deviation scaled at higher 1.0346 and lower of .64091. In conclusion the trade credit was assessed and the study can affirm with significant evidence that trade credit as factor of debt financing effects the financial performance of SMEs though not at great extent, there is evidence to believe as confirmed by the 4.2 agreeing and those disagreeing below 0.9 as presented by the standard deviation.

#### 4.3. Short Term Financing

	Minimum	Maximum	Mean	Std. Deviation
Short term financing models are the easiest form of acquiring financing for business	1.00	5.00	4.2975	.81526
The interest charged is lower in the short run and expensive in the long run.	1.00	5.00	4.0063	.90204
Repayment of short-term debt by business is indicator that business is liquid	1.00	5.00	4.0364	.82978
Repayment of short-term debt is best test for financial health of business	1.00	5.00	4.0256	.90281
A business with track record of repaying is said to have a good working capital management, which is key requirement for credit rating	1.00	5.00	4.2356	.70021
Short term debt are quickest funding options for small businesses	1.00	5.00	4.1206	.7896
With short term debts requirement of security is low hence being cheapest way to finance a business	1.00	5.00	4.215	.9712
A business with a positive working capital management indicator its ranked best in performance in the industry	1.00	5.00	3.892	1.002
Short term debts are best known for addressing operating cycle or accrual of business	1.00	5.00	4.4506	0.0871

*Table 5: Descriptive Analysis of Short Term Financing  
Key 5 Strongly Agree; 4 Agree Neutral; Disagree, Strongly Disagree*

Turning to short term financing similar analyze was conducted. It was evidence that most SMEs run for short term financing models. It was evidence that requirements for short term financing are fewer compared to long term financing and trade credit. It was observed above on table 5 that all operationalized questions had a mean score of above 4 meaning strong agreement was noted, similarly standard deviation was low. In the next section we detail each operationalized variable.

First was the question, short term financing models are the easiest form of acquiring financing for business, a mean of 4.2975; mean there was a strong agreement among the respondents and low standard deviation of 81526. With simple procedures such as having an account with a financial institution warrants a customer to qualify for a facility on short term basis. Most of SMEs with small turnovers get this as the best model of financing.

Next was interest charged is lower in the short run and expensive in the long run. If an owner of SMEs takes a loan and fails pay back within the expected time, the loan ends up being expensive. The aspect of the question is the frequency of usage of short-term financing, if the owner of SMEs has different short-term facilities; whose maturity period are same. It will be expensive at the long run. To maintain low interest for short term financing proper debt management must be done. All this observation confirmed by a mean of 4.0063 and standard deviation .90204.

Other operationalized variable included the following: Repayment of short-term debt by business is indicator that business is liquid, repayment of short-term debt is best test for financial health of business, track record of repaying is said to have a good working capital management, which is key requirement for credit rating, short term debt being quickest funding options for small businesses, with short term debts requirement of security is low hence being cheapest way to finance a business, a positive working capital management indicator its ranked best in performance in the industry and finally, Short term debts are best known for addressing operating cycle or accrual of business. All the respondents strongly agreed which showcased by the mean of above 4.0 and standard deviation of below 0.9 in all the question.

It was observed that most owners of SMEs prefer short term debt since they are cheaper and the requirements are fewer compared to long debt financing. Other the hand trade credit is mostly dependent on the relationship the buyer and supplier, which is not the case with short term financing. This was affirmed by all mean scaling above 4.0 and standard deviation being 0.9.

#### 4.4. Open Ended Debt Financing Observation

The study further sought to underscore, whether the respondents had other notable observation on debt financing in relation to financial performance of SMEs. Structured questions were presented to the respondents as follow as: are financial institutions doing enough to popularize debt financing products, opinion on the process of debt acquisition in Kenya, comment on interest charged by financial institution and points of address in the process of debt financing in Kenya.

Each general comment is individually highlighted as below: are financial institutions doing enough to popularize debt financing products. It was noted that financial institutions are putting some effort but much needs to be done. Few SMEs had the full knowledge on the existing facilities suiting their businesses. Others couldn't differentiate the difference between long term and short term debt financing methods. The study recommends more sustentation to be done.

On next card was the process of debt acquisition, it was noted that process is simple or complex depending on the facility requirement. Short term financing got simple process, but also dependent on the financial institution. Some institutions have simple process for all facilities and others got complex process for all their facilities. It in the same that the study recommends for simplification of debt financing process by financial in Kenya. Finally, was the interest charged by financial institution. Different financial institutions have different interest rate for their different facilities. Though the CBK sets the base lending rate, it is within the discretion of individual to add their mark ups and stay within manageable rate. Other institutions charged interest depending on other variables. Further, the method of interest charging is also dependent on the policy of the financial institution, some charge using straight line, reducing balance, hybrid method among others.

#### 4.5. Financial Performance of SMEs

Financial performance of SMEs being the dependent variable was also re-examined and whether the independent variables effected it. The study identified two components of financial performance of firms; that is profitability and liquidity. Each operationalized variable was further classified into single variable or ratio. For profitability, return on asset was selected and for liquidity quick ratio was pick. The study closely examined return on assets ratio, an average of five years was considered and the same case for quick ratio.

The study observed a growing trend of profitability by SMEs that used debt financing for period of five years. The entire average of 42% in return on asset was arrived at. ROA is formulated as  $ROA = \frac{\text{Earning After Interest and Tax}}{\text{Total Net Asset}} \times 100$ . In year 2015, ROA was 19% and the growth messily to average of 42%. Meaning 25% of the growth can be attributed to debt financing if all other factors reminded constant. With proper frameworks and negotiations of rates of interest more growth can be achieved.

Turning into liquidity which was present represented by quick ratio; which given by  $\text{Quick Ratio} = \frac{\text{Current Ratio} - \text{Inventory}}{\text{Current Liabilities}}$ . Ratio should be equal to one. The study found an average of  $0.92 \approx 1$ . meaning it is within the range of acceptability. Prior to year 2015, the quick ratio was below 0.6 and after adoption of debt financing the ratio has grown to greater extent. Quick ratio is considered best measure since inventory is subtracted since it suffers from damage or loss.

Finally, the study sought to undertake the averages of components of debt financing; long term financing, trade credit and short-term financing. The average of long-term debt amount 126 million of respondent, 15.6 million of trade credit and 484.1 million of short term financing. The study observed trajectory thread in the three variables. The base year being 2018. Most SMEs intensified the adoption of debt financing as 2018, and the same was noted in stabilization of the profitability and liquidity. The uptake of debt finances, lend to growth of ROA and quick ratio in the period of the study.

In conclusion there is evidence to believe that component of debt financing has contributed to financial performance of SMEs. The extent of effect various depending of the component. It was observed short term financing had more effect on profitability and liquidity as compared to long term financing and trade credit. The greater the average the greater the effect and vice versa. The significance effect was either strong or weak. Long term financing and short term financing have strong and very strong effect respectively. Trade credit had minimal or weak or little significance to the financial performance of the SMEs.

#### 4.6. Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F	df1	df2	Sig. F Change	
1	.878 <sup>a</sup>	.771	.869	94.99	.771	5.01	4	228	.000	2.06

Table 6: Summary of the Model (Model Summary<sup>b</sup>)

Source: Author (2020)

The above is epicentral of the model. In the previous chapter, it was highlighted that model was to be arrived at. Table 6 is the summary statistic of this study model. The summary is interpolated as follows; first, is Adjusted R Square, is referred as coefficient of determination. Coefficient of determination discusses the variation of dependent variable



(financial performance of SMEs) which is due to the change independent variables (long term financing, trade credit and short-term financing).

It is veritable that long term loans, trade credit and short-term loans as component of debt financing are key contributor to financial performance of SMEs; either to the profitability or liquidity of the SMEs. This is demonstrated 77.1% as observed in the summary of the model (0.771). To cement further relationship between independent variables and dependent variable is correlation of variation as shown by the R Square, interpreted as the three independent variables account for 77.1% (R Square, 0.771) of the variations in the dependent variable, financial performance.

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	27.012	4	4.221	5.01	.000 <sup>b</sup>
	Residual	67.978	228	.622		
	Total	94.99	232			

Table 7: ANOVA<sup>a</sup> Table

Source: Author (2020)

ANOVA is conducted in order to determine whether the model works and if the findings shows any correlation between independent variables (long term loans, trade credit and short-term loans). And the dependent variable financial performance. The F value of 5.01 at significance level of .000<sup>b</sup> calculated represents the variation between groups, divided by the variance within the respective groups. The high F value signifies there is more variability between the variable, which in turns is referred to as disturbance term.

The study further notes that significance value is 0.000 (i.e.,  $p = .000$ ), which is below 0.05. and, therefore, there is a statistically significant difference in the mean debt financing effects the financial performance of a SMEs.

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.910	.050		18.2	.000
	Long Term Loans	.745	.103	.071	7.23	.003
	Trade Credit	.315	.434	.060	0.73	.004
	Short Term Loan	.687	.102	.062	6.73	.013

Table 8: Regression Results (Coefficients<sup>a</sup>)

Source: Author (2020)

From the above table 8, the regression equation is as follows:

$$Y = 0.910 + 0.745X_1 + 0.315X_2 + 0.687X_3$$

If long term loans, trade credit and Short-term financing are all zero, then financial of performance of SMEs would be 0.910 as abbreviated by the constant value in the above equation (0.970) narrowing down to the specific independent variables' is long term loan, followed by short term loan. From the equation Loan Term Financing has 0.745 and Short-Term Financing 0.687. The high scores, presents a positivity between financial performance of SMEs and debt financing of the two independent variables. There is great strength demonstrated by the combination of the two variables as components of debt financing. Coming last was trade credit component with 0.315. The strength of interrelationship financial performance and credit trade weak though positive. The effect of trade credit is not as strong as compared to long term financing and short-term financing.

Turning to t value of our preselected value of alpha of 0.05. The selected coefficient in the study p-values have less than alpha apart from trade credit. This is interpreted that Loan Term Financing and Short-Term Financing are statistically significant. While trade credit is statistically insignificant. On the level of significance all the three independent variables (Loan Term Financing  $p = 0.003 \leq 0.05$ , Short Term Financing  $p = 0.013 \leq 0.05$  and trade credit  $p = 0.048 \leq 0.05$ ), had a probability level below 5% ( $p \leq 0.05$ ); meaning that effect of debt financing on the financial performance of SMEs is significant but at different level of significance. In this study the properties of linear regression were assessed as way to spur the confidence of the linear regression developed. After stimulating the data was accurate, a regression model was developed ( $Y = 0.910 + 0.745X_1 + 0.315X_2 + 0.687X_3$ ). all the independent variables (long term loans, trade credit and short-term loans) had a positive relationship with dependent variable financial performance

#### 4. Conclusions

The statistical significant effect of debt financing on the financial performance as evidenced by all independent variables with a strong statistically significant strength. Trade credit is however ranked lowest in terms of strength, long and short-term loans highest.

Long-term having a strong statistical strength is in line with similar conclusions by Baas and Schrooten (2006) who observed long term debt providers tend to minimize agency cost arising from their relationship by having several techniques in order to maximize their financial performance. Others researchers such as Schianterelli and Srivastava, (2012) echoed the same sentiments that long term debts are favorable to high productivity since it is mostly invested in capital assets.

While short loan conclusion of a positive strength was confirmed by Dennis (2017) the effect of debt financing on financial performance of private secondary schools in Kajiado county, established a strong relationship financial performance of secondary school and loans. Asserting great impact of financial performance as result of short borrowing.

Finally, trade credit conclusion was line Smith (1999) findings which showed that credit terms show high variation between industries but low variation within them; which were later strengthened Seifert (2011), who asserted that the degree of within-variation seems to differ from industry to industry, at least as indicated by actual payment delays.

## 5. Recommendations

The study recommends more sensation should be done by financier to the SMEs, since most of close up business for lack of finances. To same end educating the SMEs should be prioritized by financiers also especially on different products available for business. Further, financier should fully disclose all details while advancing the facilities, I was noted some SMEs were faced with amusement of realizing the payment of other cost such insurance, processing fees. The government should engage the financier to lower the rate of lending; by just setting the base lending rate by CBK is not enough, more incentives are required. The owners of SMEs are should be encouraged to keep proper books of accounts; tracking their income and expenditure. The study also recommends a formation of advisory body SMEs in every country to train them and avail important market information.

## 6. References

- i. Baas, T., & Schrooten M., (2006) *Relationship banking and SMEs: A theoretical analysis*
- ii. Bhaird, C., & Lucey B. (2008). *Determinants of the Capital Structure of SMEs: A Seemingly Unrelated Regression Approach*. London: *Rutledge*
- iii. Bowen, M., Morara M., & Mureithi S. (2009) *Management of Business Challenges Among Small and Micro Enterprises in Nairobi-Kenya, KCA Journal of Business Management: 2, 1:16-31*
- iv. Cassar, G. & Holmes, S. (2003). *Capital Structure and Financing of SMEs: Australian Evidence*. *Accounting and Finance*, 43, 123-147
- v. De Blasio, G. (2005). *Does trade credit substitute for bank credit? Evidence from firm level data*. *Economic Notes*, 34(1), 85-112.
- vi. Dennis, C., (2003) *Strategic human capital management ins SMEs: An empirical study of entrepreneurial performance*.
- vii. Dennis, N., (2017) *The Effect of Debt Financing on Financial Performance of Private Secondary Schools in Kajiado County*
- viii. Dobbins, N., & Barnard T., (2000) *Financial performance, measurement and analysis*
- ix. Elliehausen, G. E. & Wolken, J.D. (1993). Demand for trade credit: an investigation of motives for trade credit use by small businesses. *Federal Reserve Bulletin*, 10 (11), 929-998. *Firm level analysis for chile*
- x. Frank M., & Goyal R., (2005) *Tradeoff and pecking order theories of debt*. *Handbook*
- xi. Gitari J. N., (2012) *The relationship between financial literacy and retirement in Kenya, erepository.uonbi.ac.ke*
- xii. Graham, J. Scott, B., (2010). *3rd edition Corporate Finance: Linking Theory to what companies do; South Western*.
- xiii. Hart, J. & Moore J. A., (1995). An evaluative process for assessing human reproductive and developmental toxicity of agents
- xiv. Howorth, C. A. (2001), 'Small Firms' Demand for Finance: A Research Note', *International Small Business Journal* 19, 78-86.
- xv. Hussain J., Millman M., & Matlay H., (2006). *SME financing in the UK and in China: A Comparative perspective*.
- xvi. Ibbotson, R. G., Sindelar, J. L. & Ritter, J. (2001) *Initial Public Offerings*. IN CHEW, D. H. J. (Ed.) *The New Corporate Finance, Where Theory Meets Practice*. (3rd ed.), McGraw Hill-Irwin.
- xvii. Jensen M. C., & Meckling W. H., (1976). *Theory of the firm: Managerial behavior, agency costs and ownership structure*
- xviii. Jordon, J., Lowe, J & Taylor, P. (1998). 'Strategy and Financial Policy in UK Small Firms', *Journal of Business Finance & Accounting*, 25, 1-27.
- xix. Jose J. and Christian J., (2003). *Debt composition and balance-sheet effects of exchange rates*
- xx. Kayo, E. K. & Kimura, H. (2011). *Hierarchical determinants of capital structure*. *Journal of Banking & Finance*, 35(2), 358-371. doi: <http://dx.doi.org/10.1016/j.jbankfin.2010.08.015>
- xxi. Kenyan Constitution (2010), *Small and medium sized act 2002*
- xxii. Kon, Y., & Storey D. J., (2003) *A theory of discouraged borrowers*
- xxiii. Lander, A., & Thesmar D., (2009) *Optimal dissent in organizations*
- xxiv. Laura, V., (2010). *Factoring financing alternative for SMEs*
- xxv. Manove, M., (2001) *Collateral versus project screening: A model of lazy banks*
- xxvi. Metcalf, R. W., & Titard P. L., (1976). *Principles of Accounting'*, W.B. Saunders, (Philadelphia)
- xxvii. Miller, E. M., (1977). *Risk, uncertainty and divergence of opinion*
- xxviii. Mitchell, A., Peterson R., & Raghuram G. (2015). *the effect of credit market competition on lending relationships: oxford university press* p.g 408-443
- xxix. Modigliani, F., & Miller, M. H., (1958). *The cost of capital, corporation finance and the theory of investment*. *The American economic review*,

- xxx. Myers, M. M., (2001). *The Impact of Taxes on Corporate Defined Benefit Plan Asset Allocation,* Journal of Accounting Research, (40, 1163-1190)
- xxxi. Myers, S. C., & Majluf L., (1984). *SMEs access to intermediate credit: What do we know and what don't we know.*
- xxxii. Myers, S. C., (1984). *'The Capital Structure Puzzle,'* Journal of Finance, (39, 575-592)
- xxxiii. Ng, C. K., Smith, J. K., & Smith, R. L. (1999). *Evidence on the determinants of credit terms used in interfirm trade.* Journal of Finance, 54, 1109-1129.
- xxxiv. Ogujiuba, Ohuche, and Adenuga (2004) *credit Availability to Small and Medium Scale Enterprises in Nigeria: Importance of New Capital Base for Banks -Background and issues*
- xxxv. Ongore, V. O., & Kusa, G. B., (2013). *Effectiveness of debt factoring in Nyeri County-* thesis published at University of Nairobi
- xxxvi. Papadimitriou, D., Dimitri, B., Phillips R. J., Ronnie J.; Wray, L., (1994) *An alternative in small business financing: community-based factoring companies and small business lending*
- xxxvii. Peter, N., (2013), *Debt financing and financial performance of small and medium size enterprises: Evidence from Kenya.*
- xxxviii. Robb, A & Robinson D. T., (2008) *the capital structure decisions of new firm: Second in a series of reports using data from the Kauffman firm survey.*
- xxxix. Schianterelli, F., & Srivastava, V., (1996). *Debt maturity and firm performance: a panel study of Indian companies*
- xl. Seifert, K. A., (2011) *Industry variations of receivables among SMEs*
- xli. Shuzen, C., (2015). *The financing role of factoring in China Context*
- xlii. Slater, R. B., (1993). *'Banks Are a Big Factor in Factoring,'* Bankers Monthly, January (pp. 37-38)
- xliii. Thorsten B., (2007). *Financing constraints for SMEs in developing Countries: Evidence determinants and solutions*
- xliv. Tirole, J., (2006). *The theory of corporate finance.* Princeton (NJ): Princeton University Press.
- xlv. Titman, S. & Wessels, R., (2012). *The determinants of capital structure choice.* The Journal of Finance, 43(1)
- xlvi. Udell, G. F., & Berger A. N., (1990). *Collateral, loan quality and bank risk*
- xlvii. Wanjohi, A.M., & Mugure, A., (2008). *Factors affecting the growth of MSEs in Rural Areas of Kenya: A case of ICT firms in Kiserian Township, Kajiado District of Kenya*
- xlviii. Waweru, F. M., (2018). *Benefits of small and medium enterprise lending for commercial banks in Kenya.*
- xlix. Westhead, P., & Storey, D. J., (1996). *Management training and small firm financial performance: why is the link so weak?* International Small business Journal 14 (4):13-24
- l. Wilson, N. & Summer, B., (2002). *Trade credit terms offered by small firms: survey evidence and empirical analysis*
- li. World Bank (2015). *Addressing the SME finance problem.*