Analysis of the effect of Financial Leverage on Loan Repayment among Small and Medium Sized Enterprises in Kenya

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Abstract: ***This study sought to analyze the effect of financial leverage on loan repayment among Small and Medium Sized enterprises in Kenya. The study was guided by the following specific objectives; to determine the effect of SMEs debt to equity ratio, interest coverage, capital allocation and debt ratio on loan repayment among small and medium sized enterprises Kakamega County, Kenya. The study was anchored on the pecking order theory. The study used a census survey. The study collected primary data using structured questionnaires. The collected data was analyzed using both descriptive and inferential statistics. The study concluded that financial leverage significantly and positively influenced loan repayment among the medium sized enterprises. The study further concluded that to a significant extent the firms had optimum loan compared to total equity to enable loan repayment, are able to repay their loans with the current total debt and total equity ratio and manage their ratio. The study concluded that to a significant extent interest coverage influenced loan repayment among the enterprises since it was affordable allowing them to improve their earnings, borrow more and promptly repay the loans. It was concluded that the firms to a significant extent embrace diligent capital allocation to profitable assets, long-term debts and having an investment policy which increased their returns, net profit margin and ability to service debts. Further it was concluded that the firms have maintained a positive ratio between current assets and current liabilities which has improved their debt repayment and reduced the liabilities. It was recommended that the firms need to maintain a positive debt to equity ratio which will enhance their solvency and there is need to allocate more of their capital in acquisition of assets and also reduce their current liabilities all aimed at improve their liquidity and ability to repay debts.***

Keyword*:* Debt to equity ratio, interest coverage, capital allocation, debt ratio, small and medium sized enterprises Kenya

1. Introduction

The universe of small and medium-sized firms is very mixed. In the majority of countries, small and medium-sized enterprises (SMEs) are defined as firms employing between 10 and 250 people. Firms with up to 10 employees are usually referred to as micro firms. There is, however, no commonly agreed definition of what micro firms and SMEs are. They are mixed by nature, ranging from producers of non-tradable services to suppliers of digital products, high-quality artisanal goods or sophisticated instruments. In the majority of countries, SMEs account for a significant proportion of employment. According reference [46] Surveys, in a sample of firms from 99 emerging and developing countries, SMEs accounted for two-thirds of formal non-agricultural private employment. Similar, although not strictly comparable, evidence has been found for developed countries [25], [10].

SMEs can benefit significantly from innovation, and their entry into the market can stimulate innovation in others [33]. Against this background, there is abundant evidence of the positive impact of innovation for SMEs that engage in it. The contribution of SMEs to industry dynamics can have positive aggregate effects on productivity, not only because successful entrants have productivity growth rates that are usually higher than those of incumbents, but also because their entry can foster increased innovation by market incumbents [47].

In Kenya SMEs has over the years been recognized for its role in provision of goods and services, enhancing competition, fostering innovation, generating employment and in effect, and alleviation of poverty [43],[1].

The development blueprint which seeks to transform Kenya into an industrialized middle-income country, providing a high-quality life to all its citizens by the year 2030. The SMEs sector has been identified and prioritized as a key growth driver for achievement of the development blueprint. The measurement of the size of the sector in terms of employment as well as its contribution to Gross Domestic Product [GDP] and the generation of income is of major importance [45]. This is not only because of their usefulness in the design of appropriate policies and programmes but also in understanding their dynamics in terms of income, wages, growth patterns, sector and their evolving nature among others. SMEs tend to be dynamic: the structure and their operations change considerably within a short time.

Financial Institutions have introduced inducements that motivate the borrowers during their engagement with them. To reduce late or defaults in loan repayment among borrowers, there are various forms of loan repayments adopted including cash back, future Interest Rate reduction, and SMSs reminders sent to borrowers monthly in few days before repayment dates. FIs promise of new loans to borrowers and increased amount of credit acts as a motivation, hence borrowers are always determined to repay the current loan balance within shortest possible time. Large amount of credit offered to the borrower with revised terms is a form of incentive.

Due to increased level of unemployment in Kenya, many individuals have engaged in MEs as source of employment. Given the status of the business environment where the competition is intense, SMEs need adequate financial resources to survive. To stay highly competitive in the marketplace, research needs to be done to cater for the needs of the consumers. Any shortage in financial resources may hinder MEs from growing [38]. To meet their financial needs, SMEs have sought financial leverage from financial institutions such as commercial banks, SACCOs, micro financial institutions, self-help groups, mobile money and others.

It is against this background that this study seeks to answer the question: What is the relationship between financial leverage and loan repayment among medium sized enterprises.

2. Literature Review

This study was anchored on Pecking Order Theory. This theory expresses that organizations will lean toward internal funds sourcing as opposed to external fund [39]. It accepts that debt ratio is not favoured by firms rather they prefer external sources of funds of assets when internal funds are deficient. The theory is relevant to the study as it pinpoints events when financial leverage is applicable to get high returns to facilitate loan repayment. Medium sized enterprises have to choose a portfolio which maximises the returns for shareholders. The theory advises firms to be biased when financing their projects and use debt on projects that contribute high returns.

The study conducted the empirical review based on the research objectives. The literature reviewed was on studies carried out between the year 2014 to the year 2019. For instance, [21] conducted a study on the effect capital structure on financial performance of small and medium enterprises in dairy sector in Kiambu. The study collected capital structure data of 50 small and medium enterprises in dairy industry in Kiambu County. Data analysis was through descriptive analysis and multiple linear regression analysis. The mean of the remained lesser than one. This indicated that the SMEs in Kiambu county were funded mainly through debt and lesser through equity; the results also shows that the SMEs have more assets than current liabilities as seen by a high liquidity ratio; the debt asset ratio was as well more than one indicating that the SMEs have mainly acquired their asset through debt.

The study concludes that capital structure had a significant impact on the financial performance of small and medium enterprises in dairy sector in Kiambu County. In this case therefore from the independent variables involved in the study debt equity has a negative impact on the performance of SMEs in dairy sector in Kiambu County having more in terms of debt than equity stocks in the capital structure of the firm will cause a negative performance of these SMEs.

Reference [34] conducted a study on capital structure decisions and financial performance of sugar manufacturing firms in Kisumu County, Kenya. Data was collected using the secondary data collection sheet.. This result indicated the existence of a negative and significant relationship between debt to equity ratio and financial performance implying that if sugar manufacturing firms continued injecting much debt in their capital combination then more losses will be incurred beyond what the industry is witnessing. A negative debt to equity ratio showed that the companies were purchasing investments using borrowed funds and that these borrowed amount of funds has a greater cost and due to this debt, the companies could not raise adequate money to cover historical net losses. Indeed affects the firms' financial performance though differently based on the composition of the capital structure of a firm. Debt ratio as a proxy of capital structure has a negatively insignificant relationship with the financial performance of sugar manufacturing firms in Kisumu County. It is therefore concluded that debt ratio is not a useful factor when determining the financial performance of these firms. This means that debt-equity ratio is an essential determining factor in the financial performance of these firms.

Reference [21] conducted a study on influence of firm characteristics on capital structure of private manufacturing firms in Kenya. Results revealed that high interest cover indicates less debt. The results also revealed that increase in interest cover shows reduction in debt. Results also revealed that high interest implies the high debt in future. Further the results revealed that high interest payments means there is high debt. Results indicated revealed that increase in interest cover shows reduction in debt, high interest coverage ratio implied high debt in future, high interest payments meant there was high debt lower interest indicating lower debt. The results also revealed that low interest cover indicates high debt. The regression results revealed that interest cover have a negative and significant effect on the capital structure of private manufacturing firms in Kenya.

Reference [32] carried out a survey on the working capital management components on corporate profitability among the Kenyan listed firms. The findings from a sample of 30 listed firms at the Nairobi Securities Exchange (NSE) revealed a negative relationship between the time firms took to convert receivables into cash (collection of debts from their customers) and profitability. Firms with shorter collection period were found to be more profitable. The survey also revealed that a positive relationship existed between inventory conversion period and the firms' profitability. Firms with shorter inventory conversion period were more profitable. It was also noted that firms that took longer time to pay their creditors were also more profitable.

3. Methodology

This study utilized descriptive survey, this is because it was the most proper technique in gathering information about the attributes of a substantial populace as far as being practical and inside the imperatives of time accessible. In addition, the survey was utilized as the primary apparatus for information accumulation [4], [2] [12]. The study targeted medium sized enterprises licensed by the county government of Kakamega with single business permit. The total population was therefore 53 medium sized enterprises. The study was a census survey in which all medium sized enterprises licensed by the county government of Kakamega in Kakamega County were studied due manageable numbers involved. Therefore, the sample size for the study were 21 respondents as presented in the table below. In an endeavour to confirm reliability of the endings, the findings embraced Cronbach's alpha methodology, which was founded on interior constancy.

4. Research Findings and Discussions

The study analyzed the effect of debt to equity ratio on loan repayment among small and medium-sized enterprises in Kakamega County. The study established that to a moderate extent the enterprises had optimum loan compared to total equity to enable loan repayment, they were able to repay their loans with the current total debt and total equity ratio and that the medium enterprises have plans to manage debt to equity ratio so as to pay their loans as indicated by a mean of 3.02, 3.33 and 2.87 respectively. The respondents significantly agreed that the debt and equity ratio contribute to high returns to facilitate loan repayment and that debt to equity structure affect profitability and loan repayment as indicated by a mean of 3.64 and 3.51 respectively. This indicates that to a significant extent the firms had optimum loan compared to total equity to enable loan repayment, are able to repay their loans with the current total debt and total equity ratio and manage their ratio. The debt to equity ratio contributes to high returns and profitability to enhance loan repayments.

The second objective of the study was to assess the effect of interest coverage as an aspect of financial leverage on the loan repayment among small and medium-sized enterprises in Kakamega County. The study respondents agreed that loan repayment in their enterprises is affected the interest rate as indicated by a mean of 3.64 and standard deviation of 0.728. The study established that to a moderate extent high interest paid eats into earnings of the SMEs, the enterprises' earnings are high to repay loans, the interest coverage ration allows the firms to borrow more and loan repayment, the interest expenses are affordable to repay loan and the SMEs earnings contribute to interest coverage ratio as indicated by a mean of 3.01, 2.69, 3.33, 3.41 and 3.36 respectively. This indicates that to a significant extent interest coverage influenced loan repayment among the enterprises since it was affordable allowing them to improve their earnings, borrow more and promptly repay the loans. The respondents further indicated that interest coverage ratio influenced affordability of the loans and hence the higher the ratio the lower the ability to borrow or repay.

The third objective of the study was to assess the effect of capital allocation as an aspect of financial leverage on the loan repayment among small and medium-sized enterprises in Kakamega County. The study established that to a moderate extent the small and medium sized enterprises in Kakamega County have allocated their capital to profitable assets, their net income from assets can pay loans, long-term debt allows them to mobilize funds to service their loans, return on assets is adequate among the enterprises, their net profit margin is adequate to run their operations, the firms have investment policy that guide capital allocation for higher net income and that their returns have improved their ability to service debts as indicated by a mean of 3.24, 2.88, 3.29, 3.01, 3.42, 2.71 and 3.20 respectively. This indicates that the firms to a significant extent embrace diligent capital allocation to profitable assets, long-term debts and having an investment policy which increased their returns, net profit margin and ability to service debts. The respondents indicated that capital allocation influence growth of their businesses which had a direct influence on loan repayment.

The fourth objective was to assess the effect of total debt as an aspect of financial leverage on the loan repayment among small and medium-sized enterprises in Kakamega County. The study established that to a great extent the enterprises had a sound asset based, their assets surpass liabilities, the firms always ensure their total assets are more than total liabilities and that they pay their debts from the current assets as indicated by a mean of 3.77, 3.94, 3.51 and 3.61 respectively. The respondents disagreed that the enterprise current liabilities are more than current assets as indicated by a mean of 2.11 and standard deviation of 0.854. To a moderate extent the respondents agreed that their liabilities are maintained at manageable levels and that their liabilities have reduced with time as indicated by a mean of 3.04 and 3.02 respectively. This indicates that the firms have maintained a positive ratio between current assets and current liabilities which has improved their debt repayment and reduced the liabilities.

The study conducted inferential statistics to establish the effect of financial leverage on loan repayment among medium sized enterprises in Kakamega County. The findings of Model Summary, ANOVA and Regression Coefficients are indicated in subsequent sections. The findings of coefficient of determination and coefficient of adjusted determination are as shown in Table 1

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.813[a]	.802	.851	1.31124

The findings found out that coefficient of correlation R was 0.813 an indication of strong positive correlation between the variables. Coefficient of adjusted determination R^2 was 0.851 which changes to 85.1perecent an indication of changes of dependent variable can be explained by (debt to equity ratio, interest coverage, capital allocation and total debt ratio). The residual of 14.9 percent can be explained by other factors beyond the scope of the current study.

The study also carried out an ANOVA at 95 percent level of significance. The findings of $F_{Calculated}$ and $F_{Critical}$ are as shown in Table 2.

Table 2: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	711.033	13	142.207	6.1389	.000b
	Residual	301.151	33	23.165		
	Total	1012.184	46			

Source: Field data, 2019

The findings show that $F_{Calculated}$ was 6.1389 and $F_{Critical}$ was 3.1772, this show that $F_{Calculated} > F_{Critical}$ (6.1389>3.1772) an indication that the overall regression mode was significant for the study. The p value was 0.000<0.05 an indication that at least one variable significantly influenced loan repayment among the medium sized enterprises in Kakamega County.

The study used coefficient of regression to establish the individual influence of the variables to financial performance. The findings are indicated in Table 3.

Table 3: Coefficients of Regression

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
	(Constant)	4.103	0.740		2.632	.000
	Debt to equity ratio	0.801	.102	.104	8.157	.000
	Interest Coverage	0.783	.124	.023	12.119	.000
	Capital allocation	0.734	.133	.016	8.022	.000
	Total debt ratio	0.772	.116	.216	8.419	.000

The resultant equation was

$$\mathbf{Y = 4.103 + 0.801X_1 + 0.783X_2 + 0.734X_3 + 0.772X_4}$$

Where: X_1 = Debt to equity ratio
X_2 = interest coverage
X_3 = capital allocation
X_4 = total debt ratio

The study found out that by holding all the variables constant, loan repayment among SMEs in Kakamega County will be at 4.103. A unit increase in debt to equity ratio when holding all the other variables constant, loan repayment among the SMES would increase by 0.801. This contradicts [34] findings that ratio of Debt-equity had significant negative effects with the financial performance of sugar manufacturing firms in Kisumu County. Reference [21] in his study found that debt-equity ratio had a negative impact on the performance of SMEs in dairy sector in Kiambu County. Having more in terms of debt than equity stocks in the capital structure of the firm will cause a negative performance of these SMEs.

A unit increase in interest coverage while holding other factors constant, loan repayment would be at 0.783. The result is in line with [21] findings which revealed that an increase in interest cover showed a reduction in debt, high interest coverage ratio implied high debt in future. The regression results revealed that interest cover had a negative and significant effect on the capital structure of private manufacturing firms in Kenya. Reference [32] also in his study revealed that interest charged significantly determined the ability of a firm to pay its loan from the local microfinance institution. On loan repayment rate and credit worthiness rating, results of the data analysis showed that loan to asset ratio and firm capacity were significant determinant of loan repayment rate

On Capital Allocation, the results revealed that a unit increase in capital allocation while holding other factors constant, would lead to an increase in loan repayment among the SMEs in Kakamega County by 0.734. The results also revealed that a unit increase in total debt-ratio while holding other factors constant, would lead to an increase in loan repayment by 0.772. This finding is in contradiction with [11] [20] whose results revealed that short term loans and long term loans had a negative impact on the financial performance of SMEs in Kenya. The study recommended that SMEs should utilize loans, diversity for sustainability of revenue, keep proper books of accounts, offer clients sales contracts and lay down payment modes for trade credits, clearly stipulate the payment schedules in order to deter poor credit and loan control policies and train their staff regularly while employing experienced internal and external auditors to improve on the internal control systems and book keeping.

The findings pointed out that the debt to equity ratio, interest coverage, capital allocation and total debt ratio had a p value of 0.000<0.05 an indication that they significantly influenced loan repayment among the medium sized in Kakamega County. This is supported by [19] and [3] who in their study indicated that debt financing had a positive and significant effect financial performance a firm.

5. Conclusion and Recommendations

The study concluded that financial leverage significantly and positively influenced loan repayment among the medium sized enterprises in Kakamega County. The study further concluded that to a significant extent the firms had optimum loan compared to total equity to enable loan repayment, are able to repay their loans with the current total debt and total equity ratio and manage their ratio.

The study concluded that to a significant extent interest coverage influenced loan repayment among the enterprises since it was affordable allowing them to improve their earnings, borrow more and promptly repay the loans. It was concluded that the firms to a significant extent embrace diligent capital allocation to profitable assets, long-term debts and having an investment policy which increased their returns, net profit margin and ability to service debts Further it was concluded that the firms have maintained a positive ratio between current assets and current liabilities which has improved their debt repayment and reduced the liabilities

It was recommended that the firms need to maintain a positive debt to equity ratio which will enhance their solvency hence improved performance and ability to cover liabilities. The firms need to take advantage of low interest rates or seek options of lenders who have cheaper rates to reduce the cost of borrowing. The firms also need to allocate more of their capital in acquisition of assets and also reduce their current liabilities all aimed at improve their liquidity and ability to repay debts. The firms further need to reduce their total debt ratio buy ensuring all current assets are more than current liabilities. This can also be done by improving asset based and investment policy. .

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