Effects of Credit Lending Terms on Investments by Small and Medium Enterprises in Chuka Town, Tharaka Nithi County, Kenya.

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ABSTRACT

Globally, domestic private investment largely drives economic growth. A country's investment rate is a key determinant of its overall economic development. Small-scale investments are widely recognized as significant drivers of socio-economic transformation in economies, particularly in developing nations. According to Kenya's Economic Survey of 2024, small and medium enterprises heavily rely on bank loans and often face challenges in securing adequate financing. This study sought to assess the effects of credit lending terms on investments by Small and Medium Enterprises in Chuka Town, Tharaka Nithi County, Kenya. Specifically, the study investigated the effects of lending interest rate on investment by SMEs in Chuka Town as well as how penalty charges affect investment by SME's. In addition, the study also sought to determine the effects of repayment period on investment by SMEs in Chuka Town. Finally, the study sought to determine the effects of borrowing limits on investment by SMEs in Chuka Town. The target population for this study comprised 750 small and medium enterprises located in Chuka Town and licensed by the County Government of Tharaka Nithi from which a sample of 150 small and medium enterprises was selected. The study utilized a correlation research design, which aimed to investigate the relationship between credit lending terms (independent variable) and investment (dependent variable). Data analysis was carried out using regression analysis by utilizing SPSS software version 26. The study findings showed a statistically significant negative relationship between lending interest rates and investments by SMEs. The results, with a coefficient of -0.729 and a p-value of 0.001 demonstrated that investments are heavily discouraged at higher interest rates. The analysis also revealed a slightly significant negative relationship between repayment periods and SME investment with a coefficient of -0.545 and p value of 0.06 suggesting that shorter or more rigid repayment periods are likely to reduce investments. The study concludes that inadequate access to readily available and flexible credit stifles the growth and investment capacity of SMEs in the study area. It recommends the formulation and implementation of policies that would make credit more accessible to SMEs through lower interest rates, more flexible repayment schedules, increased lending ceilings, and enhanced financial education programs. It also recommends subsidized lending, credit guarantees, and implementation of additional risk evaluation frameworks by financial institutions such as credit scoring models as opposed to only collateral when lending to SME's.

Keywords: Credit, Investments, Small and Medium Enterprises

INTRODUCTION

Investment may arise from both domestic and international sources. Public and private savings are two domestic sources. Deposits in financial institutions and securities issued by non-resident firms that the government holds for liquidity purposes are examples of foreign investment. Government spending is referred to as public investments (Lane & Milesi-Ferretti, 2017). Firms and individuals make private domestic investments to create and accumulate physical and liquid stock for productive purposes (World Bank, 2016). Private Domestic investment is the driving force behind any economic growth of a country. It is critical for

economic growth, long-term development, and poverty alleviation. It raises an economy's economic output efficiency, fosters job creation, introduces innovation and new technology, and boosts growth. This form of investment is a significant source of job creation in the country since it involves the accumulation of wealth or capital for productive uses. It leads to income distribution equality and better living standards since more people are engaged in revenue-generating activities that raise their earnings (Afolabi, 2015).

Investment in Africa has historically been concentrated on the extractives sector, but it has been progressively expanding into the industrial and services sectors. In a study by (Nyuur et al., 2018), Between 2006 and 2010, resource extraction, petroleum, and coal processing projects accounted for more than half of the anticipated $236 billion in greenfield investment announced in Africa; however, new projects in these sectors accounted for less than a quarter of the total between 2016 and 2020 (Singh & Gal, 2020). Other areas that have attracted considerable new investment on the continent include logistics, communications and information technology services, and renewable energy. As a result, Africa must capitalize on these developments in the future.

Kenya's Vision 2030 is an economic development blueprint set to enable the country to achieve 10% growth on average and beyond. As provided in the Government sessional paper No. 12 of 2012; to secure the dream, the country was expected to grow its private investment level annually by at least 24% from 2020 towards 2030 (Government of Kenya, 2012). Other transformations include; the mobilization of the amount deposited in the bank to increase from 44% to 80% of GDP. Further, it was envisioned to lower the percentage of people who cannot access funds from 85% to 70%. This would ensure the deepening of financial institutions and markets and hence facilitating private investment growth. However, there has been a fluctuation in the growth of private investment especially in Kenya over the years. According to KIPPRA (2017), private investment was projected to positively change in the financial year 2006/07 from 15.6% of GDP to 22.9% in 2012/13, and to over 24% of GDP during the period 2020/21, towards 2030. Since 1980, the highest growth that has been achieved is 15.2% in 2014. However, the performance was 12.96% in 2021, 13.34% and 13.40% in 2022 and 2023 respectively, which are far below the expected performance. This shows that there is a critical need to focus on policies that drive private investments to reach the projected potential. Over the last decade, Kenya has implemented important political and economic changes that have contributed to sustained economic growth, social progress, and political stability benefits. Poverty, inequality, transparency and accountability, climate change, sustained poor private sector investment, and the economy's vulnerability to internal and external shocks remain important development issues (Ojo et al., 2020).

Microfinance institutions (MFIs) in Kenya encounter various challenges in lending which hinder their effectiveness. One significant challenge is the presence of high interest rates and high administrative costs. Traditionally, MFIs have charged very high interest rates on loans provided to SMEs in developing countries compared to established financial services in both developing and developed nations. These high interest rates have created obstacles for SME operators seeking access to loans. Moreover, high inflation rates in the country can exacerbate the problem, leading to business failures. In some cases, SMEs become unable to repay their loans, leaving them with no choice but to close down their businesses. Those SMEs that manage to survive often experience low profit returns due to the burdensome interest rates. Roodman (2019). In the field of monetary economics, interest rates signify the cost incurred by borrowers when utilizing borrowed funds. Money serves multiple purposes, functioning as an asset, a medium of exchange, and a store of value, creating economic claims. Consequently, microfinance institutions (MFIs) expect to receive compensation for the duration they lend money and the interest rate also accounts for the credit risk they assume. In essence, the interest rate represents the cost or price at which lenders expect to exchange current claims for future claims on goods and services. It serves as a measure of the value placed on the time value of money and reflects the expectations and preferences of lenders in terms of the trade-off between present consumption and future consumption.

Lending interest rates have an impact on the flow of money within the economy and play a vital role in controlling inflation. High interest rates can be employed as a tool to mitigate inflationary pressures. They act as a deterrent to excessive borrowing and spending, thereby curbing inflation. However, it is important to consider the potential consequences for small and medium-sized enterprises (SMEs). High interest rates may limit the borrowing capacity of SMEs, impeding their ability to access financing and potentially stalling economic growth. Consequently, there exists a trade-off between managing inflation and supporting SMEs

through favourable borrowing conditions. Conversely, low interest rates stimulate economic activity by encouraging borrowing and investment. They incentivize individuals and businesses to seek credit for various purposes, which in turn fuels economic growth. However, the availability of low interest rates carries the risk of inflationary pressures. Excessive borrowing and spending can lead to an increase in the overall price level, eroding the purchasing power of money. Finding the appropriate balance in setting interest rates is a delicate task for monetary authorities. They must consider both the objective of controlling inflation and the need to support the borrowing capacity and growth of SMEs. Striking the right balance contributes to a healthy and sustainable economic environment, fostering the growth and development of SMEs while managing inflationary risks. When interest rates are high, small and medium enterprises (SMEs) in Chuka Town and elsewhere may hesitate to borrow from banks due to the challenges associated with loan repayment.

Theoretical Grounding

This paper is based on three theories namely, i) the Loanable Funds Theory of Interest Rate, ii) the Keynes Liquidity Preference Theory of Interest Rate and iii) the Flexible Accelerator Theory which are briefly explained here below:

Loanable Funds Theory of Interest Rate: According to this theory, economic agents seek to make the best use of the resources available to them over their life time. It views the level of interest in the financial market as resulting from the factors that affect the supply and demand of Loanable funds (Sunders, 2010). In this theory, interest rate is determined just like the demand and supply of goods is determined, where the supply of Loanable funds increases as interest rate increases, other factors held constant. Similarly, the demand for Loanable funds is higher as interest rate fall, other factors held constant. Saunders (2010), identifies two factors among others causing demand curve for Loanable funds to shift; economic conditions and the Monetary expansion.

Keynes Liquidity Preference Theory of Interest Rate – According to Keynes (1937), the rate of interest depends on the present supply of money and the demand schedule for the present claim on money in terms of a deferred claim. In Keynes view, the primary way those interest rates affect the level of aggregate output is through their effects on their planned investment spending. Profit seeking organizations make investments in physical capital (machines, factories and the raw materials) as long as they expect to earn more from the physical capital than the interest cost of a loan to finance investment. According to the theory investors will always prefer short term securities to long term securities. In uncertain world, then saving and investment may be much influenced by expectations and exogenous shocks than by the underlying real forces.

Flexible Accelerator Theory - Clark (1917) developed this theory where he assumed that a stable and constant relationship exists between the capital stock and output. The foundation of this model states that a firm's higher investment rate depends on the magnitude of the interval between our desired and the existing stock of capital. The hypothesis of this model is that firms desire to bridge the existing interval between the actual capital stock and our desired capital stock in each period. When income and consumption increases in a country, more products have to be produced to meet the current demands. That means the country will require additional capital if the existing stock of capital has been exhausted. In such a scenario, consumption and income changes will induce investments. Hence, investments will be termed as induced investments because they depend on income and consumption. An accelerator is a numerical value that originated from the relationship between an increase in income, which necessitates an increase in investments. The net induced investment will have a positive value if the national income increases. The accelerator theory of investment states that investments are a function of economic growth and that the desirable stock of capital (K) is assumed to be directly linked with the levels of income (Y) in the long-run.

METHODOLOGY

The study utilized primary data that was collected from purposefully sampled Small and Medium Enterprises in Chuka Town. Further, the study employed a correlation research design, which sought to investigate the relationship between lending terms (independent variables) and investment by SMEs' (dependent variable). A

regression analysis was conducted to show the extent to which the independent variables influenced the dependent variable.

This design was considered appropriate as it has been previously used in research with similar objectives and has proven effective in examining associations between variables. By employing a correlation research design; the study sought to explore the correlation between lending terms and SMEs' investment, providing valuable insights into the potential relationship between these factors. Through the analysis of data collected on lending terms and SMEs' investment, the study aimed to test the research hypothesis and contribute to the existing knowledge in the field. Descriptive research design was employed to explain the relationship between the dependent and independent variables. The descriptive research design is a type of research that aims to obtain information to systematically describe a phenomenon, situation, or population (Mugenda and Mugenda, 2003).

RESULTS AND DISCUSSIONS

The Empirical Model

This study postulated a relationship between domestic private investment and its determinants. The decision to use the variables as selected was informed by theory and empirical studies including the accelerator theory. Specifically, a regression was performed based on merging the work of Sundararajan and Thakur (1980) and Blejer and Khan (1984). The resultant model took the following form:

$Y = \beta o + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4\ e$……..... (1)
Where,
Y = Gross Private Investment
X1 = Lending Interest Rates
X2 = Penalty Charges
X3 = Borrowing Limits
X4 = Repayment Plans
βo = Constant
β1, β2, β3 and β4 – Coefficients
e – Error term

Results on Descriptive Statistics

The descriptive statistics provide valuable insights into the distribution and characteristics of key financial variables relevant to private investment behavior. The variables under consideration include Private Investment (INVEST), Lending Interest Rate (LIR), Repayment Period (RP), Borrowing Limit (BL), and Penalty Charges (PC).

Table 1: Results on Descriptive Statistics

	N	Range	Min	Max	Sum	Mean	Std. Error	Std. Dev	Var
INVEST	150	.60	.00	.60	14.20	.0947	.01308	.16019	.026
LIR	72	3	1	4	128	1.78	.060	.510	.260
RP	72	4	1	5	193	2.68	.153	1.298	1.685
BL	68	1	1	2	88	1.29	.056	.459	.211
PC	68	1	1	2	111	1.63	.059	.486	.236
Valid N(listwise)	65								

Source: Authors, 2025

Private investment (INVEST) shows a relatively low mean value of 0.0947 across 150 observations, with a standard deviation of 0.16019. This suggests that, on average, private investment levels are minimal, and there is moderate variation among the respondents. The relatively low variance (0.026) further supports the notion of limited dispersion in investment behavior across the sample. The LIR data shows a mean of 1.78 with a standard deviation of 0.510. The increase in the mean suggests a potential upward shift in interest rates, which could imply tightening credit conditions or changes in lending policies.

The repayment period (RP) data, with 72 observations, reveals a mean of 2.68 and a relatively high standard deviation of 1.298, indicating that repayment terms vary widely among borrowers. The data spans a full range from 1 to 5, which suggests that loan repayment structures are not standardized. This variability may reflect differing borrower profiles, loan purposes, or institutional requirements. A higher standard deviation and variance (1.685) underscore the presence of substantial differences in credit agreement terms, which could significantly influence investment decisions. The borrowing limit (BL) and penalty charges (PC) variables both show relatively low levels of variation. BL, with a mean of 1.29 and a standard deviation of 0.459, suggests that most respondents have access to only limited credit. Similarly, PC has a mean of 1.63 and a standard deviation of 0.486, indicating that penalty charges are fairly common but vary slightly in severity or frequency across the sample.

Inferential statistics

The study conducted the regression analysis to establish the effects of the lending interest rate, penalty charges, repayment period and borrowing limits on investment by SMEs in Chuka Town. The results are presented in table 10.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.951[a]	0.905	0.781	0.413
a. Dependent Variable: INVEST				
b. Predictors: (Constant), Lending interest rate, Penalty charges, Repayment period and Borrowing limit.				

Source: Authors, 2025

As per the results on table 6, the R-Square was 0.905 implying that 90.5 % of the variations in investments by SME's in Chuka Town are explained by the lending interest rates, penalty charges, repayment periods, and borrowing limits. While 9.5% in change of investment growth can be attributed to other factors.

Table 3. Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	4.563	2.251		2.027	0.070
	LIR	-0.729	0.161	-0.643	-4.524	0.001
	The repayment period	-0.313	0.148	-0.390	-2.111	0.061
	BL	-0.563	0.156	-0.584	-3.608	0.005
	PC	0.137	0.826	0.032	0.166	0.872

Source: Authors, 2025

Interpretation of regression results

This section presents a detailed interpretation of the empirical findings based on the regression analysis conducted to assess the influence of selected credit-related variables on the investment behavior of Small and Medium-sized Enterprises (SMEs) in Chuka Town. The analysis focused on four main variables: lending interest rates, penalty charges, repayment periods, and borrowing limits.

$$\text{INVESTi} = 4.563 - 0.729\text{LIR} + 0.137\text{PC} - 0.313\text{RP} - 0.563\text{BL} + \varepsilon_i$$

$R^2 = 0.905$

Where:

1. INVEST represents level of investment by SMEs
2. 4.563 is the Constant
3. LIR represents lending interest rate for SMEs
4. PC represents penalty charges for SMEs
5. RP represents repayment period for SMEs
6. BL represents borrowing limit constraint for SMEs
7. ε_i is the rror term

Model Interpretation:

The coefficient of determination (R^2) is 0.905, indicating that 90.5% of the variance in SME investment is explained by the four independent variables in the model. This is a very high R^2 value, suggesting an excellent fit between the model and the observed data. The constant term, 4.563, represents the estimated level of investment by SMEs in Chuka Town when all the explanatory variables are equal to zero. In practical terms, the model is highly effective at capturing the key financial constraints that influence investment among SMEs in Chuka Town.

This regression model explains the relationship between investment by SMEs in Chuka Town (INVEST) and the four key independent variables: The signs and magnitudes of the coefficients indicate the direction and strength of influence each variable has on SME investment:

The first objective of the study was to investigate the effect of lending interest rates on investment by SMEs in Chuka Town. The regression results indicate a coefficient of -0.729, with a p-value of 0.001. This finding is both statistically significant and substantively important, indicating a strong inverse relationship between interest rates and investment levels among SMEs. A 1-unit increase in the lending interest rate is associated with a 0.729-unit decrease in SME investment, holding other factors constant. The negative sign of the coefficient implies that an increase in lending interest rates is associated with a reduction in the level of investment undertaken by SMEs. Given the significance level ($p < 0.01$), this relationship can be considered robust. The results disagree with Odhiambo (2014) who posits that SMEs still had a high demand for credit even at high annual interest rate. However, they were in agreement with Nelson (2018), George-Anokwuru (2017) and Otieno, Anyuki & Musa (2021) who found that lending interest was statistically significant and negatively affects investment. This result confirms the expectation that high borrowing costs discourage capital investment. SMEs, by their nature, tend to have limited financial reserves and often rely heavily on external sources of financing for expansion and operational activities. As such, higher interest rates directly increase the cost of capital, thereby diminishing the net returns from investment. This leads to postponed or entirely abandoned investment initiatives, especially in an environment where profit margins are already thin. Theoretically, this finding aligns closely with the Loanable Funds Theory of Interest Rate, which posits that

the equilibrium interest rate in a market is determined by the supply and demand for loanable funds. When the supply of funds is constrained or when demand increases, interest rates rise, making borrowing more expensive. This discourages investment, particularly among SMEs with low borrowing capacity. The outcome observed in Chuka Town corroborates this theory, highlighting that the cost of credit remains a critical barrier to SME investment and growth.

The second objective sought to examine how penalty charges for late loan repayments affect investment among SMEs. The regression yielded a coefficient of 0.137, with a p-value of 0.872. While the coefficient is positive, suggesting a direct relationship, the lack of statistical significance indicates that penalty charges do not have huge impact on investment decisions among SMEs in the context studied. Several plausible explanations can account for this insignificance. First, it is possible that most SMEs in Chuka Town do not frequently incur penalty charges, either due to effective financial management or because lending institutions offer grace periods and leniency in repayment enforcement. Second, SME owners may consider penalties as a relatively minor component of the total borrowing cost and may, therefore, not factor them heavily into their investment decisions.

From a theoretical standpoint, this outcome can be interpreted through Keynes' Liquidity Preference Theory, which asserts that economic agents prefer to hold liquid assets in the face of uncertainty. For SMEs, which often operate in uncertain business environments, maintaining sufficient liquidity for operations and emergencies is prioritized over concerns related to penalties, which are seen as conditional or avoidable costs. Moreover, the negligible influence of penalties could suggest that investment decisions are more strongly influenced by upfront borrowing conditions such as interest rates and credit access, rather than secondary terms such as penalties for late repayment.

The third objective aimed to evaluate the influence of repayment periods on SME investment activity. The regression results produced a coefficient of -0.313 and a p-value of 0.061. This coefficient is statistically significant at the 10 % level, indicating a potential negative association between repayment terms and investment levels. A 1-unit increase in repayment rigidity is associated with a 0.545-unit decrease in investment; this finding suggests that shorter or inflexible repayment periods may act as a deterrent to investment among SMEs. The results are in agreement with those of Nyeko et al. (2024), who found that long-term borrowing arrangements with gradual repayment benefited SMEs. They also align with findings by Okello et al. (2025), who established a direct relationship between repayment period and the loans borrowed, where short maturity terms were perceived not supportive to businesses with unpredicted cash flows. In particular, SMEs may find themselves compelled to allocate substantial portions of their earnings toward debt repayment shortly after securing a loan, thereby straining cash flows and limiting the resources available for productive investment. The uncertainty of future cash inflows, coupled with the immediate repayment obligations, may result in a more cautious investment stance or even a withdrawal from planned capital expenditures. Keynes' Liquidity Preference Theory provides a useful lens for understanding this relationship. The theory posits that businesses will prioritize liquidity over other financial objectives, particularly when faced with volatile income streams or limited access to emergency credit. Tight repayment schedules exacerbate liquidity constraints, reducing the willingness or ability of SMEs to invest in long-term projects. In the context of Chuka Town, many SMEs operate in sectors with seasonal or unpredictable revenues, and rigid repayment requirements may thus hinder rather than support their investment efforts.

The fourth objective of the study was to determine how borrowing limits affect investment among SMEs. The regression coefficient for this variable was -0.563, with a p-value of 0.005, indicating a statistically significant negative relationship at 10 per cent. Therefore, a 1-unit increase in borrowing constraints is associated with a 0.563-unit decrease in SME investment. The finding suggests that the imposition of borrowing limits significantly constrains the ability of SMEs to invest, confirming a strong and reliable inverse association between borrowing capacity and investment behavior. This is supported by Okello, et.al, (2025) who determined that loan size significantly influenced their ability of SME owners to meet business needs and drive growth limited loan amounts could not support the operational plans well. Borrowing limits often take the form of loan ceilings, restrictive credit assessments, or collateral requirements that exceed the means of many small business owners. These constraints limit the amount of capital SMEs can access, even when they possess viable investment opportunities. As a result, these enterprises may be forced to underinvest or abandon

potential growth initiatives due to a lack of adequate financing. The observed outcome can be effectively explained using the Flexible Accelerator Theory of Investment, which holds that firms adjust their capital stock gradually based on the gap between desired and actual capital. When borrowing restrictions are imposed, SMEs are unable to bridge this gap, leading to underinvestment and inefficiencies in resource allocation. In Chuka Town, where the need for capital to expand infrastructure, acquire equipment, or increase inventories is particularly high, borrowing limits emerge as a critical obstacle to enterprise development.

RECOMMENDATIONS

Subsidized lending, interest rate caps for micro and small enterprises, and the creation of credit guarantee schemes for focus SMEs are some policies that need to be looked into. Moreover, commercial banks as well as other lending institutions need to be encouraged, through regulatory and fiscal measures, to design more tailored loan products that are offered at much lower rates.

Second, reevaluation is necessary regarding the framework within which loans are repaid. The relationship, albeit weak, between repayment durations and investment indicates growth may be stunted by inflexible repayment timelines. Lenders should seek to incorporate flexible repayment schedules that align with the revenue and cash flow cycles of small and medium enterprises (SMEs). Such flexibility may comprise grace periods, seasonal repayment structures, or income-based repayment approaches that reduce the strain on finances during slow business periods.

Third, it is necessary to reconsider the existing borrowing thresholds placed on small and medium enterprises. This study demonstrates quite clearly that such thresholds are highly restrictive in terms of investment. Financial institutions need to implement additional risk evaluation frameworks, such as credit scoring models as opposed to only collateral. Increasing the credit limit for SMEs that demonstrate solid business plans along with favorable repayment histories would allow SMEs to invest in productivity-enhancing initiatives that are beneficial to the economy at large.

Moreover, improving the financial literacy of SME Owners is an important consideration. A number of entrepreneurs may lack clarity regarding the credit terms, penalties, and borrowing limits which may affect them in the long run. Tailored financial education programs on budgeting, debt management, and investment planning should be offered by government institutions, NGOs, and private sector organizations in collaboration. Empowering SME owners to make better financial decisions can help reduce risks while promoting the effective use of capital, thereby improving efficiency.

Beyond traditional banking institutions, there is a demonstrated need to diversify the sources for SME financing. The development of microfinance institutions, venture capital funds, cooperatives, and peer-to-peer lending platforms will widen the financing landscape for SMEs. As highlighted, these alternatives tend to be more accessible and flexible, tailoring their financing solutions to the specific needs and risk profiles of small enterprises.

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