BORROWERS SOCIO-ECONOMIC DETERMINANTS OF LOAN REPAYMENT: A SURVEY OF PERSPECTIVE OF NANDI MSME'S OWNERS.

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A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION

(FINANCE OPTION)

KOITALEEL SAMOEI UNIVERSITY COLLEGE

(A CONSTITUENT COLLEGE OF THE UNIVERSITY OF NAIROBI.)

2023

DECLARATION

This research project is my original work and has not been presented for a degree in any other University.

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DEDICATION

I dedicate this research project to God Almighty, my source of inspiration, wisdom, knowledge and understanding. I sincerely dedicate this work to my loving parents Mr. and Mrs. Simon Kemboi who encouraged me all the way. To my loving husband Naftaly Kennik and children: Precious, Prudence, Andrew and Angel for their sacrifice and encouragement. My love for you all can never be quantified. God bless you all.

ACKNOWLEDGEMENT

I wish to extend my special thanks to my supervisors Professor Josphat Lishenga and Dr. Loice Koskei, for providing me with unlimited, valuable, and active guidance throughout the study. Their support and encouragement enabled me to see through to a successful completion of this study. Special thanks to my lecturer Mr. Joab Ooko for providing me the logistic support and his valuable suggestion to carry out my research successfully. My sincere thanks also go to the postgraduate committee for their patience and understanding during the years of effort that went into production of this paper. Also, my gratitude goes to my fellow students who offered a lot of support during this study. Finally, I owe my gratitude to people who in one way or another contributed towards completion of this project. To all of you, I say a big thank you. God bless you all.

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LIST OF ABBREVIATION AND ACRONMYS

CBK:	Central Bank of Kenya
CRB:	Credit Bureau Reference
DBE:	Development Bank of Ethiopia
HELB:	Higher Education Loan Board
KCB:	Kenya Commercial Bank
KNBS:	Kenya National Bureau of Statistics
MFIs:	Monetary Financial Institutions
MSMES:	Micro, Small and Medium sized Enterprises
NCIDP:	Nandi County Integrated Development
NPL	Non-Performing loans
SME:	Small Medium Enterprises
TPB:	Theory of planned behavior
TSU:	Technical Service Unit
UK:	United Kingdom

ABTRACT

Loan repayment is an obligation of the borrowers in which is depended on the conditions created by the lenders. The competition in the banking sector has prompted many lenders to provide credit with fewer restrictions, and this has led to an increase in non-performing loans. Lenders have reported a larger number of defaulted or serviced loans with them moving away from security guaranteed loans. This has meant that they have to relook at ways of enhancing loan repayments. Therefore, the study sought to investigate the borrower's socio-economic determinants of loan repayment a perspective of MSMEs in Nandi County. The specific objectives include: to establish the influence of product knowledge on loan repayments among MSMEs loan borrowers, to investigate the influence of income on loan repayments among MSMEs loan borrowers, Nandi County, to assess the influence of 5c's on loan repayments among MSMEs loan borrowers, Nandi County, and to evaluate the influence of the firm's value on loan repayments among MSMEs loan borrowers, Nandi County. The agency and Theory of Planned behavior (1991) were the theories that guided the study. The study did employ a descriptive research design and correlational research design. The target population of the study was 306 MSMEs loan beneficiaries registered under the trade and licensing department in 2021/2022 financial year in Nandi County. The study employed stratified simple random sampling technique to obtain 173 samples of MSMEs loan beneficiaries from the sub-counties of Nandi County. The selected samples were given self-administered structured questionnaires. The raw primary data were then analyzed using inferential and descriptive statistics. Regression and correlation analysis were the inferential statistics used by the study. Descriptive statistics showed that product knowledge, income, 5c's and firms value influence loan repayment. Inferential findings showing that a combination of predictors (product knowledge, income, 5Cs, and firm's value) contributes 95.7% of the loan repayments at 95% significance level. The beta values of predictors at $p<0.05$ include; product knowledge (β_1=0.103), income (β_2=0.212), SCs (β_3=0.014, and β_4=0.001). The study concludes that borrower's socio-economic determinants of loan repayment have a significant effect on loan repayment. Therefore, the study recommends policy makers in financial institutions to develop credit policies that are take consideration of socio-economic determinants that aid in reducing loan defaults.

CHAPTER ONE: INTRODUCTION

1.1. Background to the Study

Financial institutions depend on loans to propel their business performance and to pay their day to day running expenses; revenues are obtained from the interest charged on it to act as a source of income to them. When the income is high, banks performance is also at the peak. It is reported that credit provisions have a lot of problems associated to it as other business, like credit risks that directly affect financial institutions' cash flow or liquidity problems. This is because a significant number remain unpaid or defaulted (Katemana, 2020). Commercial banks, therefore, are more susceptible or sensitive to defaulted or non-performing loans because of credit issues related to non-repayments (Charana & Were, 2018). Successful credit revenues depend on borrowers' being able to pay money owed to the lenders within the required time (Musango, 2018). This means that many commercials have identified this credit risk and have devised strategies to ensure that loans are repaid in full amount or high percentage is recovered from loans. But this differs significantly across countries i.e (domestic, regionally, and intercontinental.) or institutions for reasons linked to the borrower’s characteristics. Therefore, this prompts a study to be conducted to ascertain the influence of the borrower’s socio economic determinants on loan repayments.

The study did apply the agency and Theory of planned behavior to explain the purpose of the study. Agency theory defines the cordial relationship existing between two or more parties in a business transaction. Banks are the principles and agent are the loanees and these mean parties involved a business transaction need to build a good relationship guided by utmost of good faith. While the theory of planned behavior assumes that individuals have own decisions is rationally done based on subjective norms, culture,attitudes and behavior control.This theory was developed by Ajzen and Fishbein and shows that character is determined by what you intent to do and what you desire.These theories sought to explain the relationship between lenders and borrowers taking consideration of personal rational decisions.

In any global economy, micro, small, and medium-sized enterprises (MSME) are known to be most business enterprises that seek loans and more money for their needs. Demary (2018) claims that MSMEs are given the necessary support by financial institutions in developed countries. According to the other European financial institutions have a trust that the MSMEs would pay their loans and they highly depend on the business concept. Polat (2018) opines that a large percentage of loans are offered to small and medium-sized businesses by financial institutions. Muluken and Mesfin (2014) agree with the finding by stating that MSMEs require credit for expansion and growth purposes, and that explains they're being the highest beneficiaries. In Europe, especially France, United Kingdom as cited by Muluken and Mesfin (2014) many of the MSMEs have well established framework and structures that enable them access and pay credit easily.

The loan repayment in Asia differs significantly than in Europe. Bhattarai (2018) claims that many MSMEs are too cultured that they view loan repayment as a personal obligations than institutions. Nurweni, and Prasetyo (2020) state that over 87.6% of the loans borrowed by MSMEs are settled fully. Cultural factors contribute significantly to loan repayment in Asia this is according to Ozili (2019), many MSMEs owners in countries such as China, Japan, and India etc. are bounded by religious dynamics and therefore they view credit as an obligation that they must pay.

In Africa, repayment of loans among SMES is different from the other continents. According to Charana and Were (2018) a number of characteristics contribute to failure to honor repayment of loans these include economic, social, firm’s characteristics and institutional credit policies.   Kimatu's (2018) opine that our socio economic situations contribute significantly to the payment of loans. Many of the MSMEs are depended on the business for survival and when the businesses fail they suffer as well. Wachilonga (2018) describes further by stating that due to personal discipline borrowers default on the loans and see it not as an obligation.

1.1.1. Concept of Loan Repayments

Several authors have provided a working description of the concept of loan repayment. Murshed and Saadat (2018) state that it is the capacity of individuals or groups to meet their financial obligations. While Demary (2018) states that it is the ability of the borrower to fulfill the financial obligations within the specified agreements, Szarowska (2018) states that it is the ability of individuals, firms, and agencies to fulfill their financial obligations as per the agreed terms of agreements. Therefore, the study adopts the definition of the term "loan repayments" to mean the process in which credit or loan borrowers fulfil their financial obligations within the stipulated terms of agreement as per the contractual agreement.

Loan repayments differ with the borrower's characteristics and conditions agreed by the parties. Therefore, many finance experts, as cited by Ozili (2019), agree that loan repayments are successful only if the borrower can be able to meet their financial obligations as per the agreement between the parties. According to Demary (2018), loan repayment is successful if only the borrower can be able to pay the borrowed amount within the required time and as per the required schedule. On the other hand, Polat (2018) states that loan repayment presents a situation in which the borrower pays their borrowings within the stipulated schedule and time. Hence, loan repayment was measured in the current study based on the amount paid by the borrower, the timing of making payments, and the frequency of making regular payments on the loans. These indicators are based on agreement between the lender and the borrower on an agreed amount, time, and frequency of making payments.

1.1.2. Socio-Economic Determinants of Loan Repayments

Several authors have sought to explain the concept of socio-economic determinants of loan repayments. Bhattarai (2018) explains that socio-economic determinants of loan repayments are those social and economic conditions whether the borrower will be able to meet their financial obligations. Asiama and Amoah (2019) describe socio-economic determinants of loan repayments as social or economic capacities that make borrowers of credit pay loans without any difficulty or challenge. On the other hand, Lee and Rosenkranz (2020) state that socio-economic determinants of loan repayments are those general characteristics social and economic, that enable loans to be paid within the required stipulations and guidelines. From these definitions, it is apparent that socio-economic determinants of loan repayments are those conditions, capacities, and individual characteristics that contribute to the ability of borrowers to honor and adhere to their financial obligations.

As reported by various studies, the socio-economic determinants of loan repayments differ across countries both locally and internationally. In France, Ozili (2019) reports that individual characteristics are the main contributor to most non-repaid loans, further hindering loan recovery initiatives. These individual characteristics include age, personality, and previous credit history. In United States, Szarowska (2018) mentions that relaxed enforcement of credit policies has hindered the repayment of loans and credits. While in China, Murshed and Saadat (2018) report that repayment of loans depends on the income levels of individuals, institutions, or organizations.

Lastly, in Africa, Asiama and Amoah (2019) in their study outline inflation, borrower behavior, economic activity, and inadequate credit policies as the main determinants affecting repayment of loans in Ghana and South Africa. Asiama and Amoah (2019) state that 4Cs (capital, capacity, collateral, character) or also recently known as 5Cs with the element of conditions being introduced becomes an essential component for accessing credit worthiness. Lee and Rosenkranz (2020) state that MSMEs owners need to be evaluated by these criteria to ascertain their credit worthiness, and a higher score of these criteria provides an avenue to offer credit.

In Kenya, Musango (2018) outlines several socio-economic determinants of repayment of loans, including level of income, economic activities, the behavior of the loan beneficiaries, and lack of financial awareness. According to Muluken and Mesfin (2014), generic determinants of loan repayment revolve around socio-economic and financial factors. These include location, age, level of education, interest rates, and marital status. Katemana (2020) states that other socio-economic determinants that influence loan payments include interest charges, loan schedules, loan information, application costs, repayment period, and type of the firm. Therefore, as noted in these studies, the socio-economic determinants of loan repayment adopted by the study did revolve around borrowers' characteristics.

1.1.3. Micro & Small Medium Sized Enterprises in Nandi County

Business enterprises contribute significantly to the development of the economy. A World Bank report from 2020 stated that about 90% of businesses in developing countries are MSMEs. There have been different definitions of MSMEs. The European Union defines them according to the number of employees. The micro has 1-9 employees, the small have employees between 10-49, and the medium-sized enterprises have employees between 55-99. In Kenya, the Micro and Small Enterprises (MSE) act of 2012 defines micro enterprises as any trade, firm, service, or industry with an annual turnover of less than five hundred thousand Kenya shillings, employing less than 10 employees, and capital not exceeding 10 million. According to the act, a small enterprise is a firm, trade, industry, or business with a turnover of between KSH0.5-5 million, with 10–50 employees, and financial investment ranging between KSH10–50 million in manufacturing and KSH5M–25 million in the service and farming sectors. Lastly, according to sessional paper number 2 of 2005, medium enterprises are enterprises with a turnover of between Ksh5-800m, employees of between 50-99, and a capital investment of not more than Ksh30 million.

The MSMEs' impact and growth in the country cannot be ignored by policy makers (Wachilonga, 2018). The Kenya National Bureau statistics survey of 2016 showed that 14.9 million people are engaged with MSMEs businesses. Furthermore, 81.1% of employment in the country is found in MSMEs. All counties report that about 90% of licenses are from MSMEs. According to the Nandi County Integrated Development Plan

(NCIDP) 2018-2023 and the ministry of trade in Nandi County, there are about 56,000 MSMEs businesses across the county. These MSMEs in the county contribute to 36% of internal revenues and provide employment to more than 96,000 people in the county.

According to the Kenya National Bureau of Statistics (KNBS) survey report (2016), one of the main challenges confronting MSMEs is a lack of finance. Financial institutions are cautious in offering loans due to high default rates and non-performing loans (NPL). According to the Central Bank of Kenya (CBK) (2020), households led in loan borrowings, followed by MSMEs. The CBK (2020) reports further that a decline in loan repayment among households and MSMEs was witnessed in the years 2019-2020 during covid 19 pandemic. According to the Kenya Commercial Bank (KCB) financial report of 2021, Nandi Branch, only 4% of the MSMEs in the county have the required qualifications to access credit. Bank supervision annual report showed that there were 915,115 active MSME loan accounts with a total of Ksh638.3 billion (CBK, 2020). Lending to MSMEs generated Ksh70.8 billion for the banking industry, representing 12.2% of total income generated from lending by the banking industry. The report showed that the average loan repayment increased to 30 months in 2020, compared to an average of 15 months in 2017 (Wachilonga, 2018). Furthermore, across the country, 15.5% (98.7 billion) of the total loans constituted those of MSMEs. It is significant that commercial banks have developed recovery measures.

1.2. Statement of the Problem

Loan repayment is a strategic component among financial institution as it determines their level of performance. Namutebi (2019) noted that increasing number of non-performing or defaulted loans have been a concerned of many credit management institutions. The competition in the banking sector has prompted many lenders to provide credit with fewer restrictions, and this has led to an increase in non-performing loans. The changing behavior of the borrowers has made it a strategic decision to identify the criteria that financial institution would employ to advance loans and credit (Mpofu & Nikolaidou, 2018). Current studies are need to advance updated information that would aid in credit management in financial institutions.

Several empirically related studies reviewed point to theoretical, conceptual, and methodological gaps to be filled by the study. A study by Tiwari, Somani, and Mohammad (2020) sought to establish the determinants of loan delinquency in personal loans among European countries. This study utilized documentary analysis, different from the current research design, which will be descriptive. A study by Wachilonga (2018), conducted in Trans Nzoia County, Kenya, with the goal of identifying financial determinants of loan repayment among Youth Enterprise Development Fund Beneficiaries, and establishes that various financial determinants influence repayment of loans. This study differs from the current study in that it focuses only on financial determinants rather than determinants in general.

The positive contribution in repayment of loans in Nandi County provides a justification to conduct the current study. The CBK (2020) report showed that commercial banks in Nandi County loan repayment increased at 15.4% above the national average loan repayment of 12%, this an improvement of loan repayment that warrants a study to be conducted. It is on these advanced arguments and gaps that the study sought to answer the research question: what are the borrower's socio-economic determinants on loan repayments among MSMEs in Nandi County?

1.3. Research Objective

The broad objective of the study was to investigate MSMEs socio-economic determinants perspectives on loan repayments in Nandi County. The specific objectives include:

i. To establish the influence of MSMEs owner's product knowledge perspectives on loan repayments in Nandi County.
ii. To investigate the influence of MSMEs income perspectives on loan repayments in Nandi County.
iii. To assess the influence of MSMEs 5c's perspectives on loan repayments among MSMEs in Nandi County.
iv. To evaluate the influence of MSMEs firm's value perspectives on loan repayments in Nandi County.

1.4. Research Hypotheses

The study was testing the following null hypotheses:

Ho.1: There is no significant effect between MSMEs product knowledge and loan repayments.

Ho.2. There is no significant effect between MSMEs income and loan repayments.

Ho: 3: There is no significant effect between MSMEs 5C's and loan repayments.

Ho: 4: There is no significant effect between MSMEs firm's value and loan repayments.

1.5. Significance of the Study

The findings of the study are hoped to provide an enriching empirical contribution to be used for policy making, managerial operations, and the advancement of knowledge.

Financial institutions and other bodies involved with credit management would find the study findings useful in formulating policies that would aid in credit management, especially in loan repayment schedules. Credit management risks have been a big challenge for many credit facilities this makes it necessary of adaptive policies to be put in place. This will reduce the number of non-performing loans and enhance economic development via the issuance of credit in the country.

Managers and those in authority in financial institutions or credit lending companies would find the findings of this study useful in formulating policy procedures and regulations in the management of credits. Operative procedure are effective in ensuring that commercial banks raise sufficient revenues through effective loan collection process. Findings would significantly establish determinants that directly affect loan repayment and which managers need to consider and formulate strategies to address. Recommendations from the study enable managers of credit lending institutions to address the gaps existing in their organizational credit management policies and procedures.

The empirical or theoretical findings from the current study would supplement knowledge and factual evidence in the field of credit management or financing. The publication of the findings would increase accessibility to various users in geographical regions. Researchers would find additional secondary data on loan repayment that they can use for academic purposes. Furthermore, due to some of the limitations of the current study future researchers would use this as gaps to be filled by their respective studies.

1.6. Basic Assumptions of the Study

The study presumes that the instruments developed by the researcher did provide adequate information to answer the study objectives. The structure of the questions in the research instrument was devised to meet the purpose of the study. Furthermore, the study presumes that the response error was minimal not to affect the outcome of the study. The study adopted a level of significance the cushion it for the sampling error.

1.7. Limitations of the Study

There are several limitations that did affect the study; the MSMEs business is spread across the County, and it was a big task locating them in their respective premises. This limitation was mitigated by having research assistants to aid in data collection. Due to the nature of the information to be collected some of the SMEs might fear giving their responses but this was mitigated by the researcher by assuring them of their privacy and explaining the purpose of the study.

1.8. Delimitation of the Study

The study did delimit itself by determining the borrower socio-economic determinants that influence loan recovery among MSMEs in Nandi County. The socio-economic determinants pointed by the researcher to be used in the study include product knowledge, income, 5C's (Character, Conditions, Capacity, Capital, Collateral), and firms value and how they affected repayment of loans. The study was limited to the borrowers of MSME's whom loan beneficiaries across the 6 sub counties in Nandi County are. They include: Chesumei, Mosop, Aldai, Nandi hills, Emgwen and Tindiret. The study targeted both the manufacturing and service sector of the six sub counties in Nandi County. The study was undertaken during the January to November 2022.

1.9. Operational Definition of Significant Terms.

Firm's value- It represents the financial and market worth of the business at a particular period. A firm's value is defined according to Lee and Rosenkranz (2020) as the value of business assets, total debts, liquidity, and competitiveness in the market.

Income- The term income in this study refers to the amount of revenue that is accessible and available to the business at a particular period. Income is described by Mpofu and Nikolaidou (2018) as the types of sources available to the business owner; the frequency and permanency are the income flowing in the business.

5c's- It is financial criteria advanced by finance scholars to evaluate the credit worthiness of the borrowers. Nurweni, and Prasetyo (2020) define 5Cs as the elements involved with evaluating the potential credit borrowers based on the character, conditions, capital, capacity, and collateral.

Loan repayment- This according to Bhattarai (2018) represents mechanism, techniques or approaches that credit offering institutions are using to ensure loans are repaid within the stipulated time and amount. Loan recovery is measured on whether the amount was paid on time, amount of loans that have been defaulted, and loans that have loans that have successfully been paid.

Product knowledge- The term refers according to Kimatu's (2018) refers to the customer’s awareness of the credit related aspects offered by financial institutions. These credit aspects include the type of loan products being offered, the cost of loans, objective of the loans being offered and risks accruing from borrowing the loans.

Socio economic determinants- In this study the socio-economic determinants are those economic and social factors or forces that influence the process of recovering loans. Demary (2018) defines theme as those elements within and outside an individual that determine his/her financial status. These factors or forces include income, 5C’s, product knowledge, and firm’s value.

1.10. Organization of the Study

The research project was divided into five chapters. The first chapter introduces the study topic, problem, purpose, and objective of the study. Also, outlining the significance, limitations, delimitations, basic assumptions, and definition of key terms used in the study. The second chapter of this study outlines a review of literature defining the concepts, theory, and relationship of the study variables. Additionally, the chapter outlines the theoretical and conceptual frameworks used by the study. The last chapter in this study is the research methodology which outlines the design, target group, sampling frame, data collection instruments and process. Furthermore, the chapter outlines the procedure of analyzing of data and ethical considerations. Chapter four outlines analysis, presentation, and interpretation while chapter five presents the summary of the findings, conclusion and recommendations.

CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction

This section outlines a review of various literature related to the aim of the study. The literature review was based on empirical and theoretical secondary sources. Furthermore, the section outlines the theoretical and conceptual frameworks. This review of literature enabled the study to establish various gaps that were filled by the current study.

2.2. Theoretical Foundations

The section provides the theories that anchor the study, these theories advanced are the agency and Theory of planned behavior (TPB). Both studies interactively contribute to explaining the variables of the study and seek to provide a theoretical perspective that explains the association of these variables.

2.2.1. Theory of Planned Behavior (TPB)

The theory was started as a theory of reasoned action which sought to explain individual's intention to engage in certain behaviors. The theory of planned behavior compounded by Ajzon (1991) postulated that individuals act rationally, according to their attitudes, subjective norms, and perceived behavioral control. The theory posits that there are several factors that influence the strength of the relationship between behavior and intentions.

The theory is relevant in explaining the borrower's socio-economic determinants of loan repayment. Many of the borrowers have different norms, personalities and attitudes that give them certain reasons to justify their actions and behaviors. These borrowers' determinants may positively or negatively influence repayment of loans. Strategies devised to influence these borrowers' norms and attitudes (socio-economic) would lead to positive loan repayments.

2.2.2. Agency Theory.

In the context of explaining relationship between parties, Berle and Means (1932) introduced an Agency theory. According to this theory, it seeks to explain to explain a mutual relationship in business transaction between agent and the principle. In business terms the principle represents those that are more likely to benefit from business transactions for example shareholders or owners. On the other hand, agents are those given the responsibility in providing the services and products for examples managers or employees. Mutual relationship is needed between agent and principle and should be guided by contractual agreement. Problems would arise in the relationship if a third party or external forces go between. Therefore, the theory provides solutions for the problems that might arise due to interference of a third party. It encourages the agents to make right decisions that will aid them maximize opportunities provided to them and provides guidelines among the principals to be risk averse.

The implication of the theory to the current study is that the lenders are the principals and the borrowers are the agents. This relationship need to be mutual beneficial, but it might be influenced by a third party which are the determinants of loan repayment. This means that the principals (lenders of the loans) need to be risk averse by evaluating and managing situations that might lead to losses due to repayment of loans. They need to conduct proper evaluation to ascertain the trustworthiness of their clients. Based on the information asymmetry the agents (borrowers) need information and knowledge to make rational decisions to avoid breaking the contractual agreements by defaulting on their loans. Third agency problems (adverse selection and moral hazard) can be eliminated by the parties concerned by utilizing suitable evaluative and educative programmes. The theory gap is that it does not explain the behavioral between the borrowers and the lenders which is a factor in the relationship.

2.3. Empirical Review

This section involves conducting a scientific study review of the themes of the study. This enabled the researcher to identify related studies based on the objectives of the study. These studies inform the gaps that the researcher intends to fill in this current study and aid in the interpretation of analyzed data in chapter four.

2.3.1. Product Knowledge and Loan Repayments

Several local studies have sought to establish the association between product knowledge and effective loan repayments. James (2019) carried out a study on the factors that determine loan non-repayment among SMEs in Kenyan commercial banks. James (2019) further narrowed the study by aiming to establish an association that exists between product knowledge and loan recovery methods in the SME sector. The author used a descriptive study design to collect data for her study. The study's findings showed that the knowledge of products of the loan beneficiaries had a significant influence on the loan repayments of commercial banks. Those with a higher knowledge of credit products were found to service their loans once they had been listed in the credit bureaus and provided with flexible payment modes.

Kimatu's (2018) study objective aimed to classify the main determinants of loan repayment strategies for small-scale businesses in Kenya, specifically the Kariobangi District of Nairobi, with a special reference to SSEs. For this purpose, data from 50 randomly selected respondents was primarily collected by means of questionnaires. The details of the socioeconomic characteristics of borrowers are evaluated with descriptive statistics. The study showed that if the bank provides amnesty, the personal characteristics of the respondents, such as the degree of schooling, familial duration, volume of loans, and market experience, contribute favorably to repayment for loans.

Tiwari, Somani, and Mohammad (2020) investigated on the determinants of borrowers' repayment status with reference to private borrowers in the Zeway area who are financed by the Development Bank of Ethiopia (DBE). The study did employ a cross-sectional type of design where records of loan beneficiaries were archived to explain the purpose of the study. The estimation result employing the Tobit model revealed that having other sources of income, education, and work experience in related economic activity before the loan and engaging in economic activities other than agriculture were indicators of non-performing or performing loans. According to the study, those with businesses rather than agriculture are more likely to repay their loans if they are provided with a flexible mode of payment.

Another regional study was conducted in Rwanda among banking customers by Yitbarek Weldegerima Kiros (2022). The descriptive design was utilized by the study and a census of business organizations within a specific locality of Bunjumura was conducted. The study found that lack of credit knowledge among the banking customers was the primary contributor of non-performance of the loans among Rwandese banking institutions. The study further pointed out that approximately one-third of banking customers were found to have low financial knowledge on credit products. This low knowledge was manifested in their inability to save, invest, spend, or borrow credits. The author suggests the need of having simple literacy program for the population on personal finance. Therefore, Yitbarek Weldegerima Kiros (2022) notes that literacy is a main contributor to loan repayments especially in areas of personal financing.

Wachilonga (2018), on the other hand, conducted a study in Trans Nzoia County, Kenya, seeking to establish the factors that influence repayment of loans among the youths benefitting from the Enterprise fund from the Ministry. Several factors influence the loans how it is repaid and this are highly attributed to the characteristics of the youth. This was a descriptive type of study that purposively targeted beneficiaries who had defaulted. According to the study, a longer repayment period hindered loan recovery negatively. Others had stopped paying for a variety of reasons, including not knowing the risks of defaulting on loans. Additionally, Wachilonga (2018) did not find that whichever method was applied to recover the loans, the loans was unproductive due to ignorance of the risks by some borrowers.

A few global studies have also contributed to explaining the determinants of loan repayments. Bhat and Tariq (2020) mention several factors that contribute to repayment of loans among French financial borrowers of credit to include literacy levels, nature of the credit policies, income, and performance levels of the borrower. Many of the factors mentioned by this study were different from those of other countries. Especially in Asia and Africa. Although, the authors link these factors as contributors of non-performing loans, they specifically state that literacy level is the overall causal agent. Education on personal finance planning was critical especially for those that received it during their junior or senior period in schools and a significant role in the loan repayment regardless of the method of loan recovery employed.

In the United States, as a developed economy, several households and business organizations are found to have significantly defaulted on their loans. Ghosh, Sen, and Riva (2020) did a survey study. Data are collected from 80 registered enterprises in Indiana's manufacturing and service sectors where the unit of the study was selected purposively based on specific criteria. Logit regression and correlation analysis was then used to analyze data. The study revealed that educational awareness on finance management of the borrowers has a significant effect on loan repayment. The low levels of defaulting is attributed to many of the adults improving their credit knowledge and awareness.

2.3.2. Income and Loan Repayments

Several studies have attempted to explain the relationship between borrowers' income and loan repayments. Mpofu and Nikolaidou (2018) describe income as a determinant that affects the repayment of loans or the ability to access loans. Many of the loan recipients have different stream of income which are likely affect how loan are paid. Several money lending firms are focused on giving credit to lenders with stable sources of income or with income sizes that can sustain loan repayments. Consequently, the study reviews several global, regional, and local studies to explain the relationship between income levels and loan repayments.

A survey study was conducted by Karamcheva, Perry, and Yannelis (2020) that sought to establish the repayment of student loans using income-driven plans. The study targeted students in university colleges in Malaysia. The study found that students with effective income schedule plans have high chances of repaying their loans. This income-driven plan is used by lenders for those students with large loan balances and low earnings. Therefore, the study recommends that financial institutions develop income-driven plans to increase the chances of loans being repaid. This should be similarly adopted among the individual potential loan borrower where they are required to have such of the plans.

Lee, Park, and Heo (2019) did a study did seek to assess the association that exists between subjective income levels and perceived credit repayment. This was a descriptive study that sampled 201 respondents from various businesses in China. This was especially focused on service-provision industries or businesses. According to the study's findings, there is a positive and significant relationship between the size of income, revenue streams, and type of income sources and loan repayments. Therefore, commercial banks should use income as a determinant in evaluating loan applications because it is one of the determinants of loan repayment.

A descriptive study was conducted by Artavanis, and Karra (2020) aimed at evaluation the predictive causal relation between income streams and repayment of loans among SMEs in South Africa. A survey of SMEs was conducted where owners of these businesses were targeted. Descriptive findings showed that income streams have an influence on loan repayment among the SMES. Those SMEs with sustainable income streams can repay their loans without any difficulty. This is because they can pay their loans during business low or high seasons. While inferential statistics indicate that income streams of the borrowers have a significant positive relationship with loans repayments. Loans should be issued according to the seasons in which it is appropriate for the business to pay. High seasons where income is high, credit agencies should have flexible mechanism that allow loan borrowers to double or offset their respective loans.

Anderson, Conzelmann, and Lacy (2018) conducted a study in London colleges to establish the influence of the state of income levels and debt management. The study employed a descriptive research approach where the students at the selected colleges were the sample population. The study established that students performing various income-generating activities are less likely to fall into any debt. This study illustrates that having several income sources is better than depending on one source, especially when seeking loans or credit. Loan risks evaluation should be guided by the portfolio of income that the borrowers have in their business. This is because different sources of income provide enough cushions in case one source fails.

2.3.3. 5C's and loan Repayments

Several related studies have sought to describe the effect of 4Cs or 5Cs (capacity, capital, collateral, conditions, and character) used in credit evaluation on loan repayments. Saputra, Resmi, Nurweni, and Prasetyo (2020) provide a comprehensive definition of what owner characteristics entail. Several organizations have implemented policies that are used to evaluate how the loans are issued and delivered. According to them, these are personalized abilities or conducts that differ from one person to the other. Conditions, character, capacity, capital, and collateral are all factors that influence loan repayments.

Ejdelbaum (2021) did a study investigating the application of 4C (character, capital, cash, and collateral) in the selling of credit in finance. This evaluative study was conducted to ascertain the application of the four metrics in limiting the number of defaulted loans in commercial institutions in Greece. Borrowers who scored three or more of the four metrics were less likely to default, while those who scored two or fewer of the four metrics were more likely to default. But the study also state that other characteristics need to work with the 5C to ensure that the loans are issued to the right persons. The findings therefore point out that individuals (character, capacity, collateral, and cash) are important determinants of repayment of loans.

Faiz (2018) did a descriptive study that sought to examine and analyze the effect of character, capacity, capital, collateral, and conditions on bad loans. This was conducted in the Technical Service Unit (TSU) at the Local Government Finance Office**,** Sleman Regency**,** and Yogyakarta Province, Indonesia, where a total of 105 respondents were sampled. Purposive sample criteria are fund borrowers who have difficulty repaying loans and are included in the monitoring agenda. Findings showed that collateral and capital have no significant effect on bad loans, while capacity, character, and conditions have a significant effect on bad loans. These findings show that the 5C are elements that are used to evaluate borrowers to minimize the amount of bad loans in commercial institutions.

Xiao, Porto, and Mason (2020) sought to establish the effect of the financial capability of students in colleges. The study targeted graduates and dropouts to understand the financial capacity between the two groups. Findings of the study showed that many graduates performed better in debt management as compared to dropouts. The graduates were able to pay their loans within the stipulated time as compared to those who dropped out of the colleges. Therefore, this study clearly indicates that the financial capacity of individuals is an essential ingredient in determining the repayment of loans or credits.

Wasiuzzaman, Nurdin, Abdullah, and Vinayan (2019) conducted a study that was designed to evaluate the effect of credit worthiness dimensions on loan accessibility among SMEs found in small towns in Malysia. In this case, customer creditworthiness was employed as a moderating factor. A correlational study was employed in the study. The study established that customer credit worthiness has a significant mediating role contributing significant effect on the relationship. These dimensions of credit, capacity, character, and collateral significantly determined the repayment of loans with creditworthiness having a mediating role.

2.3.4. Firms Value and Loan Repayments

There are certain factors that are within and beyond the loan borrower or lender that might hinder effective loan repayments. Lee and Rosenkranz (2020) describe firms value as those internal factors that describe the performance and value of the organization. Kogan and Tian (2012) outline some of firm's value to include sales growth, sales turnover, liquidity, firm size, and asset growth. The authors state further that the variables are useful in determining the credit worth of a firm to access loans. Scientific studies have sought to establish an association between firm characteristics and loan repayments.

Mercy and Gichure (2019) conducted a study to establish whether there is an association between the number of years in business and loan repayments. The study used 44 commercial banks in Kenya as the study population but purposively sampled commercial banks in Nairobi. The study employed a descriptive research design, and the data was analyzed using descriptive and inferential statistics. From the study, it was found that the number of years the businesses operated influenced loan repayments. It was also discovered that the borrower's personality played a significant role in the loan's default or positive servicing after they were given payment reminders. Business with many years of experience are confident enough to identify the right period that is suitable for them to borrow or not. This makes it simple for the credit facilities during the evaluation process and increases the percentage of loan repayments.

Kariuki (2014) did a study on factors influencing non-performing loans by microfinance institutions in Kenya. This study employed a descriptive design and sampled employees of microfinance institutions. One of its objectives was to establish the extent to which sales turnover influenced the payment of loans among the beneficiaries. Findings from the study indicated that the sales turnover significantly influenced the level of loan recoveries. Those with higher levels of income were more likely to pay the loans compared to those with lower levels of income. Furthermore, those firms with higher sales turnover were also more likely to pay their defaulted loans.

Like the study on microfinance institutions in Kenya, another study by Kiptoo (2015) was conducted targeting Saccos in Nairobi. The aim of the study was to establish credit risk management strategies based on the performance of SACCOS. A correctional type of design was utilized, and data was obtained from the secondary data. One of its descriptive findings showed that credit management strategies based on the firm size of the beneficiaries were important in credit allocations. According to the study, it was important to provide a clear policy indicating the nature of firm size to be given loans or credit. These findings meant that big sized firms had the chance and capacity or viability to be allocated credits.

A study was conducted in Tanzania by Makorere (2014) which was purposed to establish the factors contributing to loan repayment among borrowers in financial institutions. The study found that financial institutions have a high significant number of non-performing loans. The study selected a few respondents (sample size of 100) from the banking sector who were provided with structured questionnaires. Descriptive findings from the study revealed that the most important factors such as sales growth rate, liquidity and asset growth rate have significant effects on loan repayment behavior in Tanzania.

In Asia, Al-Saleh and Al-Kandari (2012) did a descriptive type of study among commercial banks in Kuwait. The aim of the study was to investigate the prediction of financial distress for commercial banks. The study utilized a regression model analysis to establish the predictive relationship between the factors. Significantly, the firm's liquidity status was discovered to be one of the financial distresses to commercial banks, and it was predicted to have a significant impact on loan issuance and recovery. Depending on the positivity or negativity, banks would either profit or lose money, respectively, in the event of changes in liquidity issues in a firm. Furthermore, it would result in more non-performing loans and hinder loan recovery processes.

2.5. Conceptual Framework

Figure 2.1 represents the conceptualization of the study variables. The conceptual framework shows a diagrammatic illustration which outlines a linkage between the various socio-economic determinants and loan repayments.

INDEPENDENT VARIABLE: Borrowers Social-Economic Determinants of Loan repayment

DEPENDENT VARIABLE:

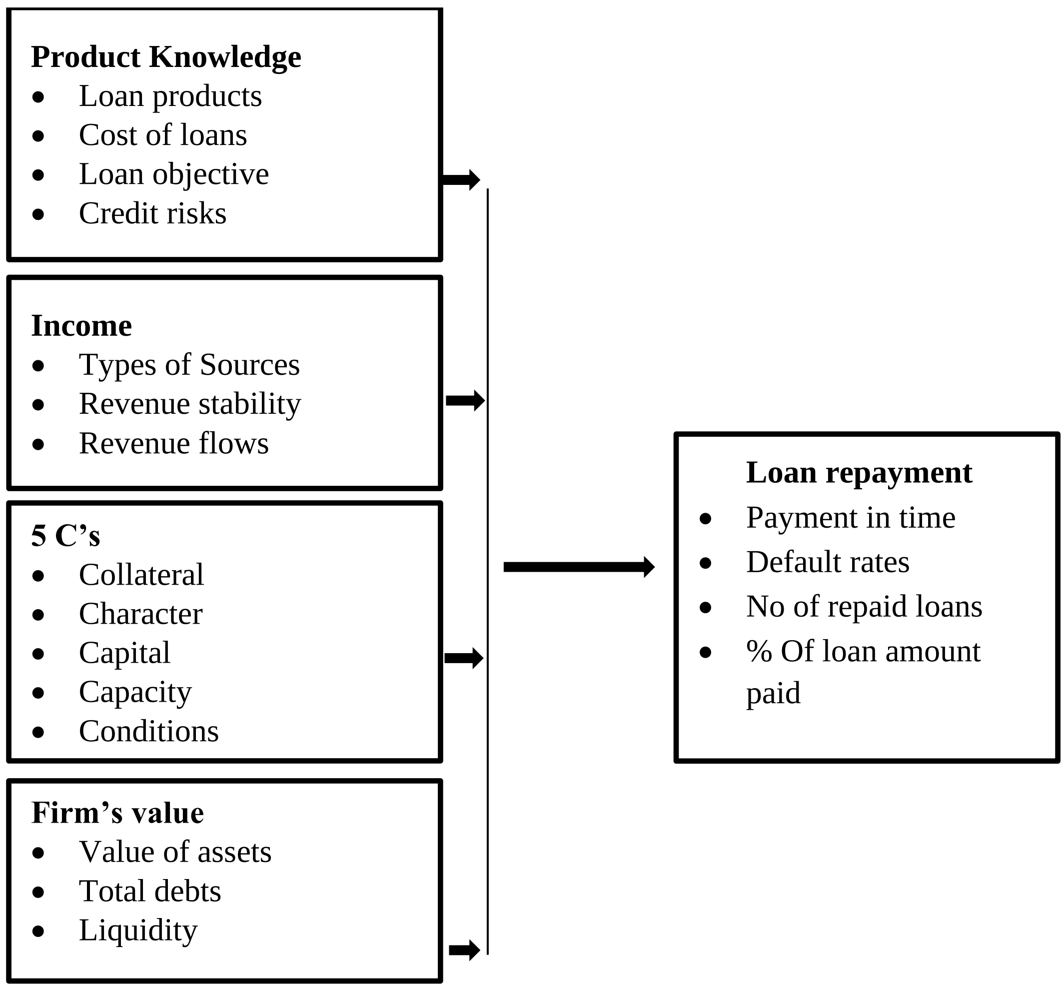

Figure 1: Conceptual framework, Source: Researcher 2023

VARIABLES

Independent Variables:

Product knowledge: this was measured using the following indicators: loan products, cost of loans, loan objectives, credit risks, types of services. Studies have been done to establish the association between product knowledge and loan repayments. James (2019) further narrowed the study by aiming to establish an association that exists between product knowledge and loan recovery methods in the SME sector and Wachilonga (2018), conducted a study in Trans Nzoia County, Kenya, seeking to establish the factors that influence repayment of loans among the youths benefitting from the Enterprise fund from the Ministry. They both found a positive association between the variables of the study.

Income levels: this variable was measured using the following indicators: types of sources, revenue stability, size of the income, and revenue streams. Different studies have sought to explain the association between the variables of the study. Mpofu and Nikolaidou (2018) describe income as a determinant that affects the repayment of loans or the ability to access loans and Karamcheva, Perry, and Yannelis (2020) that sought to establish the repayment of student loans using income-driven plans. These studies found out that income is a contributing factor to loan repayments.

5Cs was measured using the following indicators: collateral, character, previous loan repayments and net worth. Several studies have justified the association between the study variables. Ejdelbaum (2021) did a study investigating the application of 4C (character, capital, cash, and collateral) in the selling of credit in finance, and Faiz (2018) did a descriptive study that sought to examine and analyze the effect of character, capacity, capital, collateral, and conditions on bad loans. Both studies have proven the association between the 5Cs and loan repayments.

A firm's value was measured using the following indicators: value of assets, total debts, liquidity, and market value. In support to the measures, studies by Kogan and Tian (2012) outline some of firm's value to include sales growth, sales turnover, liquidity, firm size, and asset growth and Makorere (2014) which was purposed to establish the factors contributing to loan repayment among borrowers in financial institutions have shown positive results on the study variables linkage.

Dependent Variable: This variable was loan repayment, which was measured using the following indicators: if the loan is paid on time, the default rate, the number of loans repaid successfully, and the percentage of the loan amount paid by the borrowers.

2.6. Summary of Knowledge Gaps

Table 2.1 shows the knowledge gaps of the study

Table 2.1 Summary of knowledge gaps

Authors	**Study objective**	**Study findings**	**Gaps in the study**	**Addressing the gaps**
James (2019)	The title of the study was influence of product knowledge and loan repayments. While its objective was to find the association that exists between product knowledge and loan recovery methods in the SME sector. The study utilized descriptive design and targeting SMEs who are loan beneficiaries.	The study's findings showed that the knowledge of products of the loan beneficiaries had a significant influence on the loan repayments of commercial banks.	The target audience of the study was staff of commercial banks. The study employed a descriptive design.	The study did target MSMES and employed correlational design. This did aid to establish the association between study variables

Kimatu's (2018)	The title of the study was the determinants of loan repayment strategies. The objective of the study was to classify the main determinants of loan repayment strategies for small-scale businesses in Kenya, specifically the Kariobangi District of Nairobi, with a special reference to SMEs. The study conducted a survey of these SMEs.	The study findings showed that the personal characteristics of the respondents, such as the degree of schooling, familial duration, volume of loans, and market experience, contribute favorably to repayment for loans.	The study focused on several personal characteristics. The study focused on strategies for recovering loans	The study did focus on the socio economic determinants that influence loan repayments.
Wachilonga (2018),	The title of the study was determinants of loan repayments among Youth	Finding showed that whichever method was applied to recover the loans, the loans	The study focused on the youths benefitting from loans from enterprise fund.	The study did focus on loan beneficiaries who are MSMEs. Likewise it

	beneficiaries. A study in Trans Nzoia County, Kenya, conducted seeking to establish the factors that influence repayment of loans among the youths benefitting from the Enterprise fund from the Ministry. The study utilized documentary review.	were unproductive due to ignorance of the risks by some borrowers.	All determinants were sampled by the study	focused on socio economic determinants
Karamcheva, Perry, and Yannelis (2020	The study title was the effect of income driven plans on loan repayments. The objective was to establish the repayment of student loans using income-	The study found that students with effective income schedule plans have high chances of repaying their loans.	The study focused on students and repayment of loans.	The study did focus on MSMEs and all the variables not income only.

	driven plans. This was a survey study.			
Artavanis and Karra (2020)	A descriptive study was conducted by aimed at evaluation the predictive causal relation between income streams and repayment of loans among SMEs in South Africa.	The findings therefore point out that individuals (character, capacity, collateral, and cash) are important determinants of repayment of loans.	The study was conducted among SMEs in South Africa. The study focused on income as a variable.	The study was conducted in MSMEs in Kenya. Other variables (socio-economic) were conceptualized by the study.
Kariuki (2014)	Did a study on factors influencing non-performing loans by microfinance institutions in Kenya	Findings from the study indicated that the sales turnover significantly influence the level of loan recoveries.	The study focused on sales turnover on loan recoveries.	The current study focused on market value and loan repayment

CHAPTER THREE: RESEARCH METHODOLOGY

3.1. Introduction

The chapter outlines a methodology that was followed to answer the objectives of the study. It follows a step-by-step process that includes outlining the research design, documenting the target population, calculating the sample size, providing the sampling procedure, defining the data collection instrument, collecting data, and analyzing data. Methodology was useful in providing a framework for the next chapters of the study.

3.2. Research Design

The study did employ a descriptive research design and correlational research design. The research design as reported by Babbie et al. (2018) is a logical step that anchors the entire methodology of the study. According to Längler et al. (2019), research design is the umbrella under which the study is dependent upon and defines processes to actualize the objectives of the study. Vaske (2019) defines descriptive research design as a comprehensive process that seeks to find responses from a target population intended to answer the purpose of the study. Saunders (2018) defines correlational research design as the type that seeks to explain the relationship between the study variable and the descriptive and correlational research designs are applicable in this study because more information can be obtained to explain the causal relationship between determinants (product knowledge, income, 5’cs, and firms’ value) and loan repayments.

3.3. Target Population

The target population represents the entire set of objects, items, entities, and individuals sought to provide information to answer research objectives. The study populations were MSMEs loan beneficiaries who are owners of the businesses. They included only those that have obtained loans from Commercial banks, SACCOs, MFIs and Cooperative Societies. A pre assessment was done to establish the number of loan beneficiaries with the financial institutions in Nandi County. The assessment records of commercial banks found out that a total of 306 of the 4854 MSMEs registered under the trade and licensing department in 2021/2022 financial year in Nandi County were loan beneficiaries. Therefore, the study targeted the 306 loan beneficiaries of the business distributed across the various sub-counties (Table 3.1) of Nandi County.

Table 3.1 Target population

Sub-county	**Manufacturing/ Industrial**	**Service**	**Total**
Chesumei	46	32	78
Mosop	17	19	36
Aldai	25	18	43
Nandi Hills	31	27	58
Emgwen	15	17	32
Tinderet	23	36	59
Total			**306**

Researcher: County registry & financial institutions (Nandi County) records 2023.

3.4. Sample Size and Sampling Procedure

The section outlines the process in which a smaller unit was selected to represents the entire population (Flick, 2018), this represents the method that was used to obtain the sample size and procedure of obtaining samples from the entire target population.

3.4.1. Sample Size

The sample size was determined using Yamane (1960) Formula as follows.

$$n = \frac{N}{1+N(e)^2}$$

Where:

n= Sample size

N= Total population (MSMEs loan borrowers)

e= the margin of error (0.05)

n=? N=306, e=0.05

$$n = \frac{306}{1+306(0.05)^2}$$

$$=173$$

The sample size of the study was 173 MSMEs loan borrowers from across Nandi County sub counties. This is divided according to manufacturing (157/306*173=89) and service (149/306*173=84).

3.4.2. Sampling Procedure

The sampling procedure represents the process of obtaining a sample from the target population. According to Vaske (2019), it is a procedural method that ensures the target population is represented by the samples selected. The study employed a stratified random sampling procedure where samples were obtained from different stratums determined proportionally (no. of owners per sub county/total population* sample size). The sampling process involved choosing samples randomly from various sub-counties (Table 3.2 sampling frame). All the names of the businesses were assigned numbers and picked randomly equivalent to the sample size.

Table 3.2 Sampling frame

Sub-county	**Manufacturing/industrial**		**Service sector**	
	(N)	**(S)**	**(N)**	**(S)**
Chesumei	46	26	32	18
Mosop	17	10	19	11
Aldai	25	14	18	10
Nandi Hills	31	17	27	15
Emgwen	15	9	17	10
Tinderet	23	13	36	20
Total	**157**	**89**	**149**	**84**

Source: Researcher: 2023.

3.5. Data Collection

Primary data was collected, and this was done using a structured self-administered questionnaire. According to Faulkner et al. (2018), a structured self-administered questionnaire is a research instrument designed to collect data according to the researcher's specifications, which are issued to the respondents to independently fill them out. The questionnaire was chosen because it is appropriate for gathering more information from a large population within a short period of time. This structured questionnaire had sections A-F: general information, objectives of study, and closed-ended types of questions. The questionnaire was structured according to the types of measurement scales (nominal, ordinal, ratio, and interval).

3.5.1 Data Collection Procedure

The actual data collection began by seeking relevant authorization from the sponsoring institution and relevant authorities where the data was collected. Before collecting the data, the researcher obtained the physical addresses of the various businesses. The respondents were given a structured questionnaire at their identifiable localities. The researcher visited the various business premises and issues the questionnaire. Respondents were given the questionnaire, which was collected immediately after they had been filled out and with the aid of interpreters if required. This data collection process is scheduled for a period of 30 working days. According to Längler et al. (2019), for accuracy in collecting data, suitable procedures should be put in place by the researcher. Data collected during this period was then validated and ready for analysis.

3.6. Pilot of the Study

Before the commencement of actual data, validity and reliability tests for the instrument were tested during a pilot study. Responses for the pilot study (10% of the study sample) were obtained from MSMEs from the Iten town which is located in Elgeyo Marakwet County. The findings of the study were used to test for validity and reliability.

3.6.1 Reliability and Validity of the Study

Validity, which is the accuracy of the instrument content to produce the desired outcome according to Osso (2010), was tested by the scrutinizing process with the research supervisor. A test-retest was conducted, where the two sets of data collected using five items from the questionnaire was subjected to the statistical reliability test. Reliability of the instrument was conducted using the Cronbach alpha reliability coefficient. According to Kothari (2014), only Cronbach's alpha statistical value (r > 0.7) was accepted as reliable. Using 5 questionnaire items the study was able to obtain a reliability value of 0.876 (Table 3.3). After these tests, the instruments were ready for the actual data collection.

Table 3.3 Reliability statistics

Cronbach's Alpha	N of Items
.876	5

3.7. Data Analysis Procedure

The process of data analysis, according to Kumar (2018), involves a statistical analysis procedure of converting data into useful inferences. Descriptive and inferential statistics were used to analyze the data. According to Vaske (2019), descriptive and inferential statistics are used to provide deductions by summarizing, organizing, and interpreting data. Descriptive statistics involve mean, standard deviation (SD), frequencies, and percentages. Inferential statistics involve the use of correlation and regression analysis. A correlation analysis was conducted by the study. This was aimed at showing the degree of influence between two variables (independent and dependent) as the degree of scatter values was measured. The less scattered, the stronger the relationship. Karl Pearson coefficient of correlation was used as it gives an indication of the strength of the relationship between the independent and dependent variables. A correlation coefficient of one showed that the variables are related. Correlation coefficient values therefore lie between positive one and negative one. For ordinal data, the mean was used as it is most sensible.

The predictive linkage between the dependent and independent variables of the study was anchored using logistic regression model. The t-tests obtained in the model were used to test the various hypotheses outlined by the study. The measures were used to explain the relationship that exists between determinants (product knowledge, incomes, 5 C's, and firm value) and loan repayments. Logistic regression model is chosen because it is used to handle classification or categorical problems and provides a discrete output.

Before the output of the regression is accepted, the following basic assumptions must be met linearity in the logit for continuous variables this ensures that the output of the relationship is that of a straight line, absence of multicollinearity this ensures that variables selected are not highly related or are similar concepts, independence of errors in which variables are not affected by externalities, and lack of strongly influential outliers.. The Logistic regression for the study was modeled as follows:

$Yi = \propto + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \mu i$

Where.

Yi = Loan Repayment (1 for Loan repaid within the specified loan period, otherwise 0)

X_1 = Product knowledge

X_2 = Income

X_3 = 4 C's

X_4 = Firm's value

β $(1, 2, 3, 4)$ = Parameters to be estimated.

$\propto$= Constant

μi= error term

In the Logistic regression model the study predicts that loan repayment is determined by a few factors. The study further hypothesizes at 95% significance level that loan repayment is determined by a combination of several factors. The first factor hypothesized that product knowledge (X_1) of the MSMEs determines loan repayments (Yi). The second factor hypothesized that income level (X_2) of the MSMEs determines loan repayments (Yi). The third factor hypothesized that 5 C's (X_3) of the MSMEs determines loan repayment (Yi). Lastly, the fourth factor hypothesized that firm value (X_4) of the MSMEs determines loan repayments (Yi). The hypotheses were tested using t-tests at 95% significance level ($p>0.05$).

3.8. Ethical Consideration.

The professionalism in conducting this study was primarily considered in the entire research process. The process Began with following the required steps of seeking authorization and licensing before conducting data collecting. This was followed by ensuring that the respondents are informed on the purpose of conducting the study, and allowing them to voluntarily consent to participate in the study. No respondents were requested to provide any personal data or any form of personal identity indicator was used in the study. Other author's works and contribution were acknowledged by the study and this ensured that the work is free higher % of plagiarism.

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3.9 Operationalization of Variables.

Table 3.4 Operationalization of Variables

Objective	Variables	Indicators	Research Instrument	Measurement	Tools of Analysis
To establish the influence of product knowledge on loan repayments among MSMEs loan borrowers in Nandi County.	Product Knowledge	Loan products Cost of Loans Loan Objectives Credit Risk	Questionnaire	Nominal & Ratio	Descriptive & Inferential
To investigate the influence of income on loan repayments among MSMEs loan	Income	Types of Sources Revenue Stability Revenue Flows	Questionnaire	Nominal & Ratio	Descriptive & Inferential

borrowers in Nandi County					
To assess the influence of 5C’s on Loan Repayment among MSMEs, Nandi County	5C’s	Collateral Character Capital Capital Condition	Questionnaire	Nominal & Ratio	Descriptive & Inferential
To Evaluate the influence of Firm’s Value on Loan Repayment among MSMES loan borrowers in Nandi County.	Firm’s Value	Value of Assets Total Debts Liquidity	Questionnaire	Nominal & Ratio	Descriptive & Inferential

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1. Introduction

The chapter presents analysis of the data obtained from questionnaires issued to the study respondents. A sample of 173 MSMEs loan borrowers was selected during the study but only 168 MSMEs loan borrowers' accurate responses were obtained. This represented a questionnaire response rate of 97.1%, which was achieved by making a keen follow-up on the process of issuing research instruments. Faulkner and Faulkner (2018) advance that, a questionnaire response rate of >90% validates the accuracy of the sampling procedure.

4.2. General information

The research sought to find from the respondent's certain information related to the topic of the study. This general information included the number of years they have been in business, type of credit they have borrowed and their outstanding loans.

4.2.1. Number of years

The number of years in operation is a key component in ascertaining sustainability of any business. Therefore, the MSMEs loan borrowers were asked to state the number of years they have remained operation. Finding to this question was presented in Table 4.1.

Table 4.1 Number of years in Business

Number of years	Frequency (F)	Percentage (%)
1-2 years	65	38.7
3 -4 years	31	18.4
5 years & above	72	42.9
Total	168	100

Source: Author 2023

Findings as shown in Table 4.1 illustrate a slightly higher number of MSMEs loan borrowers (42.9%) have been for a period of 5 years and above followed by new entrant (38.7%) with 1-2 years of operation. Others MSMEs loan borrowers (18.4%) have stayed for a period of 3-4 years. This observation shows that many of the MSMEs loan borrowers in the study location have stayed long enough in business to understand the study objectives.

4.2.2. Loan Information

The study sought to establish general information relating to the loans. The questions asked to the study respondents revolved around the type of credit borrowed and the amount of loan outstanding. This was important in assessing whether the MSMEs loan borrowers have borrowed the loans and whether they are paying them. The findings to these questions were summarized and presented in Table 4.2.

Table 4.2 Loan Information

Questions	Responses	Frequency (F)	Percentage (%)
What types of credit your business has borrowed?	Agricultural loans	16	9.5
	Business loans	83	49.4
	Secured loans	54	32.1
	Financing loans	15	8.9
	Totals	**168**	**100**
What is your outstanding loan	None	42	25.0
	Below 5 million	116	69.0
	6-10 million	7	4.2
	11-20 million	2	1.2
	Above 21 million	1	0.6
	Totals	**168**	**100**

Source: Author 2023

Table 4.2 shows that majority of the MSMEs loan borrowers (49.4%) have borrowed business loans, followed by 32.1% MSMEs loan borrowers have borrowed secured loans. Few numbers 9.5% and 8.9% MSMEs loan borrowers have borrowed agricultural loans and financing loans respectively. These finding shows MSMEs loan borrowers are focused on business loans. Furthermore, 69% MSMEs loan borrowers have outstanding loans that are below 5 million, 25% MSMEs loan borrowers have none while 4.2% and 1.2% MSMEs loan borrowers have outstanding loans between 6-10 million and 11-20 million respectively. Only a few of MSMEs loan borrowers (0.6%) have outstanding loans above 21 million. The findings show that majority of the respondents have outstanding loans.

4.3. Product Knowledge and Loan Repayment

The first objective sought to establish the influence of product knowledge perspective on loan repayments. The respondents were given statements to provide their own level of agreement (Table 4.3). The level of agreement was ranked as follows; 1=SD (strongly Disagree), 2=D (Disagree), 3=U (Undecided), 4=A(Agree), 5=SA (Strongly Agree).

Table 4.3 Product Knowledge and Loan Repayment

Statements	5 F (%)	4 F (%)	3 F (%)	2 F (%)	1 F (%	Mean	SD
Knowledge of the loan products does influence loan repayment on time	54(32.1)	76(45.2)	3(1.8)	14(8.3)	21(11.6)	3.8	0.6
Knowledge of the cost of loans does influence the amount of loan paid	75(44.6)	44(26.2)	2(1.2)	19(11.3)	28(16.7)	3.7	0.1
Knowledge of the credit risks does influence frequency of paying loans	66(39.3)	53(31.5)	1(6.0)	21(12.5)	27(16.7)	3.6	0.3
Knowledge of the types of loan services does influence the % of loan to be paid	56(33.3)	69(41)	3(1.8)	22(13.1)	18(10.7)	3.7	0.1
Composite mean & SD=						**3.7**	**0.3**

Source: Author 2023

Findings in reference to Table 4.3 show that large number 32.1% and 45.2% MSMEs loan borrowers did strongly agree and agree respectively that the knowledge of the loan products does influence loan repayment on time. While a few in numbers 1.8% MSMEs loan borrowers were undecided with 11.6% and 8.3% MSMEs loan borrowers did strongly disagree and disagree respectively that Knowledge of the loan products does influence loan repayment on time. The findings show agreement that knowledge of the loan products does influence loan repayment on time this is according to a mean (SD)=3.8 (0.6). This finding empirically proves that customers need to be aware of loan product information for them to pay their loan in time. This finding is supported by a study by Kimatu's (2018) which explains that it is necessary for borrowers to be educated in credit management.

Moreover, 44.6% and 26.2% MSMEs loan borrowers did strongly agree and agree respectively that Knowledge of the cost of loans does influence the amount of loan paid. While 1.2% MSMEs loan borrowers were undecided with 16.7% and 11.3% MSMEs loan borrowers did strongly disagree and disagreed respectively that knowledge of the cost of loans does influence the amount of loan paid. Responses with a mean (SD) of 3.7 (0.1) bring agreement that knowledge of the cost of loans does influence the amount of loan paid. This means that borrowers need to know loan cost information which influenced the amount of loan repayments. James (2019) agrees with the findings by stating that loan payment is directly related to the cost of the loan.

Furthermore, findings in Table 4.3 showed that 39.3% and 31.5% MSMEs loan borrowers did strongly agree and agree respectively that knowledge of the credit risks does influence frequency of paying loans. While 6% MSMEs loan borrowers were undecided with the statement with 16.7% and 12.5% MSMEs loan borrowers strongly disagreed and disagreed respectively that knowledge of the credit risks does influence frequency of paying loans. This finding shows agreement that loan borrowers need knowledge of credit risks this influences their frequency of paying their loans as proven by a mean (SD) of 3.6 (0.3). Wachilonga (2018) makes a contradiction by stating that credit risks are not part of the borrower's concern during the process of applying the loan.

Finally, the findings as per Table 4.3 showed that 33.3% and 41% MSMEs loan borrowers strongly agree and agreeing respectively that the knowledge of the types of loan services does influence the % of loan to be paid. While 1.8% MSMEs loan borrowers was undecided with the statement with 10.7% and 13.1% MSMEs loan borrowers strongly disagreeing and disagreeing respectively that knowledge of the types of loan services does influence the % of loan to be paid. The findings show agreement that % of loan to be paid is influenced by the knowledge of the types of loan services as referenced by mean (SD) of 3.7 (0.1). The composite mean (SD) of 3.7 (0.3) shows agreement that product knowledge influence loan repayments.

4.4. Income and loan Repayment

The second objective of the study was to establish the influence of income perspectives on loan repayment. The respondents were provided with statements that define the association between these variables. The level of agreement was ranked as follows; 1=SD (strongly Disagree), 2=D (Disagree), 3=U (Undecided), 4=A(Agree), 5=SA (Strongly Agree). The findings showing these levels of agreements were then summarized and presented in Table 4.4.

Table 4.4 Income and loan repayment

Statements	5 F (%)	4 F (%)	3 F (%)	2 F (%)	1 F(%	Mean	SD
Sources of income influence the amount of loans paid.	54(32.1)	69(41.1)	4(2.4)	19(11.3)	22(13.1)	3.7	0.2
Revenue stability influenced the time of paying loans.	42(25.0)	79(47.0)	2(1.2)	25(14.9)	20(11.9)	3.6	0.1
Size of the income influence the % of loan amount paid.	46(27.4)	69(41.1)	5(3.0)	27(16.1)	21(12.5)	3.6	0.3
Revenue flows influence loan default rates.	66(45.2)	51(30.4)	3(1.8)	20(11.9)	18(10.7)	3.5	0.1
Composite mean & SD=						**3.6**	**0.2**

Source: Author 2023

Table 4.4 shows that 32.1% and 41.1% MSMEs loan borrowers did strongly agree and agree respectively that the sources of income influence the amount of loans paid. While 2.4% MSMEs loan borrowers were undecided on the statement with 13.1% and 11.3% MSMEs loan borrowers strongly disagreeing and disagreeing respectively that the sources of income influence the amount of loans paid. The source of income is seen to influence the amount of loans paid by the borrowers. This is according to an agreement with mean (SD) of 3.7 (0.2). Mpofu and Nikolaidou (2018) agree with the findings by stating that more incomes are good in spreading risks during the repayment periods.

The study further showed that 25% and 47% MSMEs loan borrowers did strongly agree and agree respectively that revenue stability influenced the time of paying loans. 1.2% MSMEs loan borrowers being undecided with the statement with 11.9% and 14.9% MSMEs loan borrowers strongly disagreeing and disagreeing that revenue stability influenced the time of paying loans. Findings showing an agreement that revenue stability influenced the time of paying loans as per the mean of 3.6 (SD=0.1). The finding shows that revenue stability of the borrowers influences the time of paying loans. Conzelmann, and Lacy (2018) validate the findings by stating that credit institutions look for income stability to offer credit.

Additionally, 27.4% and 41.1% MSMEs loan borrowers strongly agreed and agreed respectively that size of the income influence the % of loan amount paid. While 3% MSMEs loan borrowers were undecided with the statement, also, 12.5% and 16.1% strongly disagree and disagreed that the size of the income influences the % of loan amount paid. The finding shows agreement that borrower’s size of the income influence the % of the loan being paid as per the mean (SD) of 3.6 (0.3). Artavanis, and Karra (2020) agrees with the finding by stating the size of income determines the size of credit to take and the loan payment schedule thus making easy for the borrower.

Lastly, the findings showed that 45.2% and 30.4% MSMEs loan borrowers did strongly agree and agree respectively that revenue flows influence loan default rates. While 1.8% MSMEs loan borrowers were undecided with the statement, 10.7% and 11.9% MSMEs loan borrowers did strongly disagree and disagree respectively that revenue flows influence loan default rates. The mean (SD) of 3.5 (0.1) shows agreement that revenue flows influence loan default rates. The composite mean (SD) shows agreement that income have an influence on loan repayment,

4.5. 5C's and Loan Repayments

The third objective of the study was to establish the influence of 5C's perspectives on repayment of loans. The 5C's include assessing how capital, collateral, capacity, character, and conditions influence loan repayments. The MSMEs loan borrowers were provided with statements which they were required to provide their level of agreement. This was therefore ranked as follows; 1=SD (strongly Disagree), 2=D (Disagree), 3=U (Undecided), 4=A(Agree), 5=SA (Strongly Agree). Results obtained were presented in Table 4.5.

Table 4.5 5C's and Loan Repayments

Statements	5 F (%)	4 F (%)	3 F (%)	2 F (%)	1 F (%)	Mean	SD
Capacity to borrow credit influences the loan repayment rates	69(41.1)	64(38.1)	3(1.8)	14(8.3)	18(10.7)	3.9	0.6
Collateral provisions influences the time paying of the loan	73(43.3)	66(39.3)	1(0.6)	10(6.0)	18(1o.7)	4.0	0.1
Conditions of the loans are critical in ensuring loans are paid on time.	71(42.3)	63(37.5)	1(0.6)	17(10.1)	16(9.5)	3.9	0.4
The previous repayment of loans influences the % of loan paid.	81(48.2)	63(37.5)	2(1.2)	8(4.8)	14(8.3)	4.1	1.1
Capital availability influences the number of loans to be paid	47(28.0)	59(35.1)	6(3.6)	22(13.1)	34(20.2)	3.3	0.1
Composite mean & SD=						**3.6**	**0.2**

Source: Author 2023

The findings in Table 4.5 shows that 41.1% and 38.1% of MSMEs loan borrowers strongly agreed and agreed respectively that capacity to borrow credit influences the loan repayment rates. While 1.8% MSMEs loan borrowers was undecided on the statement, additionally, 10.7% and 8.3% MSMEs loan borrowers strongly disagreed and disagreed respectively that capacity to borrow credit influences the loan repayment rates. The findings show agreement (Mean =3.9, SD=0.6) that loan repayments are influenced by the owner’s capacity to borrow credit. Faiz (2018) agrees with the finding by stating that the capacity of an individual is key in determining whether the loan was paid or not.

Furthermore, as referenced in Table 4.5 the study established that 43.4% and 39.3% MSMEs loan borrowers strongly agreed and agreed provision of collateral influences the time paying of the loan. More of these findings, 10.7% and 6% MSMEs loan borrowers strongly disagreed and disagreed respectively that business owners' provision of collateral influences the time paying of the loan. Only a few 0.6% MSMEs loan borrowers were undecided. Therefore, this denotes an agreement (mean=4.0, SD=0.1) that business owners' provision of collateral influences the time paying of the loan.

The study further found that 42.3% and 37.5% MSMEs loan borrowers strongly agreed and agreed respectively that conditions of the loans are critical in ensuring loans are paid on time. Additionally, 9.5% and 10.1% MSMEs loan borrowers strongly disagreed and disagreed respectively that conditions of the loans are critical in ensuring loans are paid on time. Only a few 0.6% MSMEs loan borrowers were undecided on the statement. This finding shows agreement (Mean =3.9, SD=0.4) that the conditions of the loans are critical in ensuring loans are paid on time. Graham, Matthews, and Eslami (2020) support the findings by stating that loan conditions hinder the loan payment schedules by demotivating the borrowers.

More on the findings as referenced in Table 4.5 showed that 48.2% and 37.5% MSMEs loan borrowers strongly agreed and agreed respectively that the previous repayment of loans influences the % of loan paid. More of these, 8.3% and 4.8% MSMEs loan borrowers strongly disagreed and disagreed respectively that the previous repayment of loans influences the % of loan paid, only 1.2% MSMEs loan borrowers were undecided on the statement. Generally, the finding showing agreement (mean=4.1, SD=1.1) that the % of loan paid is influenced by the previous repayment of the loan by the borrower. Xiao, Porto, and Mason (2020) agree by stating that loan experience is a good indicator of a loan to be honored by the borrower.

Lastly, findings showed that 28% and 35.1% MSMEs loan borrowers strongly agreed and agreed respectively that the capital influence the number of loans to be paid while 3.6% MSMEs loan borrowers were undecided. Showing disapproval, 20.2% and 13.1% MSMEs loan borrowers strongly disagreed and disagreed respectively that the business capital influence the number of loans to be paid. Conclusively, a mean=3.3, SD=0.1 indicates neutrality the business capital influences the number of loans to be paid. The general composite mean (SD) of 3.6 (0.2) shows agreement that 5Cs influence loan repayments.

4.6. Firms value and loan Repayment

The fourth objective of the study was to establish the influence of a firm's value perspectives on loan repayments. A firm's value defines the business characteristics that might or hinder loan repayments. Respondents were provided with statements to provide their level of agreement. The levels of agreement were measured according to the following scales: 1=SD (strongly Disagree), 2=D (Disagree), 3=U (Undecided), 4=A (Agree), 5=SA (Strongly Agree). Findings obtained in these statements assessments were presented in Table 4.6.

Table 4.6 Firms value and Loan Repayment

Statements	5 F (%)	4 F (%)	3 F (%)	2 F (%)	1 F(%	Mean	SD
The value of assets of business influence rate of loan repayment.	67(39.9)	53(31.5)	4(2.4)	26(15.5)	18(10.7)	3.7	0.4
The total debt of business influences the time for paying loans.	73(43.5)	69(41.1)	2(1.2)	13(7.7)	11(6.5)	4.1	0.2
The liquidity of business affects repayment of the loans.	59(35.1)	77(45.8)	4(2.4)	17(10.1)	11(6.5)	3.9	0.2
The market value of business influences the % of loan to be paid	43(25.6)	49(29.2)	5(3.0)	33(19.6)	38(22.6)	3.2	0.4
Composite mean & SD=						**3.6**	**0.2**

Source: Author 2023

The findings in Table 4.6 show that 39.9% and 31.5% MSMEs loan borrowers strongly agreed and agreed respectively that the value of assets of business influence rate of loan repayment. Other response showed that 10.7% and 15.5% MSMEs loan borrowers strongly disagreed and disagreed respectively that the value of assets of business influence rate of loan repayment while 2.4% MSMEs loan borrowers were undecided. The findings show agreement (mean=3.7, SD=0.4) that the value of assets of business influence rate of loan repayments. Kariuki (2014) supports the findings state that assets provide stable credit collateral for many businesses.

Furthermore, the findings showed that 43.5% and 41.1% MSMEs loan borrowers strongly agreed and agreed respectively that the total debt of business influences the time for paying loans. Also, more responses showed that 6.5% and 7.7% MSMEs loan borrowers strongly disagreed and agreed that the total debt of business influences the time for paying loans while 1.2 MSMES Loan Borrowers were undecided on this. There is an agreement (Mean=4.1, SD=0.2) that time for paying loans is influenced by the total debts of the business.

Additionally, the findings showed that 35.1% and 45.8% MSMEs loan borrowers strongly agreed and agreed respectively that the liquidity of business affects repayment of the loans. Contrary to the positive responses the study established that 6.5% and 10.1% MSMEs loan borrowers strongly disagreed and disagreed respectively that the liquidity of business affects repayment of the loans while 2.4%MSMEs loan borrowers were undecided on this. The general finding shows agreement (mean=3.9, SD=0.2) that the liquidity of business affects repayment of the loans. Makorere (2014) agrees with the finding by stating that insolvency in business is a result of business suffering liquidity problems.

Lastly, the findings showed that 25.6% and 29.2% MSMEs loan borrowers strongly agreed and agreed respectively that the market value of business influences the % of loan to be paid. While 3% MSMEs loan borrowers were undecided, others 22.6% and 19.6% MSMEs loan borrowers strongly disagreed and disagreed respectively that the market value of business influences the % of loan to be paid. The mean (SD) of 3.2 (0.4) showed that respondents were undecided on whether the market value of business influences the % of loan to be paid. A composite mean (SD) of 3.7 (0.4) shows agreement that loan repayment is influenced by firm’s value.

4.7. Loan Repayment

The study sought to establish the extent to which the loan is being repaid. Loan repayment represents the dependent variable of the study. The levels of agreement were measured according to the following scales: 1=SD (strongly Disagree), 2=D (Disagree), 3=U (Undecided), 4=A (Agree), 5=SA (Strongly Agree). The findings are presented in Table 4.7

Table 4.7 Loan Repayment

Statements	5 F (%)	4 F (%)	3 F (%)	2 F (%)	1 F(%	Mean	SD
Loans are paid within the required time.	30(17.9)	24(14.3)	2(1.2)	49(29.2)	63(37.5)	2.5	0.1
No time have default occurred on the loans.	27(16.1)	22(13.1)	4(2.4)	49(29.2)	66(39.3)	2.4	0.2
The business has honored several numbers of repaid loans.	56(33.3)	58(34.5)	3(1.8)	27(16.1)	24(14.2)	3.6	0.7
Large % of the loan borrowed has been paid.	35(20.8)	21(12.5)	2(1.2)	45(26.8)	65(38.7)	2.5	0.3
Composite mean & SD=						**2.7**	**0.3**

Source Author 2023

Findings in Table 4.7 show that 37.5% and 29.2% strongly disagreed and disagreed respectively that Loans are paid within the required time while 1.2% MSMEs loan borrowers were undecided on it. Furthermore, 17.9% and 14.3% MSMEs loan borrowers strongly agreed and agreed respectively that Loans are paid within the required time. Conclusively, findings show disagreement (mean=2.5, SD=0.1) that **l**oans are paid within the required time**.** Ejdelbaum (2021) agrees that many of the business loans have gone overdue within the stipulated time periods.

More findings showed that 39.3% and 29.2% MSMEs loan borrowers strongly disagreed and disagreed respectively that no time have default occurred on the loans while 2.4% MSMEs loan borrowers were undecided to this. Other findings showed that 16.1% and 13.1% MSMEs loan borrowers strongly agreed and agreed respectively that no time have default occurred on the loans. General findings showing disagreement (mean=2.4, SD=0.2) that no time have default occurred on the loans.

The study further in Table 4.7 found that 33.3% and 34.5% MSMEs loan borrowers strongly agreed and agreed respectively that the business has honored several numbers of repaid loans only 1.8% of MSMEs loan borrowers were undecided on the statement. Furthermore, 14.2% and 16.1% MSMEs loan borrowers strongly disagreed and disagreed respectively that the business has honored several numbers of repaid loans. The general mean (SD) of 3.6 (0.7) shows agreement that the business has honored several numbers of repaid loans.

Lastly, the findings showed that 38.7% and 26.8% MSMEs loan borrowers strongly disagreed and disagreed respectively that large % of the loan borrowed has been paid while 1.2% MSMEs loan borrowers were undecided on the statement. Furthermore, 20.8% and 12.5% MSMEs loan borrowers strongly agreed and agreed respectively large % of the loan borrowed has been paid. The general mean (SD) of 2.5 (0.3) shows disagreement that large % of the loan borrowed has been paid. The composite mean (SD) of 2.7 (0.3) shows disagreement that loan repayments are being done adequately in the banks.

4.8. Effects of socio-economic factors on loan repayment

The measures of relationship (multiple regression and correlation) were used to establish the cause effect and association of the variables of the study. These measures of relationships were tested at 95% significance level.

4.8.1. Correlation analysis

Pearson moment correlation coefficient was used in the study to establish the existence of association between the study variables. Interpretation of these statistical test was as follows; 0=no correlation, 0.5=average correlation and >0.7 strong correlation. Table 4.8 shows correlation analysis findings.

Table 4.8 Correlation Findings

		Knowledge on loan cost	Revenue stability	Borrowers' capacity	Business total debts
Loan paid in time	Pearson Correlation	.785**	.812	.709**	.513**
	Sig. (2-tailed)	.000		.000	.000
	N	**168**	**168**	**168**	**168**

Statistical level =-0.05

The correlation findings show that a positive close relationship (r=0.785) exists between loan payment within time and knowledge on loan costs. This means that product knowledge has positive close relationship with loan repayments. Tiwari, Somani, and Mohammad (2020) found a positive relationship between customer awareness on credit management and repayment of loans. The study further found a positive close relationship (r=0.812) between revenue stability and loan payment in time. This means a positive close relationship exists between income and loan repayment. The finding is like a study by

Karamcheva, Perry, and Yanelis (2020) who found a close relationship existing between income stability and loan repayment schedules.

More findings showed a positive close relationship (r=.709) exists between borrowers' capacity and loan paid in time. Meaning a close relationship exists between 5C's and loan repayment. Lastly, an average relationship exists between business total debts and loan repayments. This means an average relationship exists between a firm's value and loan repayment. Kogan and Tian (2012) found a positive close relationship existing between firms' assets and credit management.

4.8.2. Logistic Regression model

The logistic regression analysis was used in this study to estimate the relationship between the predictors (independent variables) and the dependent variable. Before acceptance of the model, tests were conducted, and positive outcomes were obtained to validate the use of regression analysis. The tests conducted included linearity in the logit for continuous variables, absence of multicollinearity, independence of errors, and lack of strongly influential outliers. The results of the model summary were presented in Table 4.9.

Table 4.9 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.943[a]	.953	.957	.4530

a. Predictors: (Constant), product knowledge, income, 5Cs, firms' value
b. Dependent Variable: Loan repayments

The findings as per the model summary (Table 4.9) show that the adjuster R square value is 0.957 which means that positive relationship exists between the predictors and dependent variable. This denoted that the predictors contribute 95.7% of the loan repayments. The study further sought to establish whether this relationship is significant where values were subjected to ANOVA test. Findings of the tests were shown in Table 4.10.

Table 4.10 ANOVA Test

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	337.383	2	44.66	709.387	.000[b]
	Residual	15.560	168	.42		
	Total	352.943	166			

a. Predictors: (Constant), product knowledge, income, 5Cs, firms' value
b. Dependent Variable: Loan repayments

Finding as per Table 4.10 (ANOVA test) shows that the F value=709.4, $p<0.05$, which means the relationship between predictors and dependent variable is significant. The study sought to establish the unit contribution of the predictors to the dependent variable this was summarized in Table 4.11 showing the coefficients.

Table 4.11 Coefficients

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.023	.022		6.126	.000
	Product Knowledge	.319	.111	.103	5.022	.100
	Income	.302	.048	.212	1.454	.120
	5C's	.225	.007	.014	1.207	.100
	Firms value	.154	.003	.001	2.040	.100

a. Dependent Variable: Loan repayments

The findings in Table 4.11 show that a unit of product knowledge contributes 10.3% unit of loan repayments while one units of income contribute 21.2% unit of loan repayments. Additionally, a unit of SCs and firms value contributes to 1.4% and 1% respectively on loan repayment. The logic regression for the study was modeled as follows:

$$Yi = \propto + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \mu i$$

$Yi = 0.023 + 0.103X_1 + 0.212X_2 + 0.014X_3 + 0.014X_4 + 0.22$

4.8.3. Hypothesis testing

In the logic regression model the study predicts that loan repayment is determined by a few factors. The study further hypothesizes at 95% significance level that loan repayment is determined by a combination of several factors. The first factor hypothesized that product knowledge (X_1) of the MSMEs loan borrowers determines loan repayments (Yi). The null hypothesis was Ho.1: There is no significant effect between product knowledge and loan repayments. The findings showed $P>0.05$ which means the null hypothesis is rejected and alternative accepted that state that there is significant effect between product knowledge and loan repayments.

The second factor hypothesized that income level (X_2) of the MSMEs loan borrowers determines loan repayments (Yi). The null hypothesis was Ho.2. There is no significant effect between income and loan repayments. Findings showed $P>0.05$ which means the null hypothesis is rejected and alternative accepted that states that there is significant effect between income and loan repayments.

The third factor hypothesized that 5 C's (X_3) of the MSMEs loan borrowers determines loan repayment (Yi). The third hypothesis was Ho: 3: There is no significant effect between 5C's and loan repayments. Findings showed $P>0.05$ which means the null hypothesis is rejected and alternative accepted which states that there is significant effect between 5C's and loan repayments.

Lastly, the fourth factor hypothesized that firm value (X_4) of the MSMEs loan borrowers determines loan repayments (Yi). The hypothesis was Ho: 4: There is no significant effect between firm's value and loan repayments. Findings showed $P>0.05$ which means the null hypothesis is rejected and alternative accepted which states there is significant effect between firm's value and loan repayments.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMEDATIONS

5.1. Introduction

The chapter presents the key finding summary of results obtained in chapter four. Also, outlining the conclusion of the study based on the topic and themes of the study. the chapter further presents the recommendations, limitations, and suggestion for further studies.

5.2. Summary of the Findings

The first objective sought to establish the influence of MSMEs product knowledge perspectives on loan repayments. The findings show agreement that knowledge of the loan products and cost of loans does influence loan repayment. Furthermore, the study was able to agree that loan borrowers need knowledge of credit risks as this influences their frequency of paying their loans. Likewise, the % of loan to be paid is influenced by the knowledge of the types of loan services. Generally, the study found agreement that product knowledge influence loan repayments. The correlation findings show that a positive close relationship exists between loan payment within time and knowledge on loan costs. This means that product knowledge has a positive close relationship with loan repayments**.** The linear regression model finding showed that a unit of product knowledge contributes 10.3% of unit of loan repayments. The null hypothesis was rejected at 95% significance level meaning that product knowledge has an effect on loan repayments.

The second objective of the study was to establish the effect of income on loan repayment. The sources of income are seen to influence the amount of loans paid by the borrowers. Also, revenue stability was found to influence the time of paying loans. The study revenue flows were found to influence loan default rates. Conclusively, income was found to have an influence on loan repayment. The study further established a positive close relationship between revenue stability and loan payment in time. This means a positive close relationship exists between income and loan repayment. The linear regression model shows that one unit of income contribute 21.2% unit of loan repayments. The null hypothesis was rejected at 95% significant level which means income as a significant effect on loan repayment.

The third objective of the study was to establish the influence of MSMEs 5C's perspectives on repayment of loans. The findings show that loan repayments are influenced by the owner's capacity to borrow credit. Therefore, this denotes that business owners' provision of collateral influences the time paying of the loan. The conditions of the loans are critical in ensuring loans are paid on time, and furthermore % of loan paid is influenced by the previous repayment of the loan by the borrower. Business capital was found in average to influence the number of loans to be paid. In general, 5Cs was established to influence loan repayments with findings showing a positive close relationship existing between borrower's capacity and loan paid in time. Meaning a close relationship exists between 5C's and loan repayment. The linear regression model indicates that a unit of SCs and firms value contributes to 1.4% on loan repayment. The null hypothesis was rejected at 95% significance level meaning that 5Cs as a significant effect on loan repayments.

The fourth objective of the study was to establish the influence of a MSMEs firm's value perspectives on loan repayments. The findings of the value of assets of business influence rate of loan repayments. The study found that time for paying loans is influenced by the total debts of the business. The general finding shows liquidity of business affects repayment of the loans. The respondents were undecided on whether the market value of business influences the % of loan to be paid. Loan repayment is influenced by the firm's value. An average relationship exists between business total debts and loan repayments. This means an average relationship exists between firm's value and loan repayment. Linear regression findings showed that firm's value contributes to 1% on loan repayment. The null hypothesis was rejected at 95% significance level denoting that firms value have an effect on loan repayment.

5.2. Conclusion

The study concludes that socio-economic determinants have a higher influence on loan repayment. Product knowledge was found to have a significant predictive effect on loan repayment. This was through MSMES loan borrowers having the knowledge of cost, types and risks of the loans. The study concluded that income influences loan repayment. Income significantly predicted loan repayments. It meant that revenue streams, and stability of the MSMEs have the influence on loan repayment. The study further concluded that 5Cs influence loan repayment. It was found that 5Cs have a significant predictive effect on loan repayment. This meant that MSMEs borrowers' capacity, character, collateral, conditions, and capital influence loan repayment. Lastly, the study concluded that firms value influence loan repayment. A predictive effect was found between firms value and loan repayments. This meant that total debts, market value and liquidity influence loan repayment.

5.3. Recommendation

The empirical findings would provide beneficial outcomes for policy and practice. Policies focusing socio-economic determinants mentioned by the study need to be devised as management strategies to increase the % of loan repayments. In line with the government agenda of providing credit to small business the findings would be relevant. The Kenyan government needs to institute policies on credit management using socio-economic determinants before advancing the ‘Husler fund for small businesses.’ Policies need to be developed that ensures that socio-economic factors are part of the evaluation criteria this can be done via an application platform where the potential borrowers can fill. Further, the credit section in financial institutions should develop campaigns or awareness programs that would aid in building capacity of the borrowers on product knowledge (cost, risk, types, value of the loans) this aids in reducing loan default rates. Knowledge creation especially in schools or colleges on credit management would aid in future loan recovery and credit literacy. Additionally, the credit institutions should adopt flexible schemes that borrowers can pay or offset their loans based on the seasons that define their income streams.

The loan repayment and recovery initiatives are primary components in enhancing financial institution performance. Therefore, banking institutions should develop suitable procedures that will enforce the use of 5C’s and firms value as criteria’s of ensuring loans are issued to the right persons and reducing the burden of numerous defaulted loans. Scholars and researchers need to capitalize on additional knowledge provided to them on credit management by enriching their studies or finding gaps to be filled by their studies.

5.4. Suggestions for Future Studies

The study recommends that future studies should be conducted in other geographical regions to ascertain the results of the current studies. A study need to be conducted to establish the factors comparability between different economic occupations as this mainly affects loan repayments. Future studies can also integrate banking staff as part of the study respondents to seek their views on the subject being investigated.

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APPENDICES

Appendix I: Questionnaire for MSMEs loan borrowers

To Study respondents

I am a Student at Koitaleel Samoei University College pursuing a Master of Business Administration; my research is on 'BORROWER'S SOCIO-ECONOMIC DETERMINANTS ON LOAN REPAYMENTS: A SURVEY OF NANDI MICRO, SMALL AND MEDIUM SIZED ENTERPRISES OWNERS PERSPECTIVES.' My respondents are owners of MSME's. Kindly I need your support in filling this questionnaire. Thank you in advance.

SECTION A: BACKGROUND INFORMATION

1. Indicate the number of years in your business:
   1 to 2 years [ ]
   3-4 years [ ]
   5 years & above [ ]
2. Indicate the type of loans you have ever borrowed:
   Agricultural loans [ ]
   Business loans [ ]
   Secured loans [ ]
   Financing loans [ ]
   Any other..
3. Indicate the category showing your outstanding loan?
   Below 5million [ ]
   5-10 million [ ]
   11-20 million [ ]
   Above 21 million [ ]

SECTION B: PRODUCT KNOWLEDGE AND LOAN REPAYMENTS

4.Rate by ticking (√) where appropriate from the following statements that explain product knowledge influence on loan repayments. Rating scale is as follows; 1=SD (strongly Disagree), 2=D(Disagree), 3=U(Undecided), 4=A(Agree), 5=SA (Strongly Agree).

Statements	**5**	**4**	**3**	**2**	**1**
Knowledge of the loan products does influence loan repayment on time					
Knowledge of the cost of loans does influence the amount of loan paid					
Knowledge of the credit risks does influence frequency of paying loans					
Knowledge of the types of loan services does influence the % of loan to be paid					

SECTION C: INCOME AND LOAN REPAYMENT

5. Rate by ticking (√) where appropriate from the following statements that explain the relation between income and loan repayments among MSMEs loan borrowers. Rating scale is as follows; 1=SD (strongly Disagree), 2=D(Disagree), 3=U(Undecided), 4=A(Agree), 5=SA (Strongly Agree).

Statements	**5**	**4**	**3**	**2**	**1**
Sources of income influence the amount of loans paid					
Revenue stability influenced the time of paying loans					
Size of the income influence the % of loan amount paid					
Revenue flows influence loan default rates					

SECTION C: 5C’s AND LOAN REPAYMENT

6.Rate by ticking (√) where appropriate from the following statements that explain the relation between 5Cs and loan repayments. Rating scale is as follows; 1=SD (strongly Disagree), 2=D(Disagree), 3=U(Undecided), 4=A(Agree), 5=SA (Strongly Agree).

Statements	**5**	**4**	**3**	**2**	**1**
Capacity to borrow credit influences the loan repayment rates					
Provision of collateral influences the time paying of the loan					
Conditions of the loans are critical in ensuring loans are paid on time					
The previous repayment of loans influences the % of loan paid					
Capital availability influence the number of loans to be paid					

SECTION D: FIRMS VALUE AND LOAN REPAYMENTS

7.Rate by ticking (√) where appropriate from the following statements that explain the influence of firm's value on loan repayment. Rating scale is as follows; 1=SD (strongly Disagree), 2=D(Disagree), 3=U(Undecided), 4=A(Agree), 5=SA (Strongly Agree).

Statements	**5**	**4**	**3**	**2**	**1**
The value of assets of business influence rate of loan repayment					
The total debt of business influences the time for paying loans					
The liquidity of business affects repayment of the loans					

The market value of business influences the % of loan to be paid					

SECTION E: LOAN REPAYMENT

8.Rate by ticking (√) where appropriate from the following statements that explain your repayment. Rating scale is as follows; 1=SD (strongly Disagree), 2=D(Disagree), 3=U(Undecided), 4=A(Agree), 5=SA (Strongly Agree).

Statements	**5**	**4**	**3**	**2**	**1**
Loans is paid within the required time					
No time have default occurred on the loans					
The business has honored several numbers of repaid loans					
Large % of the loan borrowed has been paid					

Appendix II: Letter of Transmittal

KOITALEEL SAMOEI UNIVERSITY COLLEGE
(A CONSTITUENT COLLEGE OF THE UNIVERSITY OF NAIROBI)

OFFICE OF THE DIRECTOR SCHOOL OF BUSINESS

Email: jlishenga@ksu.ac.keJ
Website:www.ksuc.ac.ke

Telephone: +0722638064
P.O. Box 5-30307
Mosoriot, Kenya

REF: KSUC/SOB/MBA/PR/001

DATE: November 8, 2022

TO: WHOM IT MAY CONCERN

RE: EMMY CHELAGAT - D61/0014/2019,

This is to confirm that the above person is a bona-fide student in the School. She has successfully completed MBA course work, prepared the requisite project proposal and is ready to proceed to the field for data collection.

Her project proposal is titled, **Effect of Socio–economic Determinants on loan Repayments among Micro, Small and Medium Sized Enterprises in Nandi County.**

Any assistance and cooperation given to her in furtherance of her research enterprise will be welcomed and appreciated.

Thank you,

Faithfully.

08 NOV 2022

Prof. Josephat L. Lishenga
Director, Scholl of Business

Cc: Prof. J. Lishenga
Mr. Joab Ooko
Coordinator, Post-Graduate Studies Committee

Appendix III: Research Permit

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Ref No: **184193**

Date of Issue: **17/November/2022**

RESEARCH LICENSE

This is to Certify that Ms.. Emmy Chelagat of Koitaleel Samoei University College, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nandi on the topic: EFFECT OF SOCIAL-ECONOMIC DETERMINANTS ON LOAN REPAYMENTS AMONG MICRO,SMALL AND MEDIUM SIZED ENTERPRISES IN NANDI COUNTY. for the period ending : 17/November/2023.

License No: **NACOSTI/P/22/21965**

184193

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Director General
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See overleaf for conditions

BORROWERS SOCIO-ECONOMIC DETERMINANTS OF LOAN REPAYMENT: A SURVEY OF PERSPECTIVE OF NANDI MSME'S OWNERS

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