DETERMINANTS OF ACCESS TO PERSONAL LOANS AMONG WORKERS IN FORMAL EMPLOYMENT, A CASE OF MOI TEACHING AND REFERRAL HOSPITAL STAFF

BY

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DECLARATION

By the Candidate

This Research Project is my original work and has not been presented in any institution or University for examination purpose. No part of this project may be produced without the consent of the author and/or Moi University.

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By the Supervisors

This research project has been submitted for examination with our approval as University supervisors.

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DEDICATION

I wholeheartedly dedicate this research project to my beloved husband and cherished children. Your unwavering support and love inspire my pursuit of knowledge.

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ABSTRACT

Employees' access to personal loans has become a critical choice in financing their numerous financial obligations in today's economy. Employees face new challenges in obtaining adequate loans to meet their financial needs. This is due to the fact that employees' earnings may be low or they do not have the collateral required by banks to advance loans. Despite numerous research in the area of access to personal loans little attention has been given to the link between job security, employee income level, collateral and guarantors, credit history and access to person loans. The study sought to identify the determinants of access to personal loans among workers in formal employment, at Moi Teaching and Referral Hospital. The study was guided by the following objectives; to determine the effect of job security, employee income level, collateral and guarantors and credit history on access to personal loans. The theories that underpinned the study were; the contract and credit risk and default theories. The study used explanatory research design. The study targeted 3,780 Moi teaching and referral hospital staff on formal employment. The study used stratified sampling technique to select the employees where respondents were picked from. Random sampling was used to select the employees that constitute the sample size of 361. This study used questionnaires to collect primary data relevant to the study. Cronbach Alpha was used to determine reliability of the data instruments. Quantitative data collected was analysed using descriptive statistical techniques which included frequencies, mean, standard deviation. Pearson correlation was used to test correlation of the variables. Multiple regressions was used to test the hypothesis at 0.05 level of significant. The study results revealed that the overall regression model was significant and that job security, employee income level, collateral and guarantors and credit history explained 66.9% variation in access to personal loans. The study regression results also indicated that the determinants positively, negatively and significantly affected access to personal loans; job security (β=0.650, p=0.00), employee income level (β= -0.283, p=0.000), collateral and guarantors (β=0.307, p=0.000), and credit history (β=0.360, p=0.000). The study concluded that job security, collateral and guarantors and credit history had a positive and significant effect on access to personal loans, suggesting that an increase in these variables increases access to personal income and the employee income level had a negative and significant effect on access to personal loans, implying that an increase in employee income level reduces access to personal loans. The study recommended that employing Institutions management and boards should ensure that their employees' jobs are secured because this enhances the access to loans from financial institutions. The study recommends that the same study be carried out in a different setting targeting different respondents in other institutions. The study was restricted to four determinants of access to personal loans and the study recommends that other studies can explore other possible determinants can affect access to person loans.

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OPERATIONAL DEFINITION OF TERMS

Access to Personal Loan: The ability of an individual to obtain a financial loan from a lending institution based on their creditworthiness, financial stability, and willingness to repay. It reflects the ease with which a person can secure a loan for personal financial needs, such as education, medical expenses, or other personal requirements.

Collateral: An asset of value, such as property, vehicle, or valuable possessions, pledged by a borrower to a lender as security against a loan. Collateral serves as a form of assurance for the lender that if the borrower defaults on the loan, the lender can claim the collateral to recover the outstanding amount.

Credit History: A comprehensive record of an individual's borrowing and repayment activities, including details about loans, credit cards, and other financial obligations. It includes information about the timeliness and consistency of repayments, as well as any instances of defaults or late payments. A positive credit history enhances one's credibility and access to credit facilities.

Guarantor: An individual or entity that assumes responsibility for the repayment of a loan or debt in the event that the primary borrower is unable to fulfill their repayment obligations. A guarantor provides an additional layer of

assurance to the lender, enhancing the borrower's creditworthiness.

Income Level: The total amount of money earned by an individual within a specific timeframe, often a month or a year, before deducting taxes or other expenses. It represents the monetary compensation received from various sources, including employment, investments, and other forms of revenue.

Job Security: The perceived or actual stability of an individual's employment situation within an organization. It is characterized by the expectation that the job will be sustained over time, with minimal risk of unexpected termination, layoffs, or significant changes in employment terms.

ACRONYMS AND ABBREVIATIONS

ADB: Asian Development Bank

AI: Artificial Intelligence

FSD: Financial Sector Deepening

ILO: International Labour Organization

Ksh: Kenya Shilling

NACOSTI: National Commission for Science, Technology & Innovation

SMEs: Small and Medium Enterprises

US: United States

CHAPTER ONE

INTRODUCTION

1.0 Overview

This chapter presents the background of the study, statement of the problem, objectives of the study, research hypothesis, significance of the study, and finally the scope of the study.

1.1 Background of the Study

Personal loan is a form of debt that is given to an individual borrower without collateral as long as the borrower has proved of regular income. Personal loans are obtained for consumer credit which refers to the use of credit to purchase personal needs, such as durable goods, finance education, medical care and other expenses (FSD, 2007). personal loans are payable through check-off where the loan is recovered at source by the employer and remitted to the bank or through a standing order from the individuals' transaction account when his salary is received. Personal loans are considered as a risky segment to commercial banks especially to the high rate of defaulters. This is normally caused by multiple borrowing from different financial institutions against limited ability to pay by individuals and other reasons such as termination of employment, employer's failure to honor check-off arrangements with financial institutions and death of the borrower (Ngila, 2010).

Some workers prefer personal loans because of its purposes, cost, flexibility and risk. Traditionally, the main purpose of personal loan has been to finance durable consumption while secured debt has financed house purchase, but the purposes for which debt is used are changing (Davey, 2001). Usually, personal loan has a relatively higher cost since lack of collateral leads to higher interest rates and shorter terms than secured debt. However, there is also an increasing amount of aggregate personal loan

that does not bear any explicit interest, arising from purchases offering interest-free credit or from the use of credit cards that do not bear interest if settled at the end of each month.

Access to personal loans has been associated with increased incomes and financial stability in many countries around the world. There is a general assumption that access to personal loans will improve household welfare with reference to consumption levels and better living standards of borrowers. Bridges and Disney (2002) argue that access to -credit by low-income households is positively associated with income-related and income generating characteristics.

Some previous studies indicate that the probability of getting a loan decreases with household income (Swain, 2007; Del-Rio and Young, 2005). Low-income households get a loan to cover their needs but they have debt frequently (Kamleitneir and Kirchler, 2007). In addition, workers with positive past experience with regards to get a loan are more likely to get loan (Duca and Rosenthal, 1994). In addition, workers are less likely to get a new loan when they have problems in repaying their loan (Campbell, 2006). According to Lyons (2003), the number of credit cards positively affects the probability of getting a loan. Finally, the probability of getting a loan is negatively affected by savings. Workers are more likely to get a personal loan when they do not save money (Kamleitneir and Kirchler, 2007). Specifically, previous empirical surveys confirm that the amount of personal loan increases with the age (Fabbri and Padula, 2004; Magri, 2002). The marital status is negatively related with personal loan. Single and divorced have higher personal loan than married (Del-Rio and Young, 2005). Household size proxies for needs and personal loans are likely to increase with needs (Nguyen, 2007; Duong and Izumida, 2002; Fabbri and Padula, 2004). In particular, loan amount increases with number of children (Swain, 2007).

Accordingly, high-income employee have larger personal loan than low-income households (Lin and Yang, 2005; Jappelli and Pistaferri, 2007; Crook, 2001). However, this study did not articulate the determinants of access to personalloans among non-teaching staff in Kenyan universities.

According to the Banking and Financial Institution Act [Act No. 12/91: Sec 37(3) and (5)], the banks are prohibited from granting or permitting advances unless such advances have been unanimously approved by all of its directors and have been notified in advance to the Central Bank of Kenya. However, this clause was changed with the CBK allowing the banks to issue loans to customers with good credit history. Loans are monetary loans that are not secured against the borrower's assets (no collateral is involved) (Krige, 2012). There are small business loans such as credit cards and credit lines to large corporate credit lines. Financial publications in Kenya haveput lending in the spotlight (Whitfield, 2011) as the Credit Regulator (Credit Regulator, 2012) question the lending growth that has taken place in the recent past.

1.2 Statement of the Problem

Granting of personal loans to employees in today's economy has become a vital choice in financing their numerous financial obligations. Credit facilities all over the world have helped many nations, corporate bodies, institutions, small scale businesses and individuals in meeting major economic challenges. The unlimited economic activities of these individuals and the insatiable needs and the lifestyle of employees have necessitated the choice for other financial support either from the employer or from their bankers (Quaye, 2012).

The demand for personal loans is seen in the increasing number of applications that have been made by employees. As of 2022, Kenyan banks provided gross loans worth

about 3.6 trillion Kenyan Shillings (KSh), around 25.8 billion U.S. dollars. The personal and household sector received the highest amount of bank credit that year, just over 27 percent of the total (around 984 billion KSh, or around seven billion U.S. dollars). Nevertheless not all employees especially among employees on formal employment can access these loans due to some factors. In the past, the employed middle class particularly teachers had minimal or no access to credit facilities since they were regarded as more risky and unlikely to repay their loans allowing a few to acquire personal loans at exorbitant interest rate.

There are previous studies that were conducted in relation to personal loans. Briozzo and Vigier (2014) carried out a study on the role of personal loans in the financing of SMEs. Their findings were that older companies, firms with lower expected growth rates, younger owners, those who seek to create value or growth, and owners who perceive low emotional costs associated with bankruptcy, are less likely to use personal loans to finance their operations.

Nangila, (2013) conducted a study on the effect of unsecured personal loans on household welfare of secondary school teachers in Bungoma County, Kenya and found that utilization of unsecured personal loans contributed to improved health care and better education, empowerment of female secondary school teachers, reduction of the poverty levels, creation of employment and earning of extra income, improved total household consumption, provision of startup capital for businesses, and enabled households to put up better houses. The study established that unsecured personal loans improved household welfare for Secondary school teachers in Bungoma County.

Sawaengha, Thammajariyawat, and Leemakdej, (2022), their study on the business service model of digital personal loans in Thailand revealed that the factors affecting changes in the personal loan business of the service providers are changes in information technology and consumer behavior. As a result, entrepreneurs needed to change traditional personal loan services that relied on only documents to prove income to the new form of personal loan services that rely on information technology to provide services, such as big data analytics, alternative data, and artificial intelligence (AI) and the mobile application for digital personal loan service. Digital personal loan service today is still in the initial stage. Therefore, the Bank of Thailand needs to set standards and regulations as guidelines for the service providers to comply. However, the digital personal loan service of the service providers still relies on the traditional way of personal loan consideration along with modern information technology so the service providers have limitations in reaching new customers or people who do not have full-time jobs or retail traders cannot access personal loan services. These studies shows that there is a gap in literature, because none of these studies have linked the determinants to access to personal loans. Therefore, it was imperative to study on the determinants of access to personal loans among employees on formal employment at Moi Teaching and Referral Hospital, Eldoret.

1.3 General Objective

The main aim of the study was to assess the determinants of access to personal loans among workers in formal employment, a case of Moi teaching and referral hospital.

1.4 Specific Objectives

i. To determine the effect of job security on access to personal loan
ii. To find out the effect of employee income level on access to personal loan
iii. To investigate the effect of collateral and guarantors on access to personal loan

iv. To establish the effect of credit history on access to personal loans

1.5 Research Hypotheses

H_{01}: Job security has no significant effect on access to personal loan

H_{02}: Employee income level has no significant effect on access to personal loan

H_{03}: Collateral and guarantors have no significant effect on access to personal loan

H_{04}: Credit history has no significant effect on access to personal loans

1.6 Significance of the Study

The research findings enable policy makers in employment institutions to develop measures that increase accessibility to loans by negotiating for lower interest rates levied on credit facilities. This enhances credit access and employee welfare.

The government on the other hand use the findings of this study to establish monetary policies that reduce the base lending rate which translates to reduced interest rates charged on loans thus enhancing accessibility to credit facilities.

Salaried employees find this research work useful by appreciating how loans have contributed to improvement in their welfare. This in turn enhances accessibility since most people fear accessing loans from financial institutions due to financial illiteracy.

The study contribute to theory by providing additional evidence to support the theory. Scholars use information in this study as part of their literature review while carrying out further research on personal loans and household welfare. This study identified the research gaps to enhance further investigation by scholars on accessibility to lending and its impact on the welfare and general living standards of borrowers

1.7 Scope of the Study

The study covered determinants (Job security, employee income level, collateral and guarantors and credit history) of access to personal loans among Moi Teaching and Referral Hospital employees under formal employment. The study targeted 3,780 employees in teaching and referral hospital over a period of one moth, during the primary data collection. The study used primary data and information regarding access to personal loan, job security, employee income level, collateral and guarantors and credit history were sourced through the use of self-administered questionnaire.

CHAPTER TWO

LITERATURE REVIEW

2.0 Overview

This chapter presents relevant literature related to the study and compares the views of different authors on the same. It includes the concept of personal loans, concept of employee job security on access to personal loans, income on access to personal loans and employee credit history on access to personal loans.

2.1 Concepts of the Study Variables

The study discussed the various variables as follows;

2.1.1 Access to Personal Loans

Access to personal loans is a pivotal aspect of modern financial systems that empowers individuals with the means to achieve their financial goals, address emergencies, and invest in personal and professional growth. Brüggen, Hogreve, Holmlund, Kabadayi, and Löfgren, (2017) as economies continue to evolve, the availability and accessibility of personal loans play a crucial role in shaping individuals' financial trajectories and overall well-being.

Personal loans refer to financial arrangements where individuals borrow money from lending institutions such as banks, credit unions, or online lenders for various personal reasons. These reasons can include funding education, consolidating debts, making major purchases, covering medical expenses, or even pursuing leisure activities (Barr, 2012). Access to personal loans entails the ability of individuals to obtain these loans efficiently, transparently, and at favorable terms, thereby contributing to their financial stability and flexibility.

The concept of borrowing money has deep historical roots, tracing back to ancient civilizations where lending and borrowing formed the foundation of economic activities (Ekelund and Hébert, 2013). However, the modern form of personal loans and their accessibility emerged during the Industrial Revolution, as banking systems and consumer credit began to take shape. Over time, the evolution of financial institutions, credit scoring systems, and regulatory frameworks has refined and expanded the landscape of personal loans.

Access to personal loans empowers individuals to bridge financial gaps, whether it's purchasing a home, starting a business, or dealing with unforeseen medical expenses. This empowerment enhances their overall financial well-being. Personal loans contribute to economic growth by stimulating consumer spending, fostering entrepreneurship, and driving demand for goods and services. The availability of credit boosts economic activities and creates job opportunities. Personal loans facilitate investments in human capital through education loans. This allows individuals to acquire new skills and knowledge, leading to enhanced employability and earning potential (Steger, 2023). Easy access to personal loans provides a safety net during emergencies, preventing individuals from falling into financial distress due to unexpected events. Personal loans can help individuals consolidate high-interest debts into a single, manageable payment, improving their financial management and potentially reducing overall interest payments.

Lenders often assess an individual's creditworthiness before approving a personal loan (Zhang, Xiong, Ni, and Li, 2015). Those with poor credit histories may face challenges in accessing loans or may be subject to higher interest rates. Economic disparities can limit access to personal loans for individuals with lower incomes, creating an uneven playing field and perpetuating financial inequality. Some lending

practices exploit vulnerable individuals by offering loans with exorbitant interest rates and hidden fees, leading to a cycle of debt. Navigating the regulatory landscape surrounding personal loans can be complex for both lenders and borrowers. Regulations aim to ensure fair lending practices but can inadvertently create barriers. The shift towards online lending platforms may exclude individuals without access to digital technologies from enjoying the benefits of easy loan applications.

Continued innovation in lending models, including peer-to-peer lending and blockchain-based lending, could provide alternative avenues for accessing personal loans. Enhanced financial literacy programs can equip individuals with the knowledge to make informed borrowing decisions and manage loans effectively. Bridging the digital divide through improved digital literacy initiatives can ensure that everyone has equal access to online loan platforms (Ingram, 2021). The evolution of credit scoring models, incorporating non-traditional data points such as payment history for utility bills and rent, could widen access to loans for more individuals. The financial industry can focus on promoting ethical lending practices that prioritize borrowers' long-term financial well-being over short-term profits.

Access to personal loans stands as a cornerstone of modern finance, offering individuals the means to accomplish their aspirations and navigate unexpected financial challenges. Through a historical lens, this concept has evolved to reflect changing economic landscapes and technological advancements (Pike, Rodríguez-Pose, and Tomaney, 2018). While personal loans offer immense benefits, challenges remain in ensuring equitable access, fair lending practices, and the responsible use of credit. By addressing these challenges and embracing future innovations, societies can foster an environment where access to personal loans becomes a catalyst for widespread financial empowerment and opportunity.

2.1.2 Job Security

Job security, a fundamental concept in the realm of employment and labor, represents the level of assurance an individual has regarding the continuity and stability of their current employment. It reflects the confidence employees have in their ability to retain their positions within an organization over a specified period, even in the face of economic uncertainties, technological changes, and organizational shifts. Job security refers to the confidence employees have in the stability of their employment within an organization (Arundel and Doling, 2017). It encompasses the assurance that one's job will remain intact, barring exceptional circumstances such as significant economic downturns or drastic organizational changes.

Job security can be perceived through various dimensions, including contractual agreements, labor market conditions, organizational policies, and individual skill sets. The concept of job security has undergone significant evolution over time. In earlier eras, employment often came with more stability, particularly in traditional industries and economies characterized by slower technological advancements (Granovetter, (2017). However, the rise of globalization, technological innovation, and shifts in labor markets have reshaped the dynamics of job security. Contemporary economies are marked by increased flexibility, short-term contracts, and a focus on adaptability in the face of rapid change.

Factors Influencing Job Security include: Economic stability and growth influence an organization's ability to maintain a stable workforce. Economic downturns can lead to downsizing, layoffs, and reduced job security, Automation and technological innovation can reshape job roles and lead to workforce transformations, impacting job security for certain positions, the interconnectedness of economies has created opportunities for outsourcing and offshoring, which can affect the stability of jobs in

certain industries and regions, the financial health and strategic direction of an organization play a pivotal role in determining its workforce requirements and job security levels, and supply and demand in the labor market influence the availability of jobs and an individual's bargaining power for job security (Luan, Tien, and Chi, 2013).

Job security provides employees with a sense of stability, financial certainty, and peace of mind. It fosters loyalty, job satisfaction, and commitment to an organization. On the flip side, the absence of job security can lead to stress, anxiety, and reduced morale. Ensuring job security can contribute to higher employee morale, productivity, and loyalty. However, excessive job security measures might impede organizational agility and responsiveness to market changes (Felipe, Roldán and Leal-Rodríguez, 2017).

The rise of the gig economy has challenged traditional notions of job security, as it often involves short-term contracts and freelancing arrangements. The COVID-19 pandemic accelerated the adoption of remote work and digitalization. While these changes offer flexibility, they also introduce new considerations for job security, such as cyber-security and the blurring of work-life boundaries. In the face of technological advancements, reskilling and up-skilling initiatives are becoming crucial for individuals to adapt to changing job roles and enhance their job security. Organizations are increasingly adopting flexible work arrangements to accommodate employee preferences, which can influence perceptions of job security (De Menezes, and Kelliher, 2017).

2.1.3 Income Level

Income level is a fundamental concept that serves as a key indicator of an individual's or household's financial status and well-being. It refers to the amount of money earned or received by an individual, family, or entity within a specific period, typically a year. Income level not only reflects an individual's purchasing power but also plays a crucial role in determining access to resources, quality of life, and overall socioeconomic opportunities (Vlaev and Elliott, 2014). This essay delves into the multifaceted concept of income level, exploring its definition, factors influencing it, measurement methods, implications for individuals and societies, and its role in addressing inequality. Income level refers to the total amount of money earned or received by an individual, household, or entity over a defined period, often a year. It encompasses various sources of income, including wages, salaries, business profits, investments, and government assistance. Income level serves as a foundational metric in assessing financial stability and determining an individual's position within the socioeconomic hierarchy (Hagenaars, 2017).

The type of occupation and industry an individual works in significantly affects their income. Certain industries, such as finance and technology, tend to offer higher-paying jobs compared to others. Education and skills play a vital role in determining earning potential. Individuals with higher levels of education and specialized skills often command higher incomes (Schlee and Karns, 2017). Accumulated experience and expertise can lead to promotions and salary increases, contributing to a higher income level. Income levels can vary greatly based on geographic location due to differences in cost of living and regional economic conditions. Unfortunately, gender and diversity disparities persist in many societies, leading to unequal income levels for marginalized groups.

Income level is closely linked to an individual's quality of life. Higher income levels often enable access to better housing, healthcare, education, and recreational opportunities. Higher income levels can facilitate upward socioeconomic mobility, allowing individuals to improve their living conditions and invest in their future (Wilkinson, 2020). Household income levels collectively contribute to consumer spending, which drives economic growth and stimulates demand for goods and services. Income levels influence eligibility for social services and safety net programs that provide support to individuals facing financial hardships.

Investing in education and skill development can empower individuals to access higher-paying jobs and increase their income levels. Implementing progressive taxation policies can help redistribute wealth and reduce income inequality. Setting minimum wage standards ensures that even low-skilled workers receive a certain level of income, promoting fair compensation (Fadil El-Turkey, 2021). Robust social welfare programs can provide support to individuals with lower income levels, mitigating the impact of poverty.

2.1.4 Collateral and Guarantors

Collateral and guarantors are vital concepts within the realm of lending and credit. They serve as mechanisms that provide lenders with additional security when extending loans or credit to borrowers. These concepts play a crucial role in mitigating risks associated with lending, enhancing creditworthiness, and facilitating access to financing for individuals and businesses (Samujh, Twiname, and Reutemann, 2012). Collateral refers to a valuable asset pledged by a borrower to a lender as security for a loan or credit. If the borrower fails to repay the loan, the lender has the right to seize and sell the collateral to recover the outstanding debt. Collateral can take various forms, such as real estate, vehicles, investments, or

valuable personal property. Guarantors, also known as cosigners or sureties, are individuals or entities that assume responsibility for repaying a loan if the primary borrower defaults. Guarantors provide an additional layer of assurance for lenders, increasing the likelihood of loan approval and reducing the lender's risk (Cudia, 2015).

Collateral serves as a form of security that lenders can use to recoup losses if a borrower defaults on the loan. Offering collateral can improve a borrower's creditworthiness, making it more likely for them to secure loans and obtain favorable interest rates (Blazy and Weill, 2013). Collateral can be classified into various categories, including real property (e.g., homes), personal property (e.g., vehicles), and financial assets (e.g., stocks, bonds).

Guarantors spread the risk of default across multiple parties, reducing the lender's exposure to loss. Borrowers with limited credit history or lower credit scores can increase their chances of loan approval by having a creditworthy guarantor. Guarantors can be individuals (family members, friends) or entities (corporations) that meet the lender's criteria for creditworthiness (Ságí, 2017).

Collateralized loans can offer lower interest rates and larger loan amounts compared to unsecured loans. Borrowers risk losing their pledged assets if they fail to repay the loan as agreed. Lenders have a tangible asset that can be sold to recover losses in the event of default. Valuing, managing, and liquidating collateral can be time-consuming and may not always result in full recovery (Mild, Waitz, and Wöckl, 2015).

Through guarantors borrowers can access loans they might not qualify for on their own due to limited credit history or income. Defaulting on the loan can negatively impact the guarantor's credit and financial standing (Zhou, Lin, and Cai, 2020).

Guarantors provide an additional layer of assurance, increasing the likelihood of loan repayment. Lenders must rely on the guarantor's ability and willingness to repay if the borrower defaults.

2.1.5 Credit History

Credit history is a pivotal concept within the realm of personal finance and lending. It represents a comprehensive record of an individual's borrowing and repayment behavior over time. A person's credit history serves as a crucial determinant of their creditworthiness, influencing their ability to access loans, credit cards, mortgages, and other forms of financial assistance (Garman and Forgue, 2014). Credit history refers to a detailed record of an individual's borrowing and repayment activities. This record is maintained by credit reporting agencies and encompasses various components, including: Credit Accounts; A listing of current and past credit accounts, including credit cards, loans, and mortgages, Payment History; A detailed record of payments made on credit accounts, reflecting whether payments were made on time or were overdue, Credit Limits and Balances; Information on credit limits and the current balances on credit accounts, Types of Credit; Details about the types of credit used, such as revolving credit (credit cards) and installment loans (mortgages, car loans), and Length of Credit History; The duration for which credit accounts have been open and active.

A positive credit history reflects responsible borrowing and repayment behavior, leading to higher creditworthiness and better loan terms. Lenders use credit history to assess the risk associated with lending to an individual (Bae, Chang, and Yi, 2018). A strong credit history increases the likelihood of loan approvals. A good credit history can lead to lower interest rates on loans and credit cards, saving borrowers significant amounts of money over time. Landlords often check credit history to evaluate

potential tenants' financial responsibility and reliability. Some employers may review credit history as part of the hiring process, especially for positions involving financial responsibilities.

Consistently making payments on time is one of the most critical factors in building a positive credit history. Keeping credit card balances below the credit limit demonstrates responsible credit utilization. A mix of different types of credit can contribute positively to credit history. Opening multiple new credit accounts within a short period can negatively impact credit history. Regularly reviewing credit reports for errors and unauthorized activities is essential for maintaining accurate credit history (Figlewski, Frydman, and Liang, 2012).

2.2 Theories Underpinning the Study

The study used the contract theory and credit risk and default theory to inform the study variables.

2.2.1 The Contract Theory

Developed by pioneering scholars such as Oliver Hart, Bengt Holmström, and John Moore (Fleckinger and Martimort, 2018). This theory informed the independent variable in the study. Contract theory, a fundamental pillar of modern economics, unveils the intricate web of agreements that underpins economic transactions and interactions across diverse contexts. This theory delves into the art of designing contracts to manage uncertainty, align incentives, and foster cooperation among individuals, firms, and entities engaged in economic exchange. Contract theory illuminates the dynamics of decision-making, risk management, and resource allocation within a world where information is imperfect, interests are divergent, and outcomes are uncertain.

Contract theory is relevant in various realms of economics, from labor markets and procurement agreements to financial markets and insurance contracts. It addresses the challenge of structuring agreements that motivate parties to act in ways that lead to mutually beneficial outcomes. In an increasingly complex and interconnected global economy, where transactions are riddled with information asymmetries and moral hazard, contract theory offers insights into designing mechanisms that facilitate efficient economic exchange while mitigating conflicts of interest and adverse selection (Posner and Weyl, 2012).

The emergence of contract theory was propelled by the realization that real-world economic transactions often involve parties with varying degrees of information and competing interests (Chang, Kauffman, and Kwon, 2014). As economists grappled with understanding how to create agreements that effectively balance incentives, scholars like Oliver Hart and Bengt Holmström refined the theoretical foundations of contract theory. The theory's applications extend beyond traditional contracts to encompass principal-agent relationships, adverse selection in insurance markets, procurement negotiations, and more.

However, contract theory has limitations: Simplicity vs. Real-World Complexity; Real-world contracts are often complex, involving various contingencies that theoretical models may not fully capture, Assumptions and Information; Models rely on assumptions that might not hold in all contexts, particularly when information is asymmetrical or uncertain, Enforcement Challenges; Enforcing contracts can be challenging and costly, especially in cross-border transactions (Alexander, Ivanic, Rosch, Tyner, Wu, and Yoder, 2012).

Scholars like Oliver Hart and Bengt Holmström have made significant contributions to contract theory. Hart's work on incomplete contracts has provided insights into property rights and decision-making authority. Holmström's research delves into the design of contracts with asymmetric information, offering practical solutions for various economic contexts (Antras, 2014).

Contract theory builds upon earlier economic theories like agency theory, game theory, and information economics. It synthesizes these concepts to provide a comprehensive framework for understanding how contracts function in various scenarios.

Contract theory aligns well with microeconomic analysis and game theory. It employs mathematical models and simulations to explore optimal contract designs that account for diverse scenarios. As technology evolves, the application of contract theory to block-chain and smart contracts opens new avenues for research. Exploring how these technologies influence contract enforcement, reduce information asymmetry, and enhance efficiency is an exciting direction for future studies.

2.2.2 Credit Risk and Default Theory

This theory is attributed to Robert C. Merton and informed the dependent variable in the study (Merton and Thakor, 2019). Credit risk and default theory, integral to the realms of finance and economics, offers a profound lens through which to analyze the uncertainties surrounding borrowing, lending, and economic stability. This theory delves into the intricacies of assessing the likelihood of borrowers defaulting on their obligations, shedding light on the complex interplay of economic conditions, borrower behaviors, and financial systems. With its origins rooted in economic

principles, credit risk and default theory holds a key to unraveling the dynamics of financial crises, risk management, and the underpinnings of lending practices.

The relevance of credit risk and default theory lies in its capacity to anticipate, understand, and mitigate the repercussions of borrower defaults on financial institutions, investors, and the broader economy. By quantifying and qualifying the risk associated with lending, this theory equips financial institutions and policymakers with tools to make informed decisions, devise risk management strategies, and maintain the stability of financial systems. In an era marked by economic volatility and interconnectivity, credit risk and default theory holds a pivotal role in averting systemic shocks and fostering sustainable growth (Taiwo, Ucheaga, Achugamonu, Adetiloye, and Okoye, 2017).

Credit risk and default theory emerged as a response to the need for predictive models that could gauge the likelihood of borrowers failing to meet their financial obligations. The aftermath of financial crises underscored the urgency to comprehend the underlying factors contributing to defaults, prompting researchers and economists to develop frameworks that examine borrower profiles, economic indicators, and systemic vulnerabilities (Almansour, 2015).

Lenders use this theory to assess the risk associated with borrowers and set interest rates accordingly. Financial institutions employ credit risk models to determine whether to approve or reject loan applications. Investors use credit risk assessment to diversify their portfolios and minimize exposure to high-risk assets. Policymakers employ credit risk analysis to implement regulatory measures that safeguard financial stability (Bekhet and Eletter, 2014).

Prominent researchers like Robert C. Merton have made substantial contributions to credit risk and default theory. Merton's structural model of credit risk has offered insights into the interplay of asset values, default probabilities, and risk management. Credit risk and default theory builds upon earlier work in finance, including portfolio theory, asset pricing, and risk management (Imbierowicz and Rauch, 2014). It synthesizes these concepts to offer a comprehensive understanding of borrower risk. Credit risk and default theory aligns with quantitative methods, statistical analysis, and econometric models. These methodologies enable researchers to quantify and predict credit risk based on historical and contemporary data. The advent of big data, machine learning, and alternative data sources present opportunities for enhancing credit risk assessment. Exploring how these technologies can improve the accuracy of predictive models and respond to rapidly changing economic landscapes is a promising avenue for future research.

2.3 Employee Job Security and Access to Personal Loans

Chigunta (2002) indicated that insufficient access to funds due to job insecurity is amongst the significant troubles among youngsters run companies globally. In Developing Countries, small businesses lack access to capital and money markets due to job insecurity. Investors are unwilling to invest in proprietorships, partnerships or unlisted companies, as risk perception about small businesses is high. While there are numerous credit ratings workshops focusing on ladies, younger ladies are underrepresented being a targeted team (ILO, 2008).

Having access to loan is essential for entrepreneurs because job security is used as collateral security for business credit (Schoof, 2006). The lack of job security translates directly into inability to access bank financing needed for their business.

While access to finance is an obstacle for all firms, entrepreneurs rate it as the single biggest constraint that prevents them from growing their business. The poor and other vulnerable groups such as women and the unemployed youth have limited access to land due to lack of job security (Ndubi & Karanja, 2008).

Kelley, (2011) asserts that poor and vulnerable categories of the community cannot access credit from formal banking institutions because they do not have job security or any other capital that is required as collateral security by these commercial banks. Ensuring access to credit services to these poor individuals and groups who have no formal collateral security will therefore contribute to their socio-economic empowerment and gradually reduce the inequalities in society (Moghadam, 2005). For these underprivileged women to access credit, alternative approaches on collateral security requirements have been adopted through the emphasis on social capital tools such as trust and network relations for securities. Peer groups who have known each other for a while and therefore have developed trust based on previous relations are being used instead of economic collateral securities such as title deeds, prime property or a salary pay slip often required by formal banking institutions (Kelley, Singer & Harrington, 2011).

Job tenure has been conceptually defined as the number of years in which an employee has taken up the first job position as a professional. Kamural et al, (2003) found a statistically significant but weak relationship between job tenure and access to personal loans. However, Cheston, (2002) found a statistically insignificant relationship between job tenure and access to personal loans.

Tilakaratna (2005) carried out a study on the impact of job tenure on access to personal loans in Sri Lanka. The study was an analysis of outreach of access to

personal loans and its impact on poverty in SriLanka. The study found out that access to personal loans in SriLanka has a wide outreach to low income people. It was also established that job tenure significantly influenced access to personal loans. It was also clear that even though personal loans are meant to assist the poor, majority of those who had positively benefited from the loans were non poor people from Sri-Lanka who had longer job tenures.

Mahjabeen (2008) conducted a study on access to loans in Bangladesh. The main findings of the study indicate that longer job tenures raise income and consumption levels of households leading to acquiring loans. This implies that job tenure is an effective loan strategy and has important policy implications regarding access to personal loans, income distribution and achievement of millennium development goals.

The Asian Development Bank ADB (2007) carried out a special evaluation on the effect of job tenure on personal loans among poor rural households and the status of women. The main objective of evaluation study was to assess the extent to which selected Asian Development Bank (ADB) microfinance projects have used job tenure to determine the ability of securing a loan and thus reduced the poverty of rural poor households and improved the socioeconomic status of women in developing member countries. Bangladesh, Philippines, and Uzbekistan were selected for the study, representing three of the five operational regions of ADB. The results of the evaluation study show that job tenure had positive and mildly significant impacts on loans among the beneficiaries.

2.4 Income Level and Access to Personal Loans

Income refers to an individual's total earnings from wages and investment enterprises, and other ventures. It is the sum of all the incomes actually received by all the individuals or household during a given period. It is that income which is actually received by the individuals or households in a country during the year from all sources (Stewart, 2012).

Nghiem et al., (2007) conducted a quasi-experiment survey on the effects of income on access to personal loans in Vietnam. In the study's econometric analysis, the welfare effects of microfinance are substituted using measures of household income and access to personal loans. The empirical results indicate that income has a positive effect upon household access to personal loans, with the size of the effect increasing at a decreasing rate as a household increases its income levels.

Another study was also carried out by Kondo et al., (2008) on the impact of income on access to personal loans among rural households in the Philippines. The study established that the impact of the availability of per capita income on microfinance loans is shown to be positive and marginally significant. This is also true for per capita total expenditure and per capita food expenditure. But it was also found that this impact is insignificant for poorer households and becomes only positive and increasing with richer households. It was also established that microfinance kept clients economically active with more enterprises and more employees. The study recommended that for microfinance to be an effective poverty-alleviation tool by giving access to personal loans there is a need to review targeting procedures to know whether these are correctly identifying the intended beneficiaries.

Omwange and Omoro (2013) associated access to personal loans to be determined by household income and which leads to improved Welfare in Bungoma County. However not much has been done to assess the effect of income on access to personal loans in hospitals despite the fact that this forms the largest portion of loan portfolios in commercial banks.

Bruhn and Love (2014) their paper provided new evidence on the impact of access to finance on poverty. It pointed out an important channel through which access affected poverty and the labor market. The paper exploits the opening of Banco Azteca in Mexico, a unique "natural experiment" in which over 800 bank branches opened almost simultaneously in pre-existing locations of Elektra stores. Importantly, the bank had focused on previously underserved low-income clients. Their key findings was the sizeable effect of access to finance on labor market activity and income levels, especially among low income individuals and those located in areas with lower preexisting bank penetration. Overall, their findings indicated that access to finance can contribute significantly to poverty alleviation. They also shed new light on the channels through which increased access to finance for low-income individuals promotes economic development, namely by fostering the survival and creation of informal businesses and by increasing employment.

2.5 Collateral and Guarantors and Access to Personal Loans

Charles and Mori (2016) examined the effect of the collateral informal lenders use to ensure loan repayment. Specifically they measured how the use of movable and immovable assets affects loan repayment and delinquency rate, and assessed the extent to which guarantorship and relationship-lending act as collateral to improve loan repayment. With a dataset of 835 individual borrowers drawn from an informal Tanzanian lending institution, they ran descriptive and econometric models. The

results suggested that movable assets increase the likelihood that borrowers perceived to be less creditworthy will obtain loans from informal sources and repay them. We also find a small proportion of customers to have pledged immovable assets as collateral when borrowing from informal lenders. The results also showed the positive effect of referral, which implies that relationship lending and social collateral is key to increasing access to finance through informal lenders.

Rahman, Rahman and Ključnikov (2016) examined the issue of pledging collateral and its effect on access to credit, interest rates and credit risk of SMEs financing in Bangladesh with respect to bank size. They also examined the collateral classification (fixed assets collateral, personal guarantee and third-party guarantee) by bank ownership types to find what types of collateral are preferred by public, private and foreign banks in Bangladesh for lending to firms. In addition to that, they examined whether collateral requirements are different between large and small banks as they have different incentives for collateral based lending. Their empirical results suggested that small banks have no additional incentives to provide loans based on the collateral security than large banks. Hence, they did not find any evidence that collateral can increase access to credit for SMEs from small banks. Similarly, they also did not find any effect of collateral on interest rates or collateral security can lower the default rates of the SME loans and the results are similar regardless bank size. With regards to collateral segmentation across bank ownership types and bank size, their regression's results suggest that each type of banks has its own preferences about collateral requirements while lending to firms. Therefore, they concluded that depending on bank internal policy commercial banks ask for different collateral, which comply with the best interests of banks.

Calcagnini, Farabullini and Giombini (2014) their article analysed the role of guarantees on loan interest rates of Italian firms before and during the recent financial crisis. It improves on the existing literature by using explicit measure of collateral and personal guarantees and by modelling unobserved heterogeneity between low-level groups (banks) within a single nested panel data set. Their database covered the period 2006–2009 for a total of 560 339 firms and 214 banks.

Their analysis showed that collateral guarantee affects the cost of credit for Italian firms by systematically reducing the interest rate of secured loans. This effect was larger during the crisis. Personal guarantees show no systematic effect on interest rates, but favour firms' access to credit. Furthermore, guarantees are a more powerful instrument for riskier borrowers than for safer borrowers, i.e., the decrease in interest rates due to the presence of guarantees is larger for the former than for the latter.

Domeher and Abdulai (2012) their article seeks to critically examine why previous studies in the developing world have failed to establish any significant positive link between land registration and access to credit. It is argued that formalizing property titles alone will not be enough solve the problem of limited access to credit in the developing world. Many households and businesses in developing countries are said to face credit constraints which limit their ability to undertake investments in various production-enhancing economic activities required to reduce poverty. This limited access to formal credit is often attributed to the lack of 'acceptable' collateral, resulting from the absence of formally registered land titles. Despite the fact that this assertion is fast gaining ground, land registration has not been found empirically to positively influence access to credit.

2.6 Employee Credit History and Access to Personal Loans

Ewert et al. (2000) studied the determinants of access to personal loans in Germany using credit file information of 260 medium-sized firm borrowers for the period 1992-1998. The study aimed at testing the several theories relating to access to unsecure personal loans using a random effects model on panel data analysis to eliminate the borrower and time-specific effects. Two models were estimated with credit history and probability of distress as the two predicted variables. The credit history of individuals was found to significantly affect the rate of access to personal loans.

Frame, Srinivasan, and Woosley (2001) estimate that the use of credit history increases the portfolio share of loans by 8.4 percent for their sample of large commercial banking organizations this significantly affects the level of access to loans. Credit analysts ultimately determined that the personal credit history of small business owners is highly predictive of the loan repayment prospects of the business. Thus, personal information is obtained from a credit bureau and then augmented with basic business-specific data to predict repayment. Credit scoring will alter small business lending in three areas: the interaction between borrowers and lenders; loan pricing; and credit availability. First, credit scoring allows lenders to underwrite and monitor loans without actually meeting the borrower. This development is in stark contrast to the perceived importance of a local bank-borrower relationship. In fact, because of scoring systems, borrowers can obtain credit from distant lenders through direct marketing channels. Second, the price of small business loans should decline especially for high credit quality borrowers that will no longer have to bear the cost of extensive underwriting. Also, increased competition resulting from small businesses having access to more lenders should further lower borrowing costs. Third, credit scoring should increase credit availability for small businesses. Better information

about the repayment prospects of a small business applicant makes it more likely that a lender will price the loan based on expected risk, rather than denying the loan out of fear of charging too little. Moreover, the widespread use of credit scoring should increase future prospects for asset securitization by encouraging consistent underwriting standards.

Chernykh and Theodossiou (2011) investigated the determinants of access to personal loans in an emerging market using bank-level information from 881 banks in Russia. The variables of concern include credit history, capitalization, liability structure, risk taking, ownership type, and location of individuals. The findings reveal that the credit history and the bank capitalization are the only determinants of not only loans expended to businesses but also long-term loans.

Behr and Sonnekalb (2012) used a rich dataset from a commercial bank in Albania, they utilized the introduction of a public credit registry by the Albanian central bank in January 2008 as a natural experiment to analyze the effect of information sharing between lenders on (1) access to credit, (2) cost of credit, and (3) loan performance. Their results suggest that information sharing by means of a credit registry does not affect access to or cost of credit, but improves loan performance. Specifically, loans granted after the introduction of the credit registry are 3% points less likely of turning problematic, representing a 35% reduction of the overall sample average arrear probability. We further find that the effect is more pronounced for repeat borrowers and in areas, where competition is weak. This indicates that information sharing among lenders improves loan performance mainly by disciplining borrowers to repay in their concern about future access to credit.

2.7 Conceptual Framework

The independent variables for the study were; job security, employee income level, collateral and guarantors and credit history and access to personal loan being dependent variable.

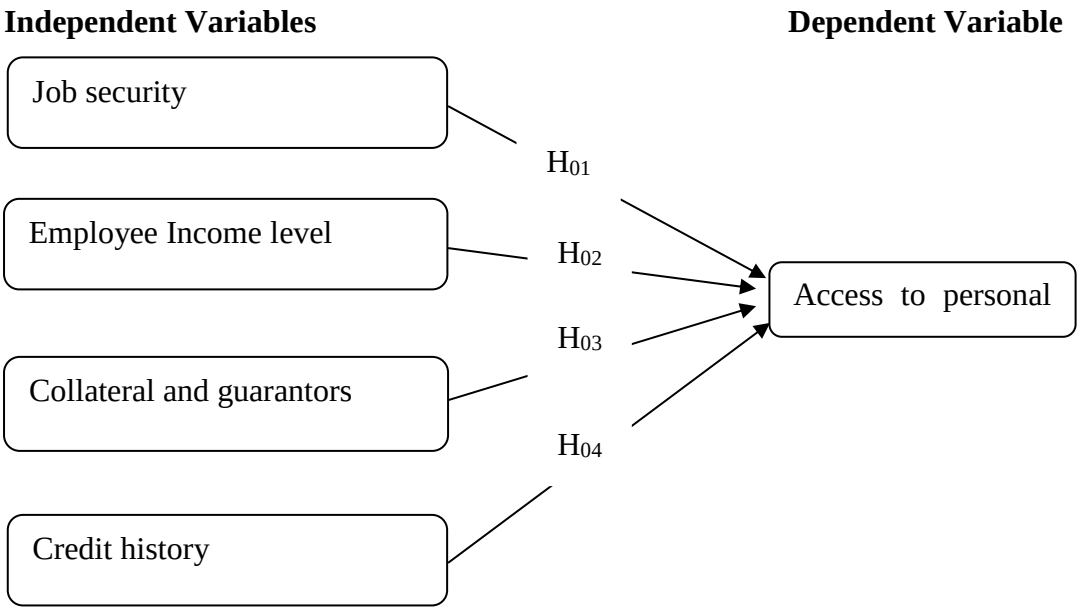

Figure 2.1: Conceptual Framework

Source; Author (2022)

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Overview

This chapter outlines the research design, target population, sample size, Data collection, Data analysis and presentation.

3.1 Research Design

Research design is a sketch and the procedures for research that cover the decisions from broad assumptions to detailed methods of data collection and analysis (Johnson and Onwuegbuzie, 2010). The study used explanatory research design. According to Cooper and Schindler (2000), explanatory research focused on why questions. In answering the why questions, the study involved developing causal explanations. According to Kumar (2005), explanatory research examines the effect of a naturally occurring situation after it has occurred, and in other words, it is a study that looks for causal relationship. This design was chosen because it applies closely to the research objectives of this study and was practical in testing the study hypotheses in trying to investigate the effect of the determinants on access to loans.

3.2 Target Population

The study targeted 3,780 Moi Teaching and Referral Hospital employees on formal employment as per the human resource records. The study targeted Moi Teaching and Referral Hospital because of the nature of employee workforce and the many departments that are diversified according to their functions and also the differences in salary scales.

3.3 Sampling Techniques

The study used stratified sampling to obtain a representative sample of employees from employees on formal employment at Moi teaching and referral hospital. This ensured a representative sample of all employees on formal employment. Out of the total population of 3,780Moi teaching and referral hospital employees on formal employment, a sample of 361was used for this study.

Table 3.1: Target Population

Department	No. of employees
Administration	770
Finance, audit & human resources and development	194
Oncology, radiology & diagnostics	208
Pharmacy & nutrition lab & pathology	393
Surgery, internal medicine & nursing	1290
Reproductive, rehabilitation & peadnaties	538
School of health sciences and commercial services	168
Information	219
TOTAL	**3780**

Source: (Moi Teaching and Referral HR records, 2022).

$$n = \frac{N}{1 + Ne^2}$$

Where: n = Sample size

N = Population size

e = the error of Sampling

This study allowed the error of sampling on 0.05. Thus, sample size was as follows:

Sample size= $3780/_{1 + 3780_{0.05^2}}$ =361Employees

The study used stratified sampling technique to select the employees where respondents were picked from. Employees were stratified into; Administration, Finance, audit & human resources and development, Oncology, radiology & diagnostics, Pharmacy & nutrition lab & pathology, Surgery, internal medicine &

nursing, Reproductive, rehabilitation & peadnaties, School of health sciences and commercial services and Information strata as per the departments and each department stratified further where the sample size was distributed according to Neyman allocation formula. The purpose of the method was to maximize survey precision, given a fixed sample size. With Neyman allocation, the best sample size for stratum h would be:

$$n_h = \left(\frac{N_h}{N}\right)\text{n}$$

Where,

n_h = the sample size in stratum h.

N_h= the population size for stratum h.

N =the total population size.

n= the sample size

Hence, distribution will be as follows;

Table 3.1: Sample Size

Department	No. of employees	Sample size
Administration	770	74
Finance, audit & human resources and development	194	19
Oncology, radiology & diagnostics	208	20
Pharmacy & nutrition lab & pathology	393	38
Surgery, internal medicine & nursing	1290	123
Reproductive, rehabilitation & pediatrics	538	51
School of health sciences and commercial services	168	16
Information	219	20
TOTAL	**3780**	**361**

Sources: Survey Data (2015)

Employees in formal employment at Moi teaching and referral hospital formed the sample. Human resource records was used to obtain a sample of staff in the different departments upon which random sampling was used to select the respondents in

proportion to the number of staff and the sizes of the population in each of the departments.

3.4 Data Collection Instruments

The study used primary data. Questionnaires were used to collect primary data relevant to the study. Sekaran (2013) suggests that questionnaires are resourceful data collection instrument which helps the researcher to know what will be required and how to measure the variables of concern. Structured questionnaires were administered to select respondents personally either by hand or through emailing.

3.5 Measurement of Variables

The study measured each variable using a number of items. The variables measured were access to personal loans, job security, employee income level, collateral and guarantors and credit history.

3.5.1 Access to personal Loan

The study measured Access to personal loans using a proxy of 6 items under five point likert scale (5"strongly agree, 4' agree, 3' neutral, 2' disagree and 1, strongly disagree). These items included; Each time I have applied for a loan I always get it, The amount of loan I had applied was given in time, The application procedure for personal loan is easy and clear, The loan I have received was satisfactory for me, I am not interested to apply for personal loans because the interest charged is too high, I am not interested to apply for personal loans because I have other sources of income Mullard (2012), Serrano-Cinca et.al (2015).

3.5.2 Independent Variables

The study had four independent variables; job security, employee income, collateral and guarantors and credit history.

3.5.2.1 Job Security

Job security which was measured using six items. They included; The hospital lay off staff regularly, The hospital is currently over staffed with, causal employees, I am protected by the employer on employment terms, I have a permanent contract with the hospital, It is unlikely to lose a job in the hospital, The labour union protects me from being unfairly dismissed by the hospital in case of any disciplinary issues Lu et.al (2017), Bernstrøm et.al (2018).

3.5.2.2 Employee Income

Employee income level was measured using 6 items; I get a regular monthly salary from the hospital, My salary income has always determined access to loans, My salary income has always determined the amount of loan that I get, My access to personal loans has depended on the other sources of income that I earn and not salary, My ability to repay loan has determined the loan I get, My access to loan depend on the income of guarantors Wang et.al (2018), Diener et.al (2013).

3.5.2.3 Collateral and Guarantors

Collateral and guarantors was measured using six proxies; The bank demands that I provide collateral in order to approve my loan, The banks demands that I provide people who guarantee my loan, The bank declined to approve my loan because I had no collateral to secure the loan, The bank declined to approve my loan because I failed to provide guarantors, The value of my collateral affects the amount I get as

loan, My access to loan depends on the ability of my guarantors to repay if I default Menkhoff et.al (2012), Blazy et.al (2013).

3.5.2.4 Credit History

Credit history will be measured using 7 items; I always pay my loans within the time given, I have never received a letter reminding me of delay or non-repayment of loans advanced to me, I have never delayed in repaying any loan advanced to me by financial institutions, I have never been enlisted by the credit reference bureau, My good credit history has been a determining factor in accessing more personal loans, The hospital has organized check off arrangements for its staff to ensure staff does not default in repaying their loans on time, My employer always deducts and remits my loans on a monthly basis without delay Oikonomou et.al (2014); Mullard et.al (2012).

3.6 Validity

Validity refers to "degree to which evidence supports any inferences a researcher makes based on the information collected using particular instrument" (Fraenkel, Wallen, & Hyun, (2012). In this study, two types of validity were tested; face validity and content validity. Face validity refers to the likelihood that questions in an instrument will be understood (Fraenkel, Wallen, & Hyun, 2012). To check on the face validity, a pilot study was conducted after which responses to each item was scrutinized to identify any misunderstandings and ambiguity. Items found to be unclear or ambiguous were modified thereby, improving face validity. Content validity "refers to whether an instrument provides adequate coverage of the topic" (Creswell & Miller, 2000). Expert Opinions, Literature searches and pre-testing of open-ended questions were used to improve the content validity used. The questions

in the questionnaire were brainstormed with colleagues and there after necessary corrections made.

To determine the content validity of questionnaire items, research experts will examine them. Suggestion and advice offered were used as a basis to modify the research items and make them more adaptable in the study. Their feedback was used to revise the instrument. In addition, the researcher conducted all the study in person in order to ensure systematic validity.

3.7 Reliability

Reliability refers to the degree to which the instrument yields the same results on replicated trials (Orodho, 2009). Reliability can be relied upon to produce the same results when used in two or more attempts to measure theoretical concepts (Kothari, 2000). To ensure reliability of the questionnaires, a pilot study targeting 50 employees was carried out in Uasin Gishu county referral hospital because it operates under the same conditions and offer the same services of treating patients. Cronbach Alpha was used to determine a reliability index. According to Sekaran (2003), a reliability index of more than 0.7 is considered ideal for the study.

3.8 Data Analysis

This refers to the important assessment of the coded data and making inferences (Kombo & Tromp, 2009). The questionnaires were collected by the researcher after which they were coded and fed into the SPSS software and analysed. Initial screening of data was done using sort functions. Data was based on the objectives and research hypotheses of the study. Quantitative data collected was analysed using descriptive statistical techniques which were frequencies, mean, standard deviation. Pearson correlation was used to test association of the data which is an assumption for

regression model. Multiple regressions model was used to test the hypothesis at 0.05 level of significant or depending on degrees of freedom. From the frequencies and observation the researcher made conclusions and recommendations.

3.8.1 Diagnostic Tests

Statistical tests were used to validate the regression assumptions in the study. Normality, heteroskedasticity, multicollinearity, and autocorrelation were the assumptions. These tests were performed in the study to ensure that the data met these assumptions and produced good results.

3.8.1.1 Normality Assumption

This implies that the sample data should come from a normally distributed population. Confidence intervals may become too wide or narrow if the error terms are not normally distributed. When a confidence interval becomes unstable, estimating coefficients based on least squares minimization becomes difficult. The presence of a non-normal distribution indicates that there are a few unusual data points that must be closely examined in order to create a better model. The Shapiro-Wilk test was used to determine normalcy in the study. The null hypothesis is normality and the alternative is non-normality. The study rejected failed to reject the null hypothesis and concluded that the data came from a population that is normally distributed when $p>0.5$.

3.8.1.2 Heteroskedasticity Assumption

Heteroskedasticity occurs when the error terms have non-constant variance. Non-constant variance occurs when there are outliers or extreme leverage values. These values appear to be given too much weight, influencing the model's performance disproportionately. When this happens, the confidence interval for out of sample prediction becomes unrealistically large or narrow. Breusch-pagan was used in the

study to test for heteroskedasticity. The null hypothesis is homoscedasticity and heteroskedasticity is the alternative.

3.8.1.3 Multicollinearity Assumption

When the independent variables are moderately or highly correlated, this phenomenon occurs. In a model with correlated variables, determining the true relationship of predictors to response variables becomes difficult. In other words, it becomes difficult to determine which variable is actually influencing the response variable. The standard errors tend to increase in the presence of correlated predictors. Furthermore, with large standard errors, the confidence interval expands, resulting in less precise estimates of slope parameters. The variance inflation factor (VIF) was used in the study to test for multicollinearity. A VIF value of less than 4 indicates no multicollinearity, whereas a value of >= 10 indicates severe multicollinearity.

3.8.2 Multiple Regression Model

The multiple regression model used in this study was given as;

$$\boldsymbol{APL = \alpha + \beta_1 JS + \beta_2 EI + \beta_3 CG + \beta_4 CH + \varepsilon}$$

Where:

APL= Access to personal loans

α = constant.

$\beta_1 \ldots \beta_4$ = Coefficients

JS = Employee Security

EIL= Employee Income

CG = Collateral and Guarantor

CH = Credit History

ε = Error Term

3.9 Ethical Considerations

Permission to carry out the study was sought from the relevant authorities of Moi teaching and referral hospital and National Commission for Science, Technology and Innovation (NACOSTI). The researcher maintained confidentiality of information and took into account the effects of the research on employees, and act in a way that protected their decorum. In this study, the researcher assured all the respondents that the information given was used for academic purposes only. This was done to ensure honest information was given and also to enhance the process of data collection.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.0 Overview

This chapter presents the data analysis, presentation and interpretation of the findings on the effects of employee job security, employee income level, collateral and guarantors and credit history on access to personal loans. The chapter layout was under various sections; response rate, demographic information, descriptive statistics, reliability test, factor analysis, data transformation, correlation analysis, diagnostic tests, and regression analysis.

4.1 Response Rate

A total of 361 self-administered questionnaires were distributed to the employees of Moi teaching and referral hospital. Out of these, 12 questionnaires were not returned leaving us with 349 effective questionnaires translating to 96.68% response rate which was adequate for the study.

4.2 Demographic Information

The table 4.1 presented the demographic information of the respondents which included gender, age and years worked of the respondents. The table 4.1 showed that out of 349 respondents 193 were male and 156 female, meaning that male respondents were more in number than their female counterparts.

The table also showed that the employees on formal employment at Moi teaching and referral hospital were of different categories. Out of the 349 respondents, 6 respondents were between the age of 18-26 representing 1.7%, 142 of the respondents were between the age of 27-35, representing 40.7%, 123 of the respondents were between the age of 36-44 (35.2%), 66 respondents were between the age of 45-53

(18.9%) and 12 respondents were above 53 years (3.4%). This revealed that most of the employees on formal employment at Moi teaching and referral hospital were between the ages of 27-35 with only 12 of the employees above 53 years being the least of the total number of employees under formal employment at Moi teaching and referral hospital.

The table reported that of the total number of respondents on formal employment at Moi teaching and referral hospital, 110 had worked in the institution for years between 1 and 6 (31.5%), 144 had worked for years between 7 and 12(41.3%), 50 were between 13 and 18 years (14.3%), 37 were between the years 19 and 24 (10.6%) and finally, 8 had worked for 24 years and above (2.3%). The findings showed that of the total respondents, 144 being the highest number having worked between 7 and 12 years at Moi teaching and referral hospital and only 8 being the least number for those who worked for 24 years and above.

Table 4.1: Demographic Information of the Respondents

Gender	**Frequency**	**Percent**
Male	193	55.3
Female	156	44.7
Total	349	100
Age		
18-26	6	1.7
27-35	142	40.7
36-44	123	35.2
45-53	66	18.9
Above 53	12	3.4
Total	349	100
Years worked		
1-6	110	31.5
7-12	144	41.3
13-18	50	14.3
19-24	37	10.6
Above 24	8	2.3
Total	349	100

Researcher, (2023)

4.3 Descriptive Statistics

The table 4.2 presented the descriptive statistics for access to personal loans. The table results revealed that on average the respondents were neutral (3.25) that each time they had applied for a loan they always get it. This indicated that a majority of the employees on formal employment at Moi Teaching and Referral Hospital could neither agree nor disagree on the issue that each time they apply for a loan they always get it. Also the table reported that of all the respondents, some strongly agreed that each time they applied for a loan they always get it while others strongly disagreed. The standard deviation showed that the spread from the mean was 1.041, meaning that minus or plus standard deviation from the mean indicated that most of the respondents also disagreed and agreed respectively, that each time they applied for a loan they always get it.

The average on the amount of loan applied being given in time was 3.03, indicating that the majority of the respondents were neutral on the issue that the amount of loan applied was given in time. The standard deviation was 1.103 reporting that plus or minus standard deviation showed that there were respondents who agreed and disagreed that the amount of loan they had applied was given in time. The maximum and minimum results showed that there were also respondents who strongly agreed and disagreed that the amount of loan they had applied was given in time.

The minimum and maximum findings on the application procedure for personal loan being easy and clear showed that there were respondents that strongly agreed and disagreed on this issue. The average for the application procedure for personal loans being easy and clear was 2.82 meaning that most of the respondents disagreed. The standard deviation was 1.183 meaning that a plus and minus standard deviation from

the mean indicated that there were respondents that agreed and disagreed that the application procedure for personal loan was easy and clear.

The loan I received was satisfactory to me showed a minimum of 1 and a maximum of 5, meaning that there were respondents that strongly disagreed and agreed that the loan they received was satisfactory respectively. The average on the loan received being satisfactory was 3.39 meaning that most of the respondents were neutral and could neither agree nor disagree that the loan received was satisfactory. The standard deviation was 1.134 confirming that plus or minus standard deviation from the mean shows that there were respondents that agreed and disagreed respectively, that the loan received was satisfactory.

The average for I am not interested to apply for personal loans because the interest rates were high was 2.34, revealing that most of the respondents disagreed. The minimum and maximum results showed that there were respondents who strongly disagreed and strongly agreed that they were not interested in applying for personal loans because the interest rates were high. The standard deviation was 1.062, meaning that plus or minus standard deviation from the mean shows that some of the respondents strongly disagreed that they were not interested in applying for personal loans because interest rates were high and some were neutral.

The minimum was 1 showing that some respondents strongly disagreed that they were not interested in applying for personal loans because they had other sources of income and maximum was 5 indicating that some respondents strongly agreed that they were not interested in applying for personal loans because they had other sources of income. The average that I am not interested to apply for a loan because I have other sources of income was 2.22, meaning that majority of the respondents disagreed. The

standard deviation was 1.221, indicating that plus or minus standard deviation from the mean revealed that there were respondents that strongly disagreed that they were not interested in applying for personal loans because they had other sources of income and others were neutral.

Table 4.2: Descriptive Statistics for Access to Personal Loans

	N	Minimum	Maximum	Mean	Std. Deviation
Each time I have applied for a loan I always get it	349	1	5	3.25	1.041
The amount of loan I had applied was given in time	349	1	5	3.03	1.103
The application procedure for personal loan is easy and clear	349	1	5	2.82	1.183
The loan I have received was satisfactory for me	349	1	5	3.39	1.134
I am not interested to apply for personal loans because the interest charged is too high	349	1	5	2.34	1.062
I am not interested to apply for personal loans because I have other sources of income	349	1	5	2.22	1.221
Valid N (listwise)	349				

Researcher, (2023)

The table 4.2 presented the descriptive statistics for job security. The findings showed that on average (2.14) majority of the respondents disagreed that the hospital lay off staff regularly, meaning that most of the staff under employment are not laid off on a regular basis. The minimum (1) and maximum (5) indicated that there were respondents who strongly disagreed and strongly agreed that the hospital lay off staff regularly. Standard deviation was 1.162 indicating that minus and plus standard deviation revealed that there were those who strongly disagreed that the hospital lay off staff regularly and some were neutral.

The hospital is currently over staffed with causal employees had a minimum of 1 and a maximum of 5, mean was 1.77 and a standard deviation of 0.962. These findings showed that there were respondents that strongly disagreed that the hospital was over staffed with causal employees and there were some that strongly agreed. The mean indicated that most of the respondents disagreed that the hospital was over staffed with causal employees. The plus or minus standard deviation from the mean revealed that there were respondents that were neutral and some strongly disagreed that the hospital was overstaffed with causal employees.

I am protected by the employer on employment terms had a minimum of 1, maximum of 5, mean of 3.41 and a standard deviation of 1.237. The results confirmed that there were respondents that strongly disagreed and strongly agreed that they were protected by the employer on employment terms. The mean signified that most of the respondent were neutral that they are protected by the employer on employment terms. The plus or minus standard deviation demonstrated that there were respondents that disagreed and agreed that they are protected by the employer on employment terms.

I have a permanent contract with the hospital had a minimum of 1 and a maximum of 5, mean was 3.82 and the standard deviation was 1.250. These findings displayed that some respondents strongly disagreed and some strongly agreed that they had a permanent contract with the hospital. The mean stated that the majority of the respondents agreed that they had a permanent contract with the hospital. The plus or minus standard deviation from the mean suggested that some of the respondents strongly agreed and some disagreed that they had a permanent contract with the hospital.

It is unlikely to lose a job in the hospital had a minimum of 1, maximum of 5, mean of 3.27 and a standard deviation of 1.299. The results inferred that there were respondents that strongly disagreed and strongly agreed that they are unlikely to lose their jobs in the hospital. The mean revealed that most of the respondents were neutral that they were unlikely to lose their jobs in the hospital. The plus or minus standard deviation from the mean demonstrated that some of the employees agreed and some disagreed that they were unlikely to lose their jobs in the hospital.

The labour union protects me from being unfairly dismissed by the hospital in case of any disciplinary issues had a minimum of 1 and a maximum of 5, the mean was 3.31 and standard deviation of 1.253. The results inferred that some of the employees strongly disagreed and some strongly agreed that the labour unions protects them from being unfairly dismissed by the hospital in case of any disciplinary issues. The mean demonstrated that most of the employees were neutral that the labour union protects them from being unfairly dismissed by the hospital in case of any disciplinary issues and the plus and minus standard deviation revealed that some of the respondents agreed and some disagreed that the labour unions protected them in case of unfair dismissal by the hospital.

Table 4.3: Descriptive Statistics for Job Security

	N	Minimum	Maximum	Mean	Std. Deviation
The hospital lay off staff regularly	349	1	5	2.14	1.162
The hospital is currently over staffed with causal employees	349	1	5	1.77	.962
I am protected by the employer on employment terms	349	1	5	3.41	1.237
I have a permanent contract with the hospital	349	1	5	3.82	1.250
It is unlikely to lose a job in the hospital	349	1	5	3.27	1.299
The labour union protects me from being unfairly dismissed by the hospital in case of any disciplinary issues	349	1	5	3.31	1.253
Valid N (listwise)	349				

Researcher, (2023)

Table 4.3 presented the descriptive results for the employee income level. The results revealed that minimum was 1, maximum was 5, mean was 4.06 and the standard deviation was 1.076 for I get a regular monthly salary from the hospital. The findings showed that some of the respondents strongly disagreed and some strongly agreed that they get a regular monthly salary from the hospital. The mean demonstrated that most of the respondents agreed that they get a regular salary from the hospital. The plus and minus the standard deviation from the mean inferred that there were some respondents that strongly agreed and some were neutral that they get a regular income from the hospital.

My salary income has always determined access to loans had a minimum of 1, maximum of 5, mean of 3.87 and a standard deviation of 1.296.The results implied that there were respondents that strongly disagreed and strongly agreed that their salary income always determined access to loans. The mean reported that most of the

employees agreed that their salary income always determined access to loans. The plus or minus standard deviation demonstrated that there were some employees who strongly agreed and some disagreed that their salary income always determined access to loans.

My salary income has always determined the amount of loan that I get had a minimum of 1, maximum of 5, mean of 4.01 and a standard deviation of 1.220.The findings confirmed that there were respondents that strongly disagreed and strongly agreed that their salary income always determined the amount of loan that they get. The mean indicated that the majority of the respondents agreed that their salary income always determined the amount of loan they get. The plus and minus standard deviation from the mean indicated that there were respondents that were neutral and some strongly agreed that their salary income always determined the amount of loan they get.

My access to personal loans has depended on the other sources of income that I earn and not salary had a minimum of 1, maximum of 5, mean of 1.94 and standard deviation of 0.844. The results revealed that there were respondents that strongly disagreed and strongly agreed that their access to personal loans depended on the other sources of income and not salary. The mean implied that most of the respondents disagreed that access to personal loans depended on other sources of income and not salary. The plus and minus standard deviation from the mean suggested that some respondents were neutral and some strongly disagreed that access to personal loans depended on other sources of income and not salary.

My ability to repay loan has determined the loan I get had a minimum of 1 and a maximum of 5, the mean was 3.27 and the standard deviation was 1.300. The findings

indicated that there were respondents that strongly disagreed and some strongly agreed that the ability to repay loan determined the loan they get. The mean reported that majority of the respondents were neutral that the ability to repay loan determined the loan they get. The plus or minus standard deviation from the mean showed that there were respondents that agreed and disagreed that the ability to repay loan determined the loan they get.

My access to loan depend on the income of guarantors had a minimum of 1 and a maximum of 5, the mean was 2.05 and the standard deviation was 1.076. The results indicated that there were respondents that strongly disagreed and strongly agreed that access to personal loan depended on the income of guarantors. The mean showed that most of the respondents disagreed that access to loan depended on the income of guarantors.

Table 4.4: Descriptive Statistics for Employee Income Level

	N	Minimum	Maximum	Mean	Std. Deviation
I get a regular monthly salary from the hospital	349	1	5	4.06	1.076
My salary income has always determined access to loans	349	1	5	3.87	1.296
My salary income has always determined the amount of loan that I get	349	1	5	4.01	1.220
My access to personal loans has depended on the other sources of income that I earn and not salary	349	1	5	1.94	.844
My ability to repay loan has determined the loan I get	349	1	5	3.27	1.300
My access to loan depend on the income of guarantors	349	1	5	2.05	1.076
Valid N (listwise)	349				

Researcher, (2023)

The table 4.4 presented the descriptive findings for collateral and guarantors. The bank demands that I provide collateral in order to approve my loan had a minimum of 1 and a maximum of 5, the mean was 2.14 and standard deviation of 1.123. The findings showed that there were respondents that strongly disagreed and strongly agreed that the bank demanded that they provide collateral in order to approve their loan. The mean implied that majority of the respondents disagreed that the bank demanded that they provide collateral in order to approve loan and the plus and minus standard deviation from the mean suggested that some respondents were neutral and some strongly disagreed that bank demanded that they provide collateral in order to approve loan.

The bank demands that I provide people who guarantee my loan had a minimum of 1 and a maximum of 5, the mean was 2.29 and a standard deviation of 1.013.The results reported that there were respondents that strongly disagreed and strongly agreed that the bank demanded that they provide people to guarantee their loans. The mean indicated that majority of the respondents disagreed that the bank demanded that they provide people to guarantee their loans and the plus and minus standard deviation from the mean inferred that some respondents were neutral and some strongly disagreed that the bank demanded that they provide people to guarantee their loans.

The bank declined to approve my loan because I had no collateral to secure the loan had a minimum of 1, maximum of 5, mean of 2.15 and standard deviation of 1.100.The findings showed that some respondents strongly disagreed and strongly agreed that the bank declined to approve their loans because they had no collateral to secure the loan. The mean suggested that majority of the respondents disagreed that the bank declined to approve their loans because they had no collateral to secure their

loans. The plus or minus standard deviation from the mean indicated that some respondents were neutral and some strongly agreed that the bank declined to approve their loans because they had no collateral to secure their loans.

The bank declined to approve my loan because I failed to provide guarantors had a minimum of 1, maximum of 5, mean of 2.22 and standard deviation of 1.061.The results showed that some respondents strongly disagreed and strongly agreed that bank declined to approve their loans because they failed to provide guarantors. The mean referred that most of the respondents disagreed that the bank declined to approve their loan because they failed to provide guarantors. The plus and minus standard deviation from the mean showed that some of the respondents were neutral and some strongly disagreed that the bank declined to approve their loan because they failed to provide guarantors.

The value of my collateral affects the amount I get as loan had a minimum of 1 and a maximum of 5, the mean was 2.31 and the standard deviation was 1.187.The findings implied that there were respondents who strongly disagreed and strongly agreed that the value of their collateral affected the amount they got as loan. The mean indicated that most of the respondents disagreed that the value of their collateral affected the amount they got as a loan. The plus or minus standard deviation from the mean revealed that some of the respondents were neutral and some strongly disagreed that the value of their collateral affected the amount they got as a loan.

My access to loan depends on the ability of my guarantors to repay if I default had a minimum of 1 and a maximum of 5 with a mean of 2.28 and a standard deviation of 1.125.The results suggested that the respondents strongly disagreed and strongly agreed that access to loan depends on the ability of guarantors to repay if the default.

The mean reported that majority of the respondents disagreed that access to loan depended on the ability of guarantors to repay if they default. The standard deviation showed that plus or minus from the mean stated that there respondents who were neutral and strongly disagreed that access to loan depended on the ability of guarantors to repay if they defaulted.

Table 4.5: Descriptive Statistics for Collateral and Guarantors

	N	Minimum	Maximum	Mean	Std. Deviation
The bank demands that I provide collateral in order to approve my loan	349	1	5	2.14	1.123
The banks demands that I provide people who guarantee my loan	349	1	5	2.29	1.013
The bank declined to approve my loan because I had no collateral to secure the loan	349	1	5	2.15	1.100
The bank declined to approve my loan because I failed to provide guarantors	349	1	5	2.22	1.061
The value of my collateral affects the amount I get as loan	349	1	5	2.31	1.187
My access to loan depends on the ability of my guarantors to repay if I default	349	1	5	2.28	1.125
Valid N (listwise)	349				

Researcher, (2023)

The table 4.5 presented the descriptive statistics for credit history and the results showed that I always pay my loans within the time given had a minimum of 1 and a maximum of 5 with a mean of 3.72 and a standard deviation of 1.196. The study results showed that some respondents strongly disagreed and strongly agreed that they always pay their loans within the time given. The mean stated that majority of the

respondents agreed that they always pay their loans within the time given and the plus and minus standard deviation revealed that there were respondents who strongly agreed and some neutral that they always paid their loans within the time given.

I have never received a letter reminding me of delay or non-repayment of loans advanced to me had a minimum of 1, maximum of 5, mean of 3.22 and a standard deviation of 1.279. The findings showed that some respondents strongly disagreed and strongly agreed that they never received a letter reminding them of delay of loans advanced to them. The mean indicated that majority of the respondents were neutral that they have never received a letter reminding them of delayed or non-repayment of their loans. The plus or minus standard deviation suggested that some respondents disagreed and some agreed that they never received a letter reminding them of delay or non-repayment of loans advanced to them.

I have never delayed in repaying any loan advanced to me by financial institutions had a minimum of 1, maximum of 5, mean of 3.37 with a standard deviation of 1.154. The results showed that some respondents strongly agreed and strongly disagreed that they have never delayed repaying their loans advanced to them by financial institutions. The mean revealed that majority of the respondents were neutral that they never delayed in repaying any loans advanced to them by financial institutions. The standard deviation revealed that some of the respondents agreed and some disagreed that they have never delayed in repaying any loans advanced to them with plus or minus standard deviation.

I have never been enlisted by the credit reference bureau had a minimum of 1 and a maximum of 5 with a mean of 2.51 and a standard deviation of 1.076.The results stated that some of the respondents strongly disagreed and strongly agreed that they

have never been enlisted by credit reference bureau. The mean reported that most of the respondents disagreed that they have never been enlisted by the credit reference bureau. The plus or minus standard deviation from the mean revealed that there were some respondents who were neutral and some strongly agreed that they have never been enlisted by credit reference bureau.

My good credit history has been a determining factor in accessing more personal loans had a minimum of 1 and a maximum of 5 with a mean of 3.44 and a standard deviation of 1.152.The findings showed that some respondents strongly disagreed and strongly agreed that their good credit history was a determining factor in accessing more personal loan. The mean showed that most of the respondents were indifferent that their good credit history had been a determining factor in accessing more of personal loans and the plus and minus standard deviation from the mean revealed that some respondents agreed and some disagreed that their good credit history had been a determining factor in accessing more personal loans.

The hospital has organized check off arrangements for its staff to ensure staff does not default in repaying their loans on time had a minimum of 1 and a maximum of 5 with a mean of 3.44 and a standard deviation of 1.339. The study findings showed some the respondents strongly disagreed and strongly agreed that the hospital had organized check off arrangements for its staff to ensure staff don't default in repaying their loans on time. The mean showed that majority of the respondents were neutral and that plus or minus standard deviation from the mean indicated that some respondents agreed and disagreed that the hospital had organized check off arrangements for its staff to ensure that they do not default in repaying their loans.

My employer always deducts and remits my loans on a monthly basis without delay had a minimum of 1, maximum of 5, mean of 3.56 and a standard deviation of 1.261.The findings revealed that some respondents strongly disagreed and strongly agreed that the employer always deducts and remits their loans on a monthly basis without delay. The mean showed that majority of the respondents were neutral and that plus or minus standard deviation from the mean revealed that some respondents strongly agreed and disagreed that their employer always deducts and remits their loans on a monthly basis without delay.

Table 4.6: Descriptive Statistics for Credit History

	N	Minimum	Maximum	Mean	Std. Deviation
I always pay my loans within the time given	349	1	5	3.72	1.196
I have never received a letter reminding me of delay or non-repayment of loans advanced to me	349	1	5	3.22	1.279
I have never delayed in repaying any loan advanced to me by financial institutions	349	1	5	3.37	1.154
I have never been enlisted by the credit reference bureau	349	1	5	2.51	1.076
My good credit history has been a determining factor in accessing more personal loans	349	1	5	3.44	1.152
The hospital has organized check off arrangements for its staff to ensure staff does not default in repaying their loans on time	349	1	5	3.44	1.339
My employer always deducts and remits my loans on a monthly basis without delay	349	1	5	3.56	1.261
Valid N (listwise)	349				

Researcher, (2023)

4.4 Reliability Analysis

The study carried out the reliability analysis in order to study the properties of measurement scales and the items that compose the scales for access to personal loan, job security, employee income level, collateral and guarantors and credit history variables. The study used cronbach's alpha to test reliability for internal consistency. The table 4.7 showed that the cronbach's alpha for each variable was within the acceptance range, therefore, the measurement scales for all the variables were reliable.

Table 4.7: Reliability Statistics

Variable Name	Cronbach's Alpha	N. Of Items
Access to personal loan	0.704	6
Job security	0.798	6
Employee income level	0.715	6
Collateral and guarantors	0.934	6
Credit history	0.854	7

Researcher, (2023)

4.5 Transformation of Data

The study transformed the data to make it more organized before running the regression analysis. The study transformed the data by calculating mean of the items for each variable.

4.6 Correlation Analysis

The table 4.8 showed that the association between access to personal loan and job security ($r = 0.688$, $p=0.000$) was positively strong and significant, indicating that an increase in job security increases access to loan significantly by 0.88 and vice versa. This was in line with the findings of Ngila (2010) that Personal loans are considered as a risky segment to commercial banks especially to the high rate of defaulters. This is normally caused by multiple borrowing from different financial institutions against limited ability to pay by individuals and other reasons such as termination of

employment, employer's failure to honor check-off arrangements with financial institutions and death of the borrower.

The association between access to personal loan and employee income level (r = 0.287, p=0.000) was positive and significant, meaning that an increase in employment income increases access to personal loan significantly by 0.287 and vice versa. This was consistent with the findings of Nghiem et al., (2007) that income has a positive effect upon household access to personal loans, with the size of the effect increasing at a decreasing rate as a household increases its income levels.

The association between access to personal loan and collateral and guarantors (r = 0.313, p=0.000) was positive and significant, meaning that an increase in collateral and guarantors increases access to personal loan significantly by 0.313 and vice versa. This was in line with the findings of Charles and Mori (2016) that movable assets increase the likelihood that borrowers perceived to be less creditworthy will obtain loans from informal sources and repay them. They also found a small proportion of customers to have pledged immovable assets as collateral when borrowing from informal lenders. The results also showed the positive effect of referral, which implies that relationship lending and social collateral is key to increasing access to finance through informal lenders.

The association between access to personal loan and credit history (r = 0.575, p=0.000) was strongly positive and significant, meaning that an increase in credit history increases access to personal loan significantly by 0.575 and vice versa. This was in line with the results of Ewert et al. (2000) that the credit history of individuals was found to significantly affect the rate of access to personal loans.

Table 4.82: Correlations Matrix

		APL	JB	EIL	CG	CH
APL	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	349				
JB	Pearson Correlation	.688**	1			
	Sig. (2-tailed)	.000				
	N	349	349			
EIL	Pearson Correlation	.287**	.507**	1		
	Sig. (2-tailed)	.000	.000			
	N	349	349	349		
CG	Pearson Correlation	.313**	-.014	.117*	1	
	Sig. (2-tailed)	.000	.790	.030		
	N	349	349	349	349	
CH	Pearson Correlation	.575**	.517**	.570**	.133*	1
	Sig. (2-tailed)	.000	.000	.000	.013	
	N	349	349	349	349	349

Researcher, (2023)

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

4.7 Regression Analysis

The study run diagnostic analysis for normality assumption, homoscedasticity assumption and multicollinerity assumption before conducting the regression analysis. These assumptions are important and should be met before drawing inferences regarding the model estimates to avoid bias and misspecification.

4.7.1 Normality Test

The study used Shapiro-Wilk to test whether the data came from a population that is normally distributed. The null hypothesis is that the data is normal and the alternative is not normal. The table 4.9 revealed that all the Shapiro-Wilk values were greater than 0.05, therefore, the study failed to reject the null hypothesis and conclude that the data came from a population that is normally distributed.

Table 4.9: Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Access to Personal Loan	.304	349	.146	.815	349	.106
Job security	.350	349	.054	.772	349	.057
Employee Income Level	.291	349	.194	.846	349	.182
Collateral and Guarantors	.217	349	.200	.910	349	.470
Credit History	.300	349	.159	.911	349	.476

Researcher, (2023)

4.7.2 Multicollinearity

The study used variance inflation factor to test for multicollinearity. The table 4.10 results suggested that all the variance inflation factor values for all the variables were below five, indicating that there was absence of multicollinearity and that one predictor variable could not predict the other.

Table 4.10: Tests of Normality

	Collinearity Statistics	
	Tolerance	**VIF**
Job security	.657	1.523
Employee income level	.609	1.642
Collateral and guarantors	.966	1.035
Credit history	.596	1.677
Dependent Variable: Access to personal loans		

Researcher, (2023)

4.7.3 Heteroscedasticity

The table 4.11 presented the lavene statistic for homoscedasticity test. The null hypothesis is homoscedasticity and the alternative is heteroscedasticity. The findings showed that all the p values were greater than 0.05 indicating that the study failed to reject the null hypothesis and concluded that the data was homoscedastic.

Table 4.11: Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Access to personal loan	.232	1	347	.630
Job security	.531	1	347	.467
Employee income level	.082	1	347	.775
Collateral and guarantors	.253	1	347	.615
Credit history	.061	1	347	.805

Researcher, (2023)

4.7.4 Regression Results

The table 4.12 presented the regression results that was used to form inference about the whole population. The results showed that the model was significant and that job security, employment income, collateral and guarantors and credit history explained 66.9% variation in access to personal loan. The findings showed that job security had a positive and significant effect (β= 0.650, p= 0.000) on access to personal loans and that a unit change in job security leads to significant increase in access to personal loan by 0.650. This was consistent with the findings of Chigunta (2002) that indicated that insufficient access to funds due to job insecurity is amongst the significant troubles among youngsters run companies globally. In Developing Countries, small businesses lack access to capital and money markets due to job insecurity.

The employment income level had a negative and significant effect (β= -0.283, p= 0.000) on access to personal loans and that a unit change in employment income level leads to significant decrease in access to personal loan by 0.283. This agreed with the findings of Yunus (2001) that Personal loans have also the ability to assist in poverty alleviation among developing countries through empowering low-income households financially, governments are able to reduce the unemployment rates and improve on income per capita. The small businesses run by low income individuals and households sponsored by personal loan borrowers provide employment to many

unemployed people thus improving their lives as well as those of their immediate dependents.

The collateral and guarantors had a positive and significant effect (β= 0.307, p= 0.000) on access to personal loans and that a unit change in collateral and guarantors leads to significant increase in access to personal loan by 0.307. This was inconsistent with the results by Rahman, Rahman and Ključnikov (2016) that small banks have no additional incentives to provide loans based on the collateral security than large banks. Hence, they did not find any evidence that collateral can increase access to credit for SMEs from small banks. Similarly, they also did not find any effect of collateral on interest rates or collateral security can lower the default rates of the SME loans and the results are similar regardless bank size. With regards to collateral segmentation across bank ownership types and bank size, their regression's results suggest that each type of banks has its own preferences about collateral requirements while lending to firms. Therefore, they concluded that depending on bank internal policy commercial banks ask for different collateral, which comply with the best interests of banks.

The credit history had a positive and significant effect (β= 0.360, p= 0.000) on access to personal loans and that a unit change in credit history leads to significant increase in access to personal loan by 0.360. This was consistent with the findings of Frame, Srinivasan, and Woosley (2001) that credit history increases the portfolio share of loans by 8.4 percent for their sample of large commercial banking organizations this significantly affects the level of access to loans. Credit analysts ultimately determined that the personal credit history of small business owners is highly predictive of the loan repayment prospects of the business.

Table 4.12: Regression Results

Model 1	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
	B	Std. Error	Beta		
(Constant)	.522	.134		3.905	.000
Job security	.726	.043	.650	16.990	.000
Employee income level	-.302	.042	-.283	-7.133	.000
Collateral and guarantors	.229	.024	.307	9.738	.000
Credit history	.094	.011	.360	8.963	.000
R Square 66.9%, Adjusted R Square 66.5%, F 174.066 Sig. 0.000					

Researcher, (2023)

4.8 Hypothesis Testing

The table 4.12 presented the regression directs effects that were used to test the various study hypotheses.

H_{01}: job security has no significant effect on access to personal loan

The table 4.12 showed that job security positively and significantly affected access to personal loans (β= 0.650, p= 0.000). The p value was less than 0.05 therefore, the study rejected the null hypothesis that job security has no significant effect on access to personal loan and concluded that job security has a significant effect on access to personal loan. This was consistent to the findings of Ndubi and Karanja (2008) that the lack of job security translates directly into inability to access bank financing needed for their business. While access to finance is an obstacle for all firms, entrepreneurs rate it as the single biggest constraint that prevents them from growing their business. The poor and other vulnerable groups such as women and the unemployed youth have limited access to land due to lack of job security.

H_{02}: employment income level has no significant effect on access to personal loan

The table 4.12 stated that employee income level negatively and significantly affected access to personal loans (β= -0.283, p= 0.000). The p value was less than 0.05 therefore, the study rejected the null hypothesis that employee income level has no significant effect on access to personal loan and concluded that employee income level has a significant effect on access to personal loan. This was inconsistent with the findings of Kondo et al., (2008) that the impact of the availability of per capita income on microfinance loans is shown to be positive and marginally significant. This is also true for per capita total expenditure and per capita food expenditure. But it was also found that this impact is insignificant for poorer households and becomes only positive and increasing with richer households.

H_{03}: collateral and guarantors has no significant effect on access to personal loan

The table 4.12 inferred that collateral and guarantors positively and significantly affected access to personal loans (β= 0.307, p= 0.000). The p value was less than 0.05 therefore, the study rejected the null hypothesis that collateral and guarantors has no significant effect on access to personal loan and concluded that collateral and guarantors has a significant effect on access to personal loan. This was consistent with the findings of Calcagnini, Farabullini and Giombini (2014) that collateral guarantee affects the cost of credit for Italian firms by systematically reducing the interest rate of secured loans. This effect was larger during the crisis. Personal guarantees show no systematic effect on interest rates, but favour firms' access to credit. Furthermore, guarantees are a more powerful instrument for riskier borrowers than for safer borrowers, i.e., the decrease in interest rates due to the presence of guarantees is larger for the former than for the latter.

H_{04}: credit history has no significant effect on access to personal loan

The table 4.12 inferred that credit history positively and significantly affected access to personal loans (β= 0.360, p= 0.000). The p value was less than 0.05 therefore, the study rejected the null hypothesis that credit history has no significant effect on access to personal loan and concluded that credit history has a significant effect on access to personal loan. This was in line with the results of Chernykh and Theodossiou (2011) that the credit history and the bank capitalization are the only determinants of not only loans expended to businesses but also long-term loans.

CHAPTER FIVE

SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Overview

This chapter covers the summary of the findings, conclusion, implications of the study, recommendation and suggestions for further research.

5.1 Summary of the Findings

The study main objective was to assess the determinants of access to personal loans among workers in formal employment, a case of Moi teaching and referral staff on formal employment. The specific objectives were to determine the effect of job security, employee income level, collateral and guarantor and credit history on access to personal loan, a case of a case of Moi teaching and referral staff on formal employment. The study will begin by summarizing the demographic information followed by descriptive statistics and finally, the inferential statistics.

According to the demographic data, the vast majority of respondents were men. The majority of Moi teaching and referral formal employment employees were between the ages of 27 and 35. It was also discovered that the majority of the employees had worked in this institution between the ages of 7 and 12.

5.1.1 Summary of the Correlation Analysis

The association between job security and access to personal loanpositively strong and significant($r = 0.688$, $p=0.000$), indicating that an increase in job security increases access to loan significantly. This was in line with the findings of Kelley, (2011) who asserted that poor and vulnerable categories of the community cannot access credit from formal banking institutions because they do not have job security or any other

capital that is required as collateral security by these commercial banks. Ensuring access to credit services to these poor individuals and groups who have no formal collateral security will therefore contribute to their socio-economic empowerment and gradually reduce the inequalities in society. The association between employee income level and access to personal loan was positive and significant(r = 0.287, p=0.000), meaning that an increase in employment income increases access to personal loan significantly. The association between collateral and guarantors and access to personal loan was positive and significant(r = 0.313, p=0.000), meaning that an increase in collateral and guarantors increases access to personal loan significantly. The association between credit history and access to personal loan was strongly positive and significant (r = 0.575, p=0.000), meaning that an increase in credit history increases access to personal loan significantly.

5.1.2 Summary of the Regression Results

The findings showed that job security had a positive and significant effect on access to personal loans (β= 0.650, p= 0.000) and that a unit change in job security leads to significant increase in access to personal. This was in agreement with Mahjabeen (2008) findings that indicated that longer job tenures raise income and consumption levels of households leading to acquiring loans. This implies that job tenure is an effective loan strategy and has important policy implications regarding access to personal loans, income distribution and achievement of millennium development goals. The employment income level had a negative and significant effect on access to personal loan (β= -0.283, p= 0.000) and that a unit change in employment income level leads to significant decrease in access to personal loan. The collateral and guarantors had a positive and significant effect on access to personal loan (β= 0.307, p= 0.000) and that a unit change in collateral and guarantors leads to significant

increase in access to personal loan. The credit history had a positive and significant effect on access to personal loans (β= 0.360, p= 0.000) and that a unit change in credit history leads to significant increase in access to personal loan.

5.1.3 Job Security and Access to Personal Loan

Job security positively and significantly affected access to personal loans (β= 0.650, p= 0.000). The p value was less than 0.05 therefore, the study rejected the null hypothesis and concluded that job security has a significant effect on access to personal loan. This was in line with the findings of Tilakaratna (2005) who study found out that access to personal loans in Sri Lanka has a wide outreach to low income people. It was also established that job tenure significantly influenced access to personal loans. It was also clear that even though personal loans are meant to assist the poor, majority of those who had positively benefited from the loans were non poor people from Sri-Lanka who had longer job tenures.

5.1.4 Employee Income Level and Access to Personal Loan

Employee income level negatively and significantly affected access to personal loans (β= -0.283, p= 0.000). The p value was less than 0.05 therefore, the study rejected the null hypothesis and concluded that employee income level has a significant effect on access to personal loan. This was consistent with the findings of Bruhn and Love (2014) that their key findings was the sizeable effect of access to finance on labor market activity and income levels, especially among low income individuals and those located in areas with lower preexisting bank penetration. Overall, their findings indicated that access to finance can contribute significantly to poverty alleviation. They also shed new light on the channels through which increased access to finance for low-income individuals promotes economic development, namely by fostering the survival and creation of informal businesses and by increasing employment.

5.1.5 Collateral and Guarantors and Access to Personal Loan

Collateral and guarantors positively and significantly affected access to personal loans (β= 0.307, p= 0.000). The p value was less than 0.05 therefore, the study rejected the null hypothesis and concluded that collateral and guarantors has a significant effect on access to personal loan. This was consistent with the study results of Domeher and Abdulai (2012) who found that many households and businesses in developing countries are said to face credit constraints which limit their ability to undertake investments in various production-enhancing economic activities required to reduce poverty. This limited access to formal credit is often attributed to the lack of 'acceptable' collateral, resulting from the absence of formally registered land titles. Despite the fact that this assertion is fast gaining ground, land registration has not been found empirically to positively influence access to credit.

5.1.6 Credit History and Access to Personal Loan

Credit history positively and significantly affected access to personal loans (β= 0.360, p= 0.000). The p value was less than 0.05 therefore, the study rejected the null hypothesis and concluded that credit history has a significant effect on access to personal loan. This was in agreement with the findings of Behr and Sonnekalb (2012) who suggested that information sharing by means of a credit registry does not affect access to or cost of credit, but improves loan performance. Specifically, loans granted after the introduction of the credit registry are 3% points less likely of turning problematic, representing a 35% reduction of the overall sample average arrear probability. We further find that the effect is more pronounced for repeat borrowers and in areas, where competition is weak. This indicates that information sharing among lenders improves loan performance mainly by disciplining borrowers to repay in their concern about future access to credit.

5.2 Conclusions

The study sought to investigate the effects of determinants on access to personal loan and found out that the various determinant under the study which included; the effect of job security, employee income level, collateral and guarantors and credit history affected access to personal loans.

The study found out that job security affected access to loan and that when an employee job is secured it translates to increasing his or her chances of getting a loan from financial institutions. This is so because job security is viewed by lending institutions as a collateral against the loan given. The study also found that employee income level affect access to loan and that when an employee income increases they react by borrowing less from financial institutions. The increase in income level means that the employee can meet more of their financial problems through their salary and need to reduce their borrowing because of increased salary income. The study findings further suggested that collateral and guarantors affects access to personal loans and that when employee collateral increases in terms of assets it leads to increase in access to loans and also guarantors also increases loan access by individuals in formal employment. Employees access more personal loans from financial institutions when they can provide collateral and guarantors, because through this provision banks lend more to individuals because they are sure that the loan is secure and may not lead to a situation where they have to write-off because of default, because they can recover from the sale of the collateral provided or even going after the guarantors. Finally, the study also found out that credit history affects access to loan and that an increase in credit ratings of an individual employee increases the chances of accessing more personal loans. This referred that when an employee has a good credit rating the banks react by approving their loan application.

5.3 Recommendations

The study included policy recommendations, practical implications, managerial implications and theoretical implications and recommendations for further research.

5.3.1 Policy Recommendations

The study suggests that employing Institutions management and boards should ensure that their employees' jobs are secured because this enhances the access to loans from financial institutions. Banks management and other financial institutions should come up with policies that encourages individuals under formal employment to access more loans, especially when they cannot provide collateral to secure loans. Government should come up with a framework that meets the financial needs of those individuals who cannot access loans from financial institutions especially those who cannot provide collateral to secure loan. Labour unions should also ensure that employees' job security is protected as this increases the chances of employees who are in formal employment to access loans from financial institutions.

5.3.2 Practical Implication

The study findings on job security, employee income level, collateral and guarantors and credit history affected access to personal loan. An increase in employee job security increases access to personal loan, meaning that when the employee job is secure they are able to access more personal loans from financial institutions. When employee income increases the individual reacts by borrowing less form financial institutions and this is attributed to reduction in financial needs after income increase. When employees under formal employment have sufficient collateral and guarantors they can access more personal loans from financial institutions, meaning that when an individual's assets increase and have persons to guarantee their loans, banks react by approving more loans to them. Finally, when the credit ratings of an individual in

formal employment is good, that is they have been meeting their financial obligations in time and in full the financial institutions react by approving more person loans to them.

5.3.3 Managerial Implication

Managements should ensure that employees' job security is protected and that promotions are earned as this improves employee terms hence increased income. By doing this their employees can access more loans from financial institutions and employees can meet their financial needs respectively.

5.3.4 Recommendations for Further Research

The study recommends that the same study be carried out in a different setting targeting different respondents in other institutions excluding hospitals. The study was restricted to four determinants of access to personal loans and the study recommends that other studies can explore other possible determinants like; interest rates, economic conditions and borrowers capacity that can affect access to person loans.

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APPENDICES

Appendix I: Cover Letter

Dear Respondent,

RE: REQUEST TO FILL THE ATTACHED QUESTIONNAIRE

I am a student at Moi University undertaking a Master's in Business Administration course in the School of Business & Economics, and currently doing research work.

The questionnaire is designed to gather information on the determinants of access to personal loans.

The information you will give is entirely for academic and learning purposes and will be treated with strict confidentiality.

Your co-operation in filling the questionnaire will be highly appreciated.

Thank you,

Egla C. Kotut
C/o Moi University
Email: eglachebet@yahoo.com

Appendix II: Questionnaire

This questionnaire is to collect data for purely academic purposes. All information will be treated with strict confidence. Do not put any name or identification on this questionnaire.

Answer all questions as indicated by either filling in the space provided or ticking the option that applies.

SECTION A: DEMOGRAPHIC INFORMATION

1.What is your gender?

Female ☐ Male ☐

2. What is your age?

18-26 Years ☐

27-35 ☐

36-44 ☐

45-53 ☐

Above 53 years ☐

3. Number of years you have worked in Moi Teaching and Referal Hospital?

1-6 years ☐

7-12 ☐

13-18 ☐

19-24 ☐

Above 24 years ☐

SECTION B: ACCESS TO PERSONAL LOANS

4. In this section the study is interested in your access to personal loans. Please read the following statements carefully and tick the appropriate category. The categories are;

5 = strongly agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1=strongly Disagree

	1	2	3	4	5
Each time I have applied for the loan I always get it					
The amount of loan I had applied was given in time					
The application procedure for personalloan is easy and clear					
The loan I have received was satisfactory for me					
I am not interested to apply for personal loans because the interest charged is too high					
I am not interested to apply for personal loans because I have other sources of income					

SECTION C: JOB SECURITY

5. In this section the study is interested in your job security aspects. Please read the following statements carefully and tick the appropriate category. The categories are;

5 = strongly agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1=strongly Disagree

	1	2	3	4	5
The Hospital layoff staff regularly					
TheHospital is currently over-staffed with causal employees					
I am protected by the employer on employments terms					
I have a permanent contract with the Hospital					
It is unlikely to lose a job in the Hospital					
The labour union protects me from being unfairly dismissed by the Hospital in case of any disciplinary issues.					

SECTION D: EMPLOYEE INCOME

6. In this section the study is interested in your income aspects. Please read the following statements carefully and tick the appropriate category. The categories are;

5 = strongly agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1=strongly Disagree

	1	2	3	4	5
I get a regular monthly salary from the Hospital					
Mysalary income has always determined access to the loans that I get					
My net salary income has always determined the amount of loan that I get.					
My access to Personal loans has depended on the other sources of income that I earn and not salary.					
My ability to repay loan has determined the loan I get					
My access to loan depend on the income of guarantors					

SECTION E: COLLATERAL AND GUARANTORS

7. In this section the study is interested in your collateral and guarantors. Please read the following statements carefully and tick the appropriate category. The categories are;

5 = strongly agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1=strongly Disagree

	1	2	3	4	5
The bank demands that I provide collateral in order to approve my loan					
The banks demands that I provide people who guarantee my loan					
The bank declined to approve my loan because I had no collateral to secure the loan					
The bank declined to approve my loan because I failed to provide guarantors					
The value of my collateral affects the amount I get as loan					
My access to loan depends on the ability of my guarantors to repay if I default					

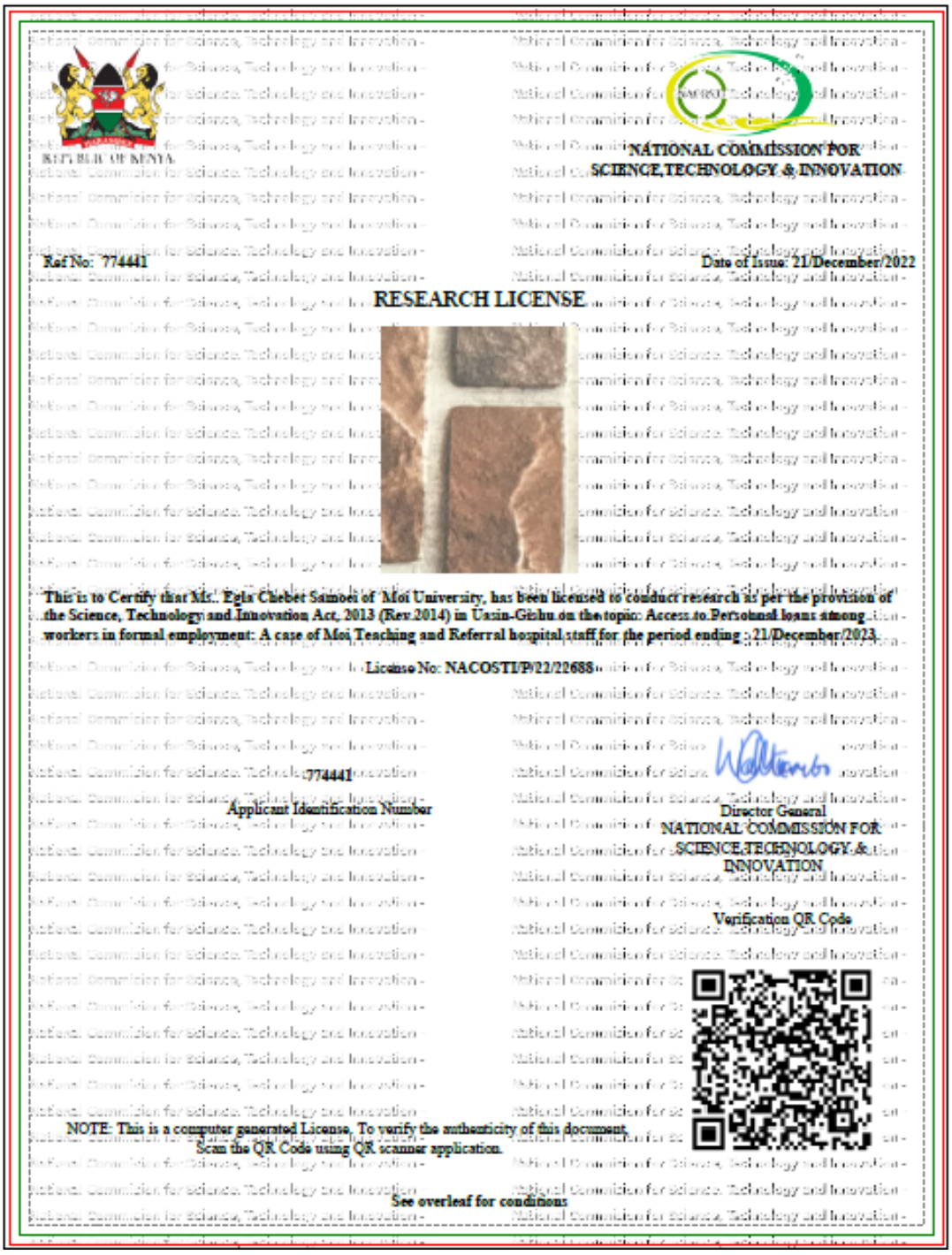
SECTION F: CREDIT HISTORY

8. In this section the study is interested in your credit history aspects. Please read the following statements carefully and tick the appropriate category. The categories are;

5 = strongly agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1=strongly Disagree

	1	2	3	4	5
I always pay my loans within the time given					
I have never received a letter reminding me of delay or non-repayment of loans advanced to me.					
I have never delayed in repaying any loan advanced to me by financial institutions.					
I have never been enlisted by the Credit Reference Bureau (CRB)					
My good credit history has been a determining factor in accessing more personal loans.					
The Hospital has organized check off arrangements for its staff to ensure staff does not default in repaying their loans on time.					
My employer always deducts and remits my loans on a monthly basis without delay					

Appendix III: Research Authorisation – NACOSTI



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Date of Issue: 21/December/2022

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Appendix IV: Plagiarism Certificate

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