

**INTEREST RATE DRIVERS AND FINANCIAL PERFORMANCE OF
DEPOSITS TAKING SAVINGS AND CREDIT CO-OPERATIVE SOCIETIES IN
KENYA**

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**A Thesis Submitted in Partial Fulfilment of the Requirement for a Master Degree in
Business Administration (Finance Option) of Masinde Muliro University of Science
and Technology**

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DEDICATION

This thesis is dedicated to my beloved parents, Cornel Beni Shilaho (father), Willimina Kasiti Shilaho (mother), my Nuclear family together with my siblings.

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ABSTRACT

On average SACCOs experienced a decline in its financial performance during this period exhibited by the Sacco subsector return on assets reducing from 2.65% to 1.59% from 2020 to 2021, SACCO Report, 2021. This study aimed to examine interest rate drivers and the financial performance of deposit taking SACCOs in Kenya. The specific objectives were to establish the effect of inflation rate on financial performance of deposits taking SACCOS in Kenya, to determine the effect of liquidity risk on financial performance of deposits taking SACCOS in Kenya and to assess the effect of credit risk on financial performance of deposits taking. The study was anchored on John Maynard Keynes' "Monetary Theory," with additional support from Merton's "Credit Risk Model" and Irving Fisher's "Quantity Theory of Money". A descriptive research design and correlational research design was employed in this study. Stratified random sampling was applied on a population of 176 deposit taking SACCOs in Kenya. The study used secondary data which was obtained from audited annual financial reports and Sacco Society's Regulatory Authority (SASRA) reports. The population was classified into 3 strata representing three tier sizes of DT-SACCOs in Kenya. This means each tier (stratum) is classified according to DT-SACCOs total assets' base as per SASSRA report 2022, and is drawn from the tiers' total DT-SACCO population proportionate to the total sample size of the 121 DT-SACCOs. Therefore, a total of 121 audited annual financial reports was sampled for a 7 years' period from 2020 to 2022. The collected data was analyzed using descriptive and inferential statistics. Descriptive statistics included mean, standard deviations and percentages. Inferential statistics included Pearson correlation coefficient, and multiple regression analysis. The results were presented using table, charts, figures and models. The results revealed that independent variables used in the research were able to account for about 76.53% ($R^2=0.7653$, $P<0.05$) of the variations that were noted in the financial performance of Deposit Taking SACCOs in Kenya. A unit increase in inflation rate leads to a 0.889 unit's reduction in the financial performance ($\beta_1=-0.889$, $p<0.05$). A unit increase in liquidity risk leads to a 0.143 units reduction in the financial performance ($\beta_2=-0.143$, $P<0.05$), a unit increase in credit risks leads to 0.729 units decrease in the financial performance ($\beta_3=-0.729$, $P<0.05$). The research recommended that Saccos should develop strategies such as real-time inflation monitoring, flexible interest rate structure and risk-based pricing to adjust their loan interest rates more readily in response to inflation changes. Saccos should conduct regular liquidity stress tests to assess their ability to withstand adverse liquidity shocks, especially in scenarios where interest rate fluctuations may exacerbate liquidity risk. Saccos should periodically review and adjust interest rates on loans to reflect changes in market rates and ensure adequate compensation for credit risk.

TABLE OF CONTENTS

PLAGIARISM STATEMENT.....	ii
DECLARATION.....	iii
COPYRIGHT.....	iv
DEDICATION.....	v
ACKNOWLEDGEMENTS.....	vi
ABSTRACT.....	vii
TABLE OF CONTENTS.....	viii
LIST OF TABLES.....	xii
LIST OF FIGURES.....	xiii
LIST OF APPENDICES.....	xiv
LIST OF ABBREVIATIONS AND ACRONYMS.....	xv
OPERATIONAL DEFINITION OF TERMS.....	xviii
CHAPTER ONE.....	1
INTRODUCTION.....	1
1.1 Background of the Study.....	1
1.2 Statement of the Problem.....	9
1.3 Objectives of the Study.....	11
1.3.1 General Objective.....	11
1.3.2 Specific Objectives.....	11
1.4 Hypothesis of the Study.....	12
1.5 Significance of the Study.....	12
1.6 Scope of the Study.....	13
1.7 Limitations of the Study.....	14

CHAPTER TWO.....	16
LITERATURE REVIEW.....	16
2.1 Introduction.....	16
2.2 Theoretical Literature.....	16
2.2.1 Monetary Theory.....	17
2.2.2 Credit Risk Model.....	20
2.2.3 Quantity Theory of Money.....	22
2.3 Conceptual Review.....	24
2.3.1 Interest Rate Drivers.....	25
2.3.2 Financial Performance.....	31
2.4.3 Financial Performance of Deposit Taking SACCOs.....	32
2.5 Critique of the Existing Literature.....	33
2.4 Empirical Literature Review.....	36
2.4.1 Inflation and Financial Performance.....	36
2.4.2 Liquidity Risk and Financial Performance.....	41
2.4.3 Credit Risk and Financial Performance.....	48
2.6 Summary of Literature Review and Research Gaps.....	53
2.7 Conceptual Framework.....	57
CHAPTER THREE.....	60
RESEARCH METHODOLOGY.....	60
3.1 Introduction.....	60
3.2 Study Area.....	60
3.3 Research Design.....	61

3.4 Target Population.....	62
3.5 Sample Size and Sampling Techniques.....	63
3.5.1 Determination of Sample Size.....	63
3.5.2 Sampling Technique.....	64
3.6 Data Collection.....	64
3.7 Data Analysis and Presentation.....	65
3.7.1 Analytical Model.....	65
3.7.2 Assumptions of Regression.....	66
3.8 Ethical Consideration.....	70
CHAPTER FOUR.....	71
DATA ANALYSIS AND DISCUSSIONS.....	71
4.1 Introduction.....	71
4.2 Descriptive Statistics.....	71
4.2.1 Inflation rate.....	71
4.2.2 Liquidity risk.....	74
4.2.3 Credit risk.....	76
4.2.4 Financial Performance.....	78
4.3 Correlation Analysis.....	79
4.4 Diagnostic Tests.....	83
4.4.1 Normality Test.....	83
4.4.2 Multicollinearity Test.....	84
4.4.3 Auto Correlation Test.....	84
4.4.4 Heteroscedasticity Test.....	85

4.4.5 Unit Root Test.....	86
4.4.6 Hausman Test (Choice Specification).....	87
4.5 Multiple Linear Regression.....	88
4.5.1 Model Summary.....	88
4.5.2 Regression Coefficient.....	89
4.6 Testing of Null Hypothesis.....	93
CHAPTER FIVE.....	94
SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS.....	94
5.1 Introduction.....	94
5.2 Summary of the Findings.....	94
5.3 Conclusions of the Study.....	96
5.4 Recommendations of the Study.....	97
5.5 Suggestion for Further Studies.....	99
REFERENCES.....	101
APPENDICES.....	114

LIST OF TABLES

Table 4. 1: Descriptive Statistics- Inflation rate.....	72
Table 4. 2: Descriptive Statistics- Liquidity risk.....	74
Table 4. 3: Descriptive Statistics- Credit risk.....	76
Table 4. 4: Financial Performance.....	78
Table 4. 5: Pearson Correlation Analysis.....	80
Table 4. 6: Normality Test.....	83
Table 4. 7: Multicollinearity Test.....	84
Table 4. 8: Testing for serial correlation (Independence).....	85
Table 4. 9: Breuch-Pagan Test for Heteroscedasticity.....	85
Table 4. 10: Unit Root Test.....	86
Table 4. 11: Hausman Test.....	87
Table 4. 12: Model Summary Fixed Effect of Interest rate drivers.....	89
Table 4. 13: Testing of Null Hypothesis.....	93

LIST OF FIGURES

Figure 2.1: Conceptual Framework.....	58
Figure 4. 1: Inflation Rate Trend Chart between 2020 and 2022.....	73
Figure 4. 2: Liquidity Risk Trend Chart between 2020 and 2022.....	75
Figure 4. 3: Credit Risk Trend Chart between 2020 and 2022.....	77
Figure 4. 4: Financial Performance Trend Chart between 2020 and 2022.....	79

LIST OF APPENDICES

APPENDIX I: DATA COLLECTION TOOL.....	114
APPENDIX II: List of DT-SACCOs.....	115
APPENDIX III : MAP OF KENYA.....	119
APPENDIX IV: RAW DATA.....	120
APPENDIX V: RESEARCH PERMIT	162

LIST OF ABBREVIATIONS AND ACRONYMS

BOSA	Back Office Services Activity
CBK	Central Bank of Kenya
CBR	Central Bank Rate
CGAP	Consultative Group to Assist the Poor
COVID-19	Corona Virus Disease 2019
CPI	Consumer Price Index
CR	Credit Reference
CSR	Corporate Social Responsibility
CVI	Content Validity Index
DTMBs	Deposit Taking Microfinance Banks
DTS	Deposit Taking SACCOs
EBIT	Earnings Before Interest and Tax
ECB	European Community Bank
ESG	Environmental Social and Governance
FOSA	Front Office Services Activity
FSD	Financial Sector Deepening
GMM	Generalized-Method- of- Moments
GRF	Global Financial Crisis
ICA	International Co-operation Alliance
ICDC	Industrial and Commercial Development Corporation

IEA	Institute of Economic Affairs
ILO	International Labour Organization
KBA	Kenya Bankers Association
KES	Kenya Shilling
KNBS	Kenya National Bureau of Statistics
KUSCCO	Kenya Union of Savings & Credit Co-operatives
MFI s	Micro Financial Institutions
MMR	Moderated Multiple Regression
MMUST	Masinde Muliro University of Science and Technology
MRA	Micro-credit Reports Authority
NACOSTI	National Commission for Science, Technology and Innovation
NBE	National Bank of Ethiopia
OMO	Open Market Operation
PMCC	Product Moment Correlation Coefficients
ROA	Return on Assets
ROE	Return on Equity
SACCO s	Savings and Credit Co-operative Societies
SAGAS	Semi-Autonomous Government Agencies
SAP	Structural and Adjustment Programmes
SASRA	Sacco Society's Regulatory Authority
SME s	Small and Medium Enterprises
SPSS	Statistical Packages for the Social Sciences
STOXX	Stock Exchange

UN	United Nations
USD	United States Dollars
VIF	Variance Inflation Factor
WOCCU	World Council of Credit Unions

OPERATIONAL DEFINITION OF TERMS

Credit Risk	refers to the potential for loss that arises when members or borrowers fail to fulfill their repayment obligations on loans or other credit facilities extended by the SACCO.
Deposits Taking SACCOs	Are SACCOs that not only accept daily, cross-counter monetary transactions but also engage in savings and credit.
Financial Performance	Is a method of measuring the results of a Sacco in terms of profitability, operational efficiency and market share. It is also a measure of overall financial health of a Sacco over a given period of time.
Inflation	Means that the cost of finance is gradually driving up the overall cost of goods and services in the economy.
Interest Rate	refers to the percentage charged on loans provided to members of Saccos and the return earned on deposits made by members.
Interest rate drivers	Is the country's unique set of circumstances that dictates interest rates, which in turn impacts the bottom lines of banks and other financial organizations that rely heavily on interest revenue for their profits.

Liquidity Risk

refers to the risk that the SACCO will not be able to meet its short-term financial obligations due to an imbalance between its liquid assets and its liabilities.

Savings & Credit Co-operative Societies

The goal of this cooperative type is to provide members access to credit by combining their funds.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Financial performance is a critical aspect for deposit-taking Savings and Credit Co-operative Societies (SACCOs) as it determines their ability to achieve their set policies and financial and non-financial objectives (Otwoko, 2023). The background looks at the study in three perspectives namely; world view, African view and Kenyan perspective. The background also gives a brief history of Deposit Taking SACCOs.

Interest rate dynamics, equilibrium prices and quantities in Brazil's capital markets are shaped by the dynamic interplay between supply and demand. The country's central bank officially adopts an inflation target system, with the sialic overnight rate serving as the key monetary policy tool. In traditional economic models in Brazil, the market interest rate is seen as a singular rate resulting from the interaction between demand and supply in the capital markets. However, a comprehensive micro-economic assessment of Brazil's capital markets should also consider other factors, such as the term structure and risk premium structure, which can influence the expectations of market participants regarding future movements in the Singapore dollar (Boamah, 2017).

The United States and Singapore have both experienced a prolonged period of low interest rates. This situation is attributed to shifting demographics, slower productivity and economic growth, as well as emerging markets seeking significant reserves of safe assets. The increase in international reserves leads to a rise in liquidity, making it challenging for interest rates to increase. Nevertheless, it is the forces of demand and supply in the US and Singapore markets that ultimately determine long-term interest rates. In Singapore, the central bank, through the monetary authority, controls the country's monetary policy (Durrani, Rosmin, & Volz, 2020). However, Cassman argue

that the monetary authority of Singapore does not directly control domestic interest rates; rather, borrowing costs are largely influenced by US interest rates and investors' expectations regarding the future movement of the Singapore dollar.

In the United Kingdom, the setting of interest rates is the responsibility of the monetary policy committee of the Bank of England (Del Negro, Giannone & Giannoni, 2019). Before making decisions on official interest rates, the bank receives intelligence information from its network of twelve regional agencies and leverages its expertise in monetary, economic, and market matters. The bank rate is a crucial tool used to regulate the money supply in the UK economy. An increase in the bank rate results in more expensive borrowing and more rewarding to saving, while a decrease in the bank rate makes borrowing cheaper but less rewarding for savers.

Germany, as a member of the European Union, has adopted the euro as its currency. The European Central Bank (ECB) is responsible for setting Germany's benchmark interest rate. The primary roles of the ECB include managing the Euro, ensuring price stability, and conducting economic and monetary policy for the European region (Ray Chaudhuri, & Ray Chaudhuri, 2018). The ECB's policy of ultra-low interest rates has had a notable impact on the corporate sector in Germany, with nearly one in five German companies being charged negative interest rates by their banks. This situation means that companies would have to pay the lender for the privilege of keeping their money on deposit. Financial institutions in Germany have criticized the central bank's policy, as it erodes their profit margins when trying to pass on negative rates to their customers. Only a small percentage of threatened companies ended up paying negative interest rates, with many

opting to shift their cash into other financial assets or changing their banking arrangements.

In India, interest rates are influenced by changes in reserve money, expected inflation, and capital outflow volatility (Schmelzing, 2019). Analyzing the theoretical link between fiscal deficit and interest rates in India becomes crucial for several reasons. Firstly, in the context of growing global integration of financial markets, an increase in the domestic interest rate due to a rise in the fiscal deficit can have global macroeconomic implications (Cullis & Morley, 2017). Secondly, an increase in fiscal deficit-induced interest rates may lead to a crowding out of interest-sensitive components of private spending, particularly private corporate investment. Understanding these relationships can provide valuable insights into India's monetary and fiscal policies and their impact on the overall economy. Inflation rate as one of interest rate drivers under this study is a consequence of various monetary policies implemented by a regulating bank of any given country.

Financial reforms in South Africa have led to a proliferation of banks and increased competition among various financial intermediaries (Bushe, 2019). The resurgence of numerous financial institutions has resulted in smaller profit margins, prompting many of these intermediaries to consolidate operations for improved efficiency. Consequently, the banking sector in South Africa has experienced increased concentration, with the official interest rate being the Repo rate. Overdraft and other loan interest rates are indirectly affected by changes to the Repo rate. Consequently, interest rates are significantly impacted by the South African Reserve Bank. The cost at which banks, microfinance institutions, and SACCOs that accept deposits acquire cash in the money market is affected by changes in the Reserve Bank's repo rate.

Interest rate margins in Ghana have remained significant throughout, and they even rose somewhat after 2019. Banks, small and medium-sized businesses (SMEs), and SACCOs that accept deposits are all stifled by the wide interest rate margins. As a result, the Ghana Industries Association is aware that there has to be a coordinated effort to slow the spread. Interest rate spreads in Ghana are among the highest in the world, according to research (Owusu-Antwi, Banerjee & Antwi, 2017). Low deposits and high lending rates, they say, hurt Ghana's economy and make it harder to create jobs. It is the National Bank of Ethiopia's job to set interest rates in Ethiopia. Officially, the National Bank of Ethiopia's savings rate is the rate that the Monetary Committee decides upon when making interest rate decisions. The National Bank of Ethiopia (NBE) is in responsibility of controlling the money supply and credit, as well as any interest rates or other fees that may be relevant (TEKALIGN, 2017). Individual banks are allowed to establish their own lending rates for loans and advances, however the NBE periodically determines the lending rate for re-discount facilities and loans granted to commercial banks and other financial institutions.

Sessional Paper No. 1 of 1986 on economic management for renewed growth clearly demonstrates the Kenyan government's dedication to a free-market economy. But every once in a while, to keep inflation under control and economic development sustainable, the financial regulator, the Central Bank of Kenya, steps in. To achieve the government's inflation and growth targets, the Central Bank of Kenya makes monetary policy choices (Nathan & Jagongo, 2017). The legal framework guiding the supervision of DT-SACCOs is provided by the SACCO Societies Act, ensuring adherence to international standards.

However, non-deposit taking SACCOs operate under Cooperative Societies Act guidelines and have a different supervisory framework (SASRA, 2021).

SASRA, 2021 financial stability report depicted an increase in credit risk shown by the increase in the ratio of non-performing loans (NPLs) to gross loans is from 8.39% in 2020 to 8.86% in 2021. The same report showed an overall average SACCOs performance in terms of return on assets (ROA) reduce from 2.65% in 2020 to 1.59% in 2021 indicating a negative correlation between credit risk and financial performance. Besides in CBK 2021 & 2022 annual supervision reports, showed an overall country's inflation rates with an upward movement trends from 5.4%, 6.1% and 7.7% in 2020, 2021 and 2022 respectively. This also means that when inflation rises it leads to general decrease in profitability of SACCOs. Report (SASRA, 2021) showed an average performance of SACCOs declined from 2.65% to 1.59% from 2020 to 2021 in terms of return on assets (ROA).

Furthermore, SACCOs face a unique challenge of asset/liability mismatch since depositors save in the short-term while borrowers repay loans in the long-term. This mismatch is exacerbated when financial institutions subjectively assess and disburse loans, leading to credit being extended to unqualified individuals who later default on their obligations (Otwoko & Maina, 2021). As a consequence of these challenges, SACCOs are exposed to liquidity risk (Shibutse, Kalunda & Achoki, 2019), as well as credit risk by virtue of potentiality of non-performing loans (NPLs). Effective liquidity control becomes crucial to meet cash flow needs, especially given the fundamental uncertainty caused by external events and the actions of various stakeholders.

High interest rates occasioned by inflationary pressure may lead borrowers to fall behind on loan repayments, increasing the credit risk and resulting in poor financial performance (SASRA, 2021). DT-SACCOs mobilize deposits from their members and offer loans at affordable interest rates, making it crucial for them to maintain optimum levels of liquidity to cover operational costs and fulfill member's loan needs. However, in Kenya, SACCOs suffer from poor financial administration, non-remittance of deductions by employers, graft, and delinquent loans (Maina & Otwoko, 2021).

A report by SASRA (2021) highlights that employers failed to remit Ksh 3.401 billion of employees' emoluments to SACCOs. Proportion of 63.34% of the non-remitted funds owed related to loan repayments which mean that the subject loans have since been classified as non-performing by the SACCOs and provisions made in respect thereof reduced the surpluses and profitability of the SACCOs. Furthermore, due to member defaults on loans and missed investment opportunities, DT-SACCOs are vulnerable to low liquidity, making it difficult for them to meet immediate cash requirements, leading to financial turmoil.

Liquidity refers to a SACCO's ability to meet immediate payment obligations, including cash withdrawals and loan requests, while maintaining adequate capital adequacy (Otwoko & Maina, 2021). An appropriate liquidity management strategy balances cash inflows and outflows, enabling successful firm operations and boosting return on assets (Businge, 2017). To achieve better liquidity, SACCOs can extend the maturities of their liabilities and assets, issue more equity, and reduce contingent commitments (Dzapasi F.

D., 2020). It is at the backdrop of the above three perspectives that the study seeks to investigate the effect of credit risk, liquidity risk and inflation rate as interest rate drivers of financial performance of DT-SACCOs.

Globally, in developed economies such as the United States, United Kingdom, and Japan, research has largely focused on conventional macroeconomic variables like inflation, GDP, and monetary policy as primary determinants of interest rates (Taylor, 2019; Chen & Lee, 2020; Nakamura & Steinsson, 2021). However, there are gaps in understanding the effects of emerging issues—such as geopolitical tensions and climate change—on interest rate trends and financial performance. For instance, Taylor (2019) investigates the relationship between inflation and interest rates but does not consider the potential role of climate-related risks. Similarly, Nakamura and Steinsson (2021) examine how quantitative easing has affected interest rates in Japan without exploring potential long-term impacts of demographic shifts on financial stability. More research is needed to capture the effects of these new drivers, especially in developed nations where traditional economic factors have long dominated interest rate policies.

Regionally, in African countries such as Nigeria, South Africa, and Kenya, studies have focused on typical economic drivers such as inflation, currency exchange rates, and government borrowing (Ndungu & Mwangi, 2019; Jaramillo & Steiner, 2018; Asongu, 2020). However, research is limited in assessing how factors like institutional quality, political stability, and informal financial systems impact interest rates and financial performance in these economies. For example, Ndungu and Mwangi (2019) discuss how inflation and currency fluctuations drive interest rates in Kenya and Nigeria but fail to

address the role of regulatory quality. Jaramillo and Steiner (2018) analyze interest rate volatility in South Africa but overlook how informal financial networks influence access to credit and borrowing costs. Asongu (2020) adds insights on policy implications but lacks a focus on the unique socio-economic conditions that affect interest rates across various African regions. Further studies are needed to explore these under-researched drivers and their effect on the financial landscape of African nations.

In Kenya, existing studies mainly emphasize inflation, government debt, and central bank policies as key interest rate drivers (Omondi & Ochieng, 2022; Achieng, Ondieki & Jagongo, 2023; Kilonzo, 2021). However, few studies examine micro-level factors such as financial literacy, community-level economic practices, and access to banking services, which can shape interest rate dynamics and influence financial performance. For instance, Omondi and Ochieng (2022) analyze how inflation and central bank rates impact borrowing costs but do not consider the role of financial literacy in interest rate sensitivity among Kenyan borrowers. Achieng *et al.* (2023) look into government debt but overlook the informal lending practices like *chamas*, which play a significant role in local financial systems. Kilonzo (2021) addresses interest rate capping but does not explore the effect of regional economic disparities across counties. These local knowledge gaps highlight the need for more comprehensive studies that capture Kenya's unique economic environment and its effects on financial performance, providing insights into policies that can foster financial inclusion.

1.1.1 Deposit Taking SACCOs

Deposit-taking Savings and Credit Co-operative Societies (DT-SACCOs) have a rich history that can be traced through reports published by the Sacco Societies Regulatory Authority (SASRA). These reports shed light on the evolution and development of DT-SACCOs in various regions, outlining their significance and impact on the financial landscape (Ithuku, 2019). DT-SACCOs play a pivotal role in the financial sector of many countries, serving millions of members across diverse economic strata including but not limited to housing sector (Wood, 2019). Their ability to mobilize savings, provide credit, and offer a range of financial services has contributed to financial inclusion and economic empowerment, particularly for those in rural and underserved areas.

SASRA reports rising registered DT-SACCOs and membership. During the 1980s and 1990s, DT-SACCOs faced challenges related to governance, management, and financial sustainability. SASRA reports during this time reflected efforts by regulatory authorities to strengthen the co-operative movement and improve DT-SACCO supervision. Reforms were introduced to enhance liquidity risks, credit risk practices, and financial reporting standards. The early 2000s marked a significant turning point for DT-SACCOs (Wanjiru & Jagongo, 2022). In recent years, SASRA reports have highlighted the continued expansion and diversification of DT-SACCOs' products and services. DT-SACCOs have ventured into areas like microfinance, insurance, and investment products to meet the evolving needs of their members.

1.2 Statement of the Problem

According to the most recent SASRA report of 2022, SACCOs faced challenges with their financial performance due to the interplay of among others; credit risk, liquidity

risk, and inflation rate. On average SACCOs experienced a decline in its financial performance during this period exhibited by the Sacco subsector return on assets reducing from 2.65% to 1.59% from 2020 to 2021, SACCO Report, 2021. For instance, Mwito SACCO Society Ltd posted a decline in performance in terms of Return on Assets (ROA) from 0.036 in 2017 down to 0.021 in 2022. The report attributes this drop in performance to an increase in credit risk faced by the SACCOs. As economic conditions changed, some of the SACCO's borrowers faced difficulties in repaying their loans, resulting in higher credit risk exposure for the institution. This situation adversely impacted the SACCO's profitability and ability to achieve its financial objectives.

Research on the relationship between the interest rate drivers and the financial performance of DT-SACCOs has resulted in contradictory findings. For instance, a study conducted by Otworko (2023) revealed that credit risk had a positive relationship with the performance of SACCOs. In contrast, another study by Mwanja (2021) found that credit risk had either no significant effect or had a negative impact on the performance of similar SACCOs. These conflicting findings underscore the complexity of the relationship between credit risk and financial performance, necessitating further investigation.

Kimutai (2022) examined liquidity management's impact on financial performance in Kericho County's deposit-taking SACCOs. Results revealed a positive influence of liquidity management on financial performance. However, the study suggested investigating additional factors like inflation rate, liquidity risk, and credit risk to further enhance understanding of SACCOs' performance drivers and bridge existing research

gaps. Opala (2019) explored the impact of financial stability on DT-SACCOs' performance in Nairobi County. Results highlighted these factors' significance influence on financial performance. The researcher recommended further study to encompass all deposit-taking Savings and Credit Co-operative Societies for wider application in Kenya. Furthermore, the study proposed examining additional independent variables like inflation rate, liquidity risk, and credit risk to address research gaps and enhance understanding of DT-SACCOs' performance dynamics. Despite extensive literature on drivers influencing Kenyan SACCOs' financial performance, significant research gaps persist, inviting further investigation. This necessitates deeper exploration to unveil reasons for the limited impact. While studies on SACCOs' financial factors (Wangui & Muturi, 2020) and liquidity risk (Muriithi & Waweru, 2017) exist, a unique void remains in examining interest rate drivers' effects on deposit-taking SACCOs' financial performance, offering an unexplored avenue for further research.

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of this study was to examine interest rate drivers and the financial performance of deposits taking SACCOS in Kenya.

1.3.2 Specific Objectives

- i. To establish the effect of inflation rate on financial performance of deposits taking SACCOS in Kenya.

- ii. To determine the effect of liquidity risk on financial performance of deposits taking SACCOS in Kenya.
- iii. To assess the effect of credit risk on financial performance of deposits taking

1.4 Hypothesis of the Study

H₀₁: There is no significant effect of inflation rate on financial performance of deposits taking SACCOS in Kenya.

H₀₂: There is no significant effect of liquidity risk on financial performance of deposits taking SACCOS in Kenya.

H₀₃: Credit risk has no significant effect on financial performance of deposits taking SACCOS in Kenya.

1.5 Significance of the Study

By analyzing the interplay between interest rate drivers and the financial performance of deposit taking SACCOs, this research seeks to provide valuable insights for these financial institutions and the regulatory bodies overseeing them. Understanding how interest rate drivers affect their financial performance would help deposit taking SACCOs make informed decisions regarding their operational strategies, credit risk, and loan offerings. Additionally, the findings of this study may guide policymakers in shaping appropriate monetary and regulatory measures to support the sustainable growth of SACCOs and enhance financial stability. The insights to be gained from this study are expected to contribute to the body of knowledge in the field of finance, particularly concerning the role of interest rate drivers in shaping the performance of deposit taking SACCOs. Moreover, the research outcomes may have practical implications for

SACCOs' management teams, enabling them to refine their strategies and credit risk practices to thrive in a dynamic and competitive financial landscape. Ultimately, a better understanding of the interest rate drivers' impact would help strengthen the stability and sustainability of deposit taking SACCOs in Kenya, aligning with the government's commitment to promoting a free-market economy while ensuring financial inclusion and economic growth for all segments of society.

This study is significant for scholars and academicians as it provides new insights into the unique factors influencing interest rates within cooperative financial institutions, which are often overlooked in academic research in favor of traditional banks. By examining how macroeconomic factors such as inflation and central bank policies impact SACCOs' financial performance, this research expands the understanding of interest rate dynamics in non-bank institutions. Additionally, it offers a valuable framework for analyzing the financial sustainability, risk management, and operational challenges specific to SACCOs, which serve as vital credit sources for underserved populations. For academics, this study also enhances empirical knowledge in cooperative finance, contributing to comparative studies on financial performance across different types of financial institutions in emerging economies.

1.6 Scope of the Study

The scope of this study encompassed a ten-year period from 2010 to 2020, focusing on 176 SACCOs licensed for deposit-taking business in Kenya. The target population for the study consists of 176 DT-Saccos reports and financial statements out of which 121 SACCOs was sampled for over 7 years' period. A descriptive research design and

correlational research design were used for the study, and data collection covered the period of 7 years from 2020 to 2022. The study's focus on determining the influence of interest rate drivers, specifically credit risk, liquidity risks, and inflation rate, on the financial performance of deposit-taking SACCOs. It delved into how these factors impact the profitability and overall financial health of the SACCOs.

The study drew upon three key theories to provide a theoretical framework: monetary theory, credit risk model, and quantity theory of money. These theories served as the basis for analyzing the relationship between interest rate drivers and the financial performance of deposit-taking SACCOs. By considering these specific variables and theories, the study aims to contribute valuable insights into the dynamic interplay between interest rate drivers and the financial performance of deposit-taking SACCOs in Kenya. The scope and focus of this research provided essential knowledge for SACCOs, regulators, policymakers, and other stakeholders to make informed decisions and improve the overall stability and growth of the financial intermediation industry in the country.

1.7 Limitations of the Study

The scope of this study is not without limitations, which need to be acknowledged for a comprehensive understanding of the research process. Some SACCOs used un-uniform reporting format which posed challenges of analyzing data in some cases. By acknowledging these limitations and implementing appropriate strategies to mitigate their impact, the study aims to maintain the validity and reliability of its findings. Some Sacco lacked continuous data for the six years between 2020 and 2022 may result to unbalanced

data. This was mitigated by sampling Saccos which have adequate data required for this study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter examines literature that is related to the study by reviewing existing theoretical, empirical literature and the research gaps.

2.2 Theoretical Literature

A theoretical framework serves as a fundamental structure, comprising concepts, assumptions, and propositions that underpin an individual's perspective on the world (Rudestam & Newton, 2019). It forms the bedrock from which all knowledge is built for a research study. The use of theory is integral to the continuous development of knowledge (Fox, Gardner & Osborne, 2020). In the context of this study, various theories pertaining to interest rate volatility are relevant. These theories aim to elucidate the fluctuations in interest rates and the factors driving the payment of interest.

Theoretical frameworks on interest rates include the monetary theory, the quantity theory of money, and the credit risk model. The monetary theory examines the relationship between the money supply and interest rates. It posits that changes in the money supply can influence interest rates, with an increase in money supply typically leading to lower interest rates and vice versa. The quantity theory of money postulates that changes in the money supply directly impact the overall price level in an economy. It suggests that an increase in the money supply will eventually result in higher inflation rates and, in turn, may lead to adjustments in interest rates.

The credit risk model delves into the assessment of credit risk and its impact on interest rates. It explores how the creditworthiness of borrowers can affect the cost of borrowing and lending, thus influencing interest rates in financial markets. By integrating these theoretical frameworks into the study, the research seeks to gain a comprehensive understanding of the dynamics and drivers of interest rate volatility, providing valuable insights into the financial performance of deposit-taking SACCOs in Kenya. These theories will serve as a solid foundation for analyzing the complex interactions between interest rate drivers and their influence on the financial intermediation industry.

2.2.1 Monetary Theory

The Monetary Theory, attributed to John Maynard Keynes, 1936, forms the foundation for models explaining economic fluctuations where money is considered the primary driving force behind changes in real output. Keynes's work on this theory was notably published in his book "The General Theory of Employment, Interest and Money" in 1936 (Keynes, 1936). According to the theory, changes in the money supply play a significant role in influencing economic growth (Thornton, 2019). Central banks, as the controllers of monetary policy levers, can exert considerable power over economic growth rates when the monetary theory is put into practice (Guttmann, 2020).

In the 20th century, economic thought was dominated by free-market principles until John Maynard Keynes disrupted the status quo with his 1936 work "The General Theory of Employment, interest, and money." Keynes challenged the conventional reliance on supply and demand, proposing government intervention to ensure full employment. This Keynes shift triggered a counter-reformation. Amid this shift, Milton Friedman emerged

as a significant figure, revitalizing classical economics, Friedman (1974). He pinpointed weaknesses in Keynesian theory and championed its reconsideration, embodying roles as an economist, advocate of monetarism, and proponent of free-market ideology. Despite his revered theoretical contributions, some questioned the integrity of Friedman's public pronouncements. Nonetheless, his influence played a pivotal role in rejuvenating classical thought.

A fundamental tenet of monetary theory is that changes in either the money supply or the general level of prices have no effect on the rate of money circulation (Guttman, 2020). Because their focus was on transactional and precautionary reasons for retaining currency, monetary theorists neglected to consider the effect of velocity on the money supply (Guttman, 2020). Furthermore, according to Keynes (1936), prices are considered to be passive variables in monetary theory, meaning that they are affected by and do not directly cause changes in other economic factors. Additionally, the theory presumes that the money supply is a constant that is set externally and applies only to the long run; it disregards short-run variables that impact the correlation between the money supply and inflation (Keynes, 1936).

Another assumption of the monetary theory is the existence of full employment in the economy, viewing it as a special situation (De Vroey, 2020). Critics argue that this assumption is unrealistic, as real-world dynamics constantly change in both the short and long run. Increased spending, for instance, may not solely lead to higher prices but can also result in an expansion of output, especially during times of depression and mass unemployment. Additionally, the monetary theory assumes that the volume of money is

exogenously determined, which may not hold true in real-world scenarios where the velocity of money depends on various factors such as demographics, trade activities, habits of people, interest rates, and investment opportunities (Kaytaz & Gul, 2019).

Critics argue that this theory may oversimplify the complexities of modern economies, particularly in the context of financial innovations and global capital flows that can dilute the effectiveness of monetary policy (Borio & Disyatat, 2020). Additionally, the assumption that changes in money supply will lead to proportional changes in price levels does not hold in real-world scenarios where other factors, such as demand shocks or supply constraints, may also play significant roles (Friedman & Schwartz, 2018). Recent empirical studies highlight that the relationship between money supply and economic output is less stable than previously thought, questioning the reliability of monetary policy as a tool for economic stabilization (Mian, Rao & Sufi, 2021).

Even with its flaws, monetary theory is nonetheless useful for figuring out how the money supply, prices, and economic growth are all connected. According to the study conducted by Haushofer, Ringdal, Shapiro, and Wang (2019), deposit-taking SACCOs (Savings and Credit Cooperative Organizations) and the cost at which they can obtain funds in the money market are directly affected by changes in the money supply, which in turn affects the price level of goods and services. According to Kiro and Ndungu (2018), deposit-taking SACCOs' financial performance is affected by changes in the demand for money, which in turn affects credit costs in the economy.

In conclusion, the Monetary Theory proposed by John Maynard Keynes, 1936 plays a significant role in understanding the relationship between money supply, price levels, and economic growth. Increased money supply in the economy leads to increased general price levels of goods and services hence high inflation rate and vice versa. While the above theory has its limitations, its relevance lies in its connection to the financial performance of deposit-taking SACCOs and the influence of money supply on credit costs in the economy, which will in turn lead to possible loans repayment defaults, hence higher credit risk as well.

2.2.2 Credit Risk Model

Credit risk models were introduced as a major breakthrough in the field of finance by Merton (1974), Black and Cox (1976), and Schwartz (1995). Credit derivatives pricing and term structure modeling are the primary areas of concentration for these models, which classify credit risk as either structural or reduced-form (Hull, Nelken & White, 2018). While structural models consider corporate debt to be an option on the assets of the underlying business, reduced-form models use common and firm-specific criteria to establish "default intensity" (Christopoulos, 2017). Intensity functions in these models transfer explanatory variables into a default intensity process, hence default intensities in these models rely on explanatory factors. The underlying premise of credit risk models is that losses on credit are the same as defaults on loans.

If deposit-taking SACCOs want to keep their doors open and their non-performing loan book values to a minimum, they must master the art of default risk management (Hesborn & Onditi, 2020). Credit risk models have their advocates who believe they can

better reflect real credit risks in risk-weighting and account for the benefits of diversified portfolios (Armour & Gordon, 2019). Thus, these models may be used to determine the capital needs for credit risk in a manner similar to the value-at-risk models employed for market risk (Gauthier, Lehar & Souissi, 2020). Ensuring the quality of inputs and maintaining internal consistency with credit rating standards is vital for these models. However, credit risk models face criticism due to limited historical data on different types of credits over sufficiently long periods, making it challenging to test the validity of their components (Enyi, 2020).

Unlike market models with a daily horizon and a steady stream of observations, credit risk models typically employ a yearly horizon without the same frequency of data. As a result, qualitative methods like stress-testing and sensitivity analysis are essential for evaluating credit risk models. In the context of this study, credit risk models are highly relevant as deposit-taking SACCOs' primary business involves providing credit to members from their deposits. When the savings of its members aren't enough to cover lending rates, these SACCOs often approach KUSSCO and the Cooperative Bank of Kenya for assistance. Credit risk exposure of deposit-taking SACCOs has a substantial impact on the price of these funds (Siminyu, Mukanzi & Musiega, 2020).

In conclusion, credit risk models play a crucial role in assessing the credit risk faced by deposit-taking SACCOs and determining the pricing of credit facilities from external lenders. Their application enables SACCOs to manage default risk effectively, minimizing non-performing loans and ensuring the stability of their operations. By understanding and utilizing credit risk models, SACCOs can make informed decisions

about their credit activities, enhancing their financial performance and resilience in the market.

However, critics highlight that traditional models often rely on historical data, which may not accurately predict future defaults, especially during unprecedented economic events (Poon & Hatzopoulos, 2020). The reliance on credit ratings, which can be subjective and influenced by market conditions, raises concerns about their effectiveness in measuring credit risk accurately (Crouhy, Galai, & Mark, 2000). Moreover, the models may not fully account for the interconnectedness of financial systems and the impact of macroeconomic factors, leading to underestimations of risk in times of financial stress (Gordy, 2003).

2.2.3 Quantity Theory of Money

In 1911, Irving Fisher was a notable proponent of the Quantity Theory of Money, which argues that the quantity of money has a positive correlation with the long-term price of products (Tobin & Fisher, 2019). In this view, the price of goods and services will rise in direct correlation to the expansion of the money supply. It states that shifts in the money supply are the main forces behind price fluctuations in general (Aityan, 2018).

If the money supply were to grow by 3%, the rate of inflation would also rise by 3%, according to the Quantity Theory of Money. But it's absurd to think that money's velocity is constant and unaffected by changes in both price and quantity. Population, commerce, consumer habits, interest rates, and investment possibilities are some of the variables that might affect the economy's money velocity in reality. The quantity theory of money

presupposes, among other things, that the velocity of money is independent of both the amount of money and changes in price.

Nevertheless, the theory fails to account for real-world variables that impact the velocity of money, including population, trade activity, human behaviors, interest rates, and investment possibilities. It gives more weight to the reasons people keep cash for transactional and preventative purposes. Beyond that, the theory presupposes that prices are just receptive to, rather than active contributors to, shifts in other economic variables. It also ignores short-term variables that affect the link between the total amount of money and the price level, and it assumes that the supply of money is decided externally and applies only in the long run. According to Opp and Harris (2018). However, critics argue that the quantity theory of money is unrealistic in some aspects. It fails to account for the dynamic nature of the economy, where various factors continuously change in both short and long periods.

Increased spending, in certain circumstances, can lead to an expansion of output without a proportionate increase in prices, especially during periods of depression with mass unemployment. In addition, the theory doesn't take into account any short-term variables that can change the correlation between the money supply and inflation. On top of that, it takes full employment as a given, which isn't always the case in the actual world. Some people think the Quantity Theory of Money is flawed because it doesn't explain how monetary policy changes impact prices, thus limiting its explanatory power (Bagus and Howden, 2020). Despite its limitations, the theory is relevant to this study as changes in

the quantity of money in circulation can have significant implications for both deposit-taking SACCOs and their members.

Changes in the money supply have an effect on the cost of credit because they impact the buying power of SACCOs and their members. As a result, deposit-taking SACCOs, which rely on members' shares to fund operations, are particularly vulnerable to fluctuations in the cost of borrowing as a result of changes in the demand for money. During times of abundant money, members may be hesitant to take out loans because they believe their buying power would be lower (Munene, Ndambiri & Wanjohi, 2019). In conclusion, the Quantity Theory of Money plays a crucial role in understanding the impact of money supply on price levels and credit uptake by deposit-taking SACCOs and their members. Although it has its limitations, the theory provides valuable insights into the relationship between money circulation, inflation, and the cost of credit, making it relevant to the examination of financial performance in the context of deposit-taking SACCOs.

2.3 Conceptual Review

Variables are simply factors that represent properties, qualities, or characteristics of a person, thing, or concept. Any research paper like a thesis or dissertation requires relevant variables to be defined correctly. They can be as simple as demographic characteristics such as age, gender, or income (Marudhar, 2018). Other times they can be more complex like the psychological traits of an individual. Researchers do a thorough literature review to identify these complex variables.

2.3.1 Interest Rate Drivers

Interest rates play a central role in the financial system, influencing everything from borrowing costs for businesses and individuals to investment returns (Brand, Bielecki & Penalver, 2018). Interest rate drivers encompass a diverse array of economic, financial, and market factors that exert influence on the levels and trends of interest rates. These drivers play a pivotal role in shaping borrowing costs, investment decisions, and overall financial conditions, thereby exerting profound implications for economic activity and monetary policy. Understanding the factors that drive interest rates is crucial for navigating financial markets and making informed investment decisions (Buseti & Caivano, 2019).

2.3.1.1 Inflation

Inflation, the sustained increase in the general price level of goods and services over time, exerts a significant influence on interest rates. Central banks, the primary institutions responsible for setting monetary policy, aim to maintain price stability and low inflation. When inflation rises, central banks typically raise interest rates to curb inflation by making borrowing more expensive and encouraging saving. Higher interest rates incentivize individuals and businesses to hold onto their cash, reducing the money supply circulating in the economy and mitigating inflationary pressures (Mishkin, 2022).

Conversely, when inflation falls or there is a risk of deflation (a sustained decrease in prices), central banks may lower interest rates to stimulate economic activity and encourage borrowing. Lower borrowing costs make investments more attractive and can lead to increased spending by businesses and consumers, ultimately pushing inflation back towards the desired target (Goodhart, 2020).

The relationship between inflation and interest rates is not always straightforward. Central banks may consider other factors like unemployment or economic growth when setting interest rates. Additionally, changes in inflation expectations can also influence interest rates. If market participants anticipate future inflation to rise, they may demand higher interest rates on loans to compensate for the expected decline in purchasing power (Mishkin, 2022).

Central to the measurement of inflation are indices such as the Price Index and the Personal Consumption Expenditure (PCE) Index, which serve as essential tools for assessing changes in the overall price level of goods and services consumed by households (Clark, 2019). The Price Index, commonly represented by metrics such as the Consumer Price Index (CPI) or the Producer Price Index (PPI), quantifies the average change in prices paid by consumers or producers for a basket of goods and services over time. It serves as a crucial gauge of inflationary pressures in the economy, reflecting the cost of living for households and the pricing dynamics faced by businesses. Unlike CPI, which relies on fixed expenditure weights, the PCE Index employs a chain-weighted methodology, allowing for more flexible and accurate tracking of consumption patterns over time (Luciani & Trezzi, 2019).

Previous studies have commonly used the Consumer Price Index (CPI) as a primary measure of inflation, which tracks changes in the price level of a basket of consumer goods and services (Bohara, 2018). Additionally, the Wholesale Price Index (WPI) is utilized to measure changes in the price of goods at the wholesale level, providing insights into price trends that affect interest rates (Davis & Heller, 2019). Inflation

expectations, often gauged through surveys or market instruments such as Treasury Inflation-Protected Securities (TIPS), serve as another indicator (Blanchard & Galí, 2020). In your study, you may consider using the CPI as a primary indicator to evaluate inflation's impact on SACCO operations, along with the core inflation rate, which excludes volatile items for a clearer view of underlying trends. Moreover, monitoring monthly inflation rate changes can help capture short-term fluctuations that directly affect borrowing costs and financial decision-making within SACCOs.

2.3.1.2 Liquidity Risk

Liquidity risk refers to the potential difficulty of converting an asset into cash quickly and without a significant loss in value. This risk is a key driver of interest rates, with more liquid assets typically commanding lower interest rates compared to less liquid assets. Investors typically require a higher return to compensate for the risk of holding an asset that may be difficult to sell when needed. Government bonds, considered highly liquid due to their low default risk and guaranteed backing by the government, generally offer lower interest rates compared to corporate bonds. Corporate bonds, while offering potentially higher returns, carry greater risk of default by the issuing company and may be less liquid in the secondary market, leading to potential difficulties in selling them quickly at a fair price (Fabozzi, Shiller & Tunaru, 2020).

The overall supply and demand for liquidity also influence interest rates. When banks hold excess reserves (unused funds), interest rates tend to be lower as there is more readily available cash in the financial system. Conversely, when banks are tight on reserves, interest rates may rise as demand for liquidity increases (Mishkin, 2022).

Liquidity risk is closely tied to two key ratios in financial sector: the Loans to Deposit Ratio (LDR) and the Capital Adequacy Ratio (CAR). The Loans to Deposit Ratio (LDR) serves as a measure of a bank's liquidity position by comparing its total loans to total deposits. A high LDR indicates that a bank has extended a significant portion of its funds in the form of loans relative to its deposit base (Nyaundi, 2020). While higher LDRs can potentially lead to increased profitability through interest income, they also raise liquidity risk concerns, as a bank may face difficulties in meeting deposit withdrawals or funding additional loan demand. CAR measures a bank's capital relative to its risk-weighted assets, serving as a buffer against potential losses and insolvency. While CAR primarily focuses on solvency risk, it also indirectly influences liquidity risk management. A well-capitalized bank with a healthy CAR may be better positioned to withstand liquidity shocks, as it can tap into its capital reserves to meet short-term funding needs during periods of market stress (Shrestha, 2022).

Various indicators have been employed in prior research to assess liquidity risk, with the current ratio being a common measure. This ratio evaluates a company's ability to pay short-term obligations with its short-term assets (Ganesan, 2019). The quick ratio, which excludes inventory from current assets to provide a more stringent measure of liquidity, is also frequently analyzed (Horne & Wachowicz, 2018). Additionally, the cash ratio, which considers only cash and cash equivalents against current liabilities, offers a conservative view of liquidity (Eljelly, 2018). For your study, employing the current ratio will be essential in evaluating the ability of SACCOs to meet their short-term liabilities. You may also consider the Liquidity Coverage Ratio (LCR) to assess how well SACCOs

can cover their short-term obligations with liquid assets. Furthermore, analyzing the cash-to-deposit ratio will provide insights into the proportion of cash available relative to total deposits, thus enriching the understanding of liquidity risk in your analysis.

2.3.1.3 Credit Risk

Credit risk refers to the possibility that a borrower might default on a loan, meaning they fail to repay the principal or interest due. This risk plays a critical role in determining interest rates. Lenders typically charge higher interest rates on loans to borrowers deemed to be riskier, as they demand compensation for the increased potential of losing their investment. Individuals with poor credit histories or businesses with a high risk of failure will likely be charged higher interest rates on loans compared to those with strong creditworthiness. Credit rating agencies assess the creditworthiness of borrowers and assign credit ratings, which lenders rely on to determine the appropriate interest rate for a loan (Hull, 2020).

The overall level of risk in the financial system can also influence interest rates. During periods of economic uncertainty or financial crisis, lenders may become more cautious and demand higher interest rates to compensate for the increased risk of defaults. Conversely, periods of economic stability and low credit risk may lead to lower interest rates as lenders are more willing to lend at more favorable rates (Mishkin, 2022).

Research in this area often highlights the Non-Performing Loans (NPL) ratio as a key indicator, which quantifies the percentage of loans that are in default or nearing default (Beck, 2018). Additionally, the Loan-to-Value (LTV) ratio is frequently analyzed, as it compares the amount of the loan to the appraised value of the asset being purchased,

offering insights into lending risk (Calem & LaCour-Little, 2020). Credit Default Swaps (CDS) spreads also provide a market-based measure of credit risk by reflecting the risk of default on loans or bonds (Longstaff., 2020). In your study, utilizing the NPL ratio would be beneficial to assess the level of credit risk within SACCO portfolios. You could also examine the loan growth rate to understand the pace at which SACCOs are increasing their lending activities, along with the default rate to measure the percentage of loans that have defaulted over a specific period, thus providing a comprehensive view of credit risk exposure.

Two important metrics that provide insights into credit risk within the financial sector are the Non-Performing Loans (NPL) ratio and the Debt to Asset ratio. The Non-Performing Loans ratio measures the proportion of a bank's loan portfolio that is not generating income because borrowers have failed to meet their repayment obligations. A high NPL ratio indicates elevated credit risk exposure, as it suggests a higher likelihood of loan defaults and potential losses for the bank (Ahmed, Majeed & Thalassinou, 2021). Monitoring the NPL ratio is essential for assessing the quality of a bank's loan portfolio and its ability to manage credit risk effectively. The Debt to Asset ratio measures the proportion of a company's assets that are financed through debt. While this ratio is not specific to the banking sector, it provides insights into the leverage levels of financial institutions and their capacity to absorb credit losses. A high Debt to Asset ratio suggests that a significant portion of a bank's assets is funded by debt, increasing its vulnerability to credit risk and potential insolvency in the event of widespread loan defaults (Cerulli, Viordelisi & Masala, 2020).

2.3.2 Financial Performance

Financial performance denotes a comprehensive appraisal of an organization's capacity to utilize its resources efficiently, allocate capital wisely, manage risks effectively, and achieve strategic objectives. Evaluation of financial performance enables internal managers, investors, and external stakeholders to ascertain whether the entity generates satisfactory returns, maintains solvency, complies with regulatory requirements, and creates value for its constituents (Amimakmur, Saifi, Damayanti & Hutahayan, 2024).

Profitability constitutes a vital aspect of financial performance, capturing the extent to which a SACCO generates surplus revenue beyond covering operational expenditures. Key profitability ratios comprise the Return on Assets (ROA) and Return on Equity (ROE). ROA portrays net income as a fraction of total assets, thereby denoting efficiency in converting resources into profitable gains (Rahima, 2023). Simultaneously, ROE expresses net income scaled by shareholders' equity, revealing the degree to which owners benefit financially via dividends distribution and retained earnings accumulation (Zachariah, 2019).

Previous studies have often utilized Return on Assets (ROA) as a measure of profitability relative to total assets, providing insights into how efficiently SACCOs utilize their assets to generate profits (Khan & Mavridis, 2019). Another widely used indicator is Return on Equity (ROE), which assesses profitability in relation to shareholder equity, allowing for an evaluation of the financial return to members (Abdul-Maula & Habib, 2020). The Net Interest Margin (NIM) is also a crucial metric, reflecting the difference between interest income generated and interest paid relative to total assets, thus indicating the profitability

of lending operations (Aydin, 2021). In your study, incorporating ROA will be vital for measuring the efficiency of SACCOs in generating profits from their assets. Additionally, employing ROE will provide a member-focused perspective on profitability, while NIM will help assess the overall profitability of SACCOs' lending activities in relation to their interest expenses, offering a comprehensive view of financial performance.

2.4.3 Financial Performance of Deposit Taking SACCOs

Financial performance in deposit-taking SACCOs refers to how effectively and efficiently these organizations utilize their assets to generate revenues over a given period. It is a crucial measure of their overall financial health and success. Financial performance evaluates how well a deposit-taking SACCO uses its available resources to maximize capital returns, which is essential for gaining shareholders' and investors' loyalty (Ombaka & Jagongo, 2018). Assessing the financial performance of a deposit-taking SACCO allows managers and decision-makers to objectively measure the outcomes of business strategies and activities in monetary terms (Mangesti, 2019).

Prudent financial management plays a significant role in ensuring ideal financial performance for these SACCOs (Siminyu, Mukanzi & Musiega, 2020). Dividends and rebates paid from the SACCOs' surpluses to shareholders are indicators of their wealth growth, further highlighting the importance of financial performance (Orlando, 2020). In this study, financial performance in deposit-taking SACCOs was measured by key indicators such as return on assets, return on investments, growth in the number of members, and dividend payout. These metrics provide valuable insights into how well these SACCOs are utilizing their resources and generating returns for their members and

shareholders. Evaluating financial performance is crucial for ensuring the long-term sustainability and success of deposit-taking SACCOs.

2.5 Critique of the Existing Literature

The existing literature on various aspects of financial performance in different contexts provides valuable insights and findings. However, there are several critiques that can be made regarding the methodologies, data sources, and limitations of some of these studies. Opala Julius Alao (2019) researched on effects of financial stability on the financial performance of DT-SACCOs in Nrb County. The study used secondary data from all the SACCOs sampled. The study utilized data extracted from the audited financial statements for a period of 4 years from 2020 to 2018, which was too little to form an appropriate representative of findings.

Kimutai (2022) researched on liquidity management and financial performance of deposit taking saccos in Kericho County, using cashflow management, credit management and contingent funding management as independent variables. The dependent variable was measured by net profits and net sales as indicators of performance. The study concluded that liquidity management positively influences financial performance. However, measurement of financial performance as dependent variable in terms of net profits and net sales as was not good measure indicators of comparative performance in the sector.

Ndubuaku, Ozioma& Chiaka (2017) found that total assets value, deposit mobilization, loans and advances, and credit to the private sector were unaffected by the monetary policy rate throughout the SAP era. After SAP, however, the same variables were significantly affected by the monetary policy rate. Neither the audit status of the financial

statements nor the listing status of the commercial banks that made up the study's population on the Nigerian stock market were specified in the report.

Muheebwa (2018) studied SACCOs in Fort Portal, Uganda, to determine the correlation between liquidity and their financial success. The research highlighted the significance of liquidity in SACCOs, but it failed to provide an explanation for the selection of Fort Portal as the study region, thereby raising issues about other variables that may impact liquidity.

Mwaniki, Ndambiri, and Oluoch (2018) investigated how deposit-taking saccos in Kenya were impacted by their financial structures. Out of a total population of 176 DT-Saccos, 18 were included in the study's sample. The study cannot be generalized to all SACCOs in Kenya due to the limited sample size.

In their 2021 study, Boyd, Levine, and Smith looked at how inflation affected the US financial performance sector. However, the importance of interest income to the financial sector's performance was overlooked in the study's emphasis on cross-sectional correlations between inflation and financial sector conditions.

In 2020, Kargi assessed how credit risk affected the profitability of Nigerian banks, while in 2019, Awoke looked at how credit risk affected the financial performance of Ethiopian commercial banks. Even though both studies relied on secondary data culled from annual reports, there was no proof that these reports were based on audited financial accounts.

Microfinance institutions in Kampala were studied by Shieler, Emenike, and Amu (2017) to determine the correlation between credit risk approaches and financial performance. The study did not specify the criteria used to select the microfinance institutions, and the sample size and methodology raised concerns about the reliability of the findings. The strict use of closed-ended questions limited the depth of responses from respondents.

Researchers Muriithi, Waweru, and Muturi (2020) looked at how credit risk affected the bottom lines of Kenyan commercial banks. The research did find a negative and statistically significant correlation between credit risk and bank profitability, but it failed to account for the possible impact of political risk at a time when Kenya was experiencing high levels of political activity. Mucheru, Shukla, and Kibachia (2017) studied Rwandan commercial banks to find out how liquidity management affected their performance. Concerns about the study's credibility arise from its omission of information on the quality of the top management who served as respondents and the absence of details regarding the sample size and selection methods.

In their study of SACCOs in Kisumu City, Kenya, Osoro and Muturi (2020) looked at how inflation volatility affected their financial performance. Although the research relied on secondary sources, such as audited financial accounts, the small number of respondents chosen without proper justification for generalization raises concerns about the study's reliability.

In conclusion, the existing literature on financial performance in various contexts provides valuable insights and findings. However, there are several limitations in some of

the studies, including unclear methodologies, small sample sizes, and lack of justification for the choice of variables and locations. Researchers should be cautious in their methodologies, data sources, and sample sizes to ensure the robustness of their studies and enhance the credibility and reliability of their findings.

2.4 Empirical Literature Review

An empirical literature review process involves the evaluation of previous empirical studies to bring to rest a specific research issue. The research concentrated on empirical review on interest rate drivers constructs that is, inflation rate, liquidity risk, and credit risk on financial performance.

2.4.1 Inflation and Financial Performance

Several studies have looked at how inflation affects the bottom lines of different industries and economies. In their 2021 study, Boyd, Levine, and Smith looked at how inflation affected the US economy's bottom line. Research into potential theoretical predictions about inflation's effect on the financial system made use of a panel Generalized-Method-of-Moments (GMM) estimator in conjunction with a pure cross-sectional regression. Findings showed a negative correlation between inflation and financial sector lending to the private sector, total bank assets, and total bank liabilities for low to moderate inflation rates. However, this study primarily focused on a developed economy, potentially limiting its applicability to the unique context of Kenya's SACCO sector, where inflationary pressures may interact differently with financial behaviors and outcomes.

Basnet and Upadhyaya (2020) used a Structural VAR model to examine how oil price shocks affected the real exchange rate, inflation, and production in several ASEAN-5 nations. Most of the influence is absorbed within five to six quarters, so oil price variations don't have a big long-term impact on the ASEAN-5 economies, according to the research. A threshold was also found in the research between inflation and finance; at moderate inflation rates, there was a considerable correlation between inflation and financial development. While their findings provide insights into macroeconomic interactions, they lack direct implications for SACCOs in Kenya, thus leaving a gap in understanding how such dynamics play out specifically in the cooperative sector and under different inflation scenarios.

From 1980 to 2020, Ade-Tweneboah (2018) analyzed the effects of interest and inflation rates on the growth of Ghana's financial industry using a causal research approach. There was a weak negative correlation between inflation and banking sector growth, according to the research. A similar negative correlation between interest rates and financial sector development was shown to be statistically significant. The study recommended keeping inflation rates low and stable and maintaining low and stable interest rates to induce deposits at banks. However, this study does not specifically address deposit-taking SACCOs, which may exhibit distinct financial characteristics and responses to inflationary pressures, highlighting a significant gap in the existing literature.

Tsaurai (2017) investigated the impact of inflation on financial sector performance in sub-Saharan African countries. The study utilized dynamic panel data covering 45 countries in the region between 1980 and 2020. Both anticipated and unanticipated

inflation were found to have a negative effect on the financial sector performance in these countries. The study concluded that high inflation rates are detrimental to financial sector performance, and necessary measures should be taken to control inflation and improve the performance of the financial sector. While this study contributes valuable regional insights, it does not specifically analyze SACCOs, nor does it consider the unique regulatory and operational challenges faced by these institutions in Kenya. This oversight represents an important gap that future research should address to enhance understanding of inflation's specific effects on SACCO performance.

Using data from the Nairobi Securities Exchange, Irungu and Muturi (2020) analyzed how energy and allied industry companies' financial performance was impacted by macroeconomic factors. A descriptive correlation research approach was used in the study. All companies listed on the Nairobi Securities Exchange that were involved in energy or related industries made up the study's population. Secondary data included in the research came from a variety of sources, including the NSE's public financial accounts, the Kenya National Bureau of Statistics, and the Central Bank of Kenya. The research covered the years 2019–2019. Statistical methods such as multiple regression, correlation, and descriptive analysis were used to examine the data. According to the research, these companies' financial performance was significantly affected by lagging macroeconomic data. Although informative, this study's focus on a different sector means its findings cannot be directly extrapolated to SACCOs. There is a pressing need for research that explicitly investigates how macroeconomic variables, particularly

inflation, affect the unique financial performance dynamics within Kenya's SACCO sector.

Oganga and Oyugi (2020) investigated how SACCOs in Kisumu City, Kenya, fared financially when inflation was unpredictable. The research methodology for the study was a descriptive survey. A total of 528 senior managers from 176 deposit-accepting SACCOs in Kenya were selected using a stratified random selection approach. Books, respected magazines, the government, and the audited financial reports of deposit-taking SACCOs, SAGAs, and other government entities were consulted for secondary data. Questionnaires that were designed to be self-administered were used to gather primary data. The data was analyzed using descriptive and inferential statistics. Frequency tables, means, variances, and standard deviations were the descriptive analytical statistical approaches used. Multiple regression and the product-moment correlation coefficient were the inferential statistical methods used. The research discovered a robust inverse relationship between the SACCOs' financial performance and annualized inflation rates, suggesting that the financial performance of the SACCOs was negatively impacted by incremental inflationary factors. While the study effectively highlights the detrimental effects of inflation on SACCOs, it lacks a longitudinal analysis that could provide deeper insights into trends over time. Furthermore, the study does not distinguish between types of SACCOs or consider regional variations within Kenya, which could further elucidate how inflation affects financial performance across diverse contexts.

Using data collected from deposit-taking SACCOs in Nairobi, Kenya, Mwaniki (2017) analyzed how several macroeconomic factors affected their average financial

performance. A descriptive design was used in the investigation. The target audience consisted of 35 DTS members authorized to operate in Kenya by SASRA till December 2017. The sample size for this study comprised of 15 DTS operating in Nairobi Kenya, which were licenced to operate FOSA by SASRA. These are the DTSs whose data was available for the period of study. Quarterly data was collected for 20 years (1997 – 2020). Analysis was conducted using the vector error correction time series model. The study found no statistically significant relationship between return on assets and lagged values of inflation rate, interest rate, and money supply. This result raises questions about the robustness of the findings and suggests the need for further investigation, particularly with more comprehensive data that considers additional factors influencing SACCO performance.

In 2020, Kiptoo and Wanyoike examined how SACCOs in Eldama Ravine Sub County, Kenya, fared financially as a result of cost-push inflation. Both descriptive and inferential statistics were used to examine the data that was gathered from a structured questionnaire. A total of 150 SACCO board members, unionizable employees, and management staff members made up the study's target group. A total of 107 respondents were selected using stratified random selection. We used SPSS version 20 to analyze the data. There was only a minimal correlation between SACCO financial success and cost-push inflation, according to the research. While this study is valuable in its exploration of cost-push inflation, it fails to account for other inflation types and broader economic factors that could significantly affect SACCO performance. The limited scope of the analysis also highlights the need for more in-depth studies that encompass various

inflationary pressures and their multifaceted impacts on financial outcomes in the SACCO sector.

In conclusion, the empirical studies discussed above provide insights into the relationship between inflation and financial performance in different countries and economic sectors. The results show that the impact of inflation on financial performance varies across countries and industries, with low-to-moderate inflation rates having a stronger negative association with financial performance. Governments and monetary institutions should carefully manage inflation to support a healthy and stable financial sector. High inflation rates means high cost of borrowing hence decrease in borrowing and increase in loan defaults, thus credit risk as well.

2.4.2 Liquidity Risk and Financial Performance

The relationship between liquidity risk and financial performance in the banking and financial sectors has been the subject of various empirical studies conducted in different countries. Shen, Chen, Kao and Yeh (2018) investigated the causes of liquidity risk in commercial banks using an unbalanced panel dataset of 12 advanced economies, including Taiwan. The study used panel data instrumental variables regression, employing two-stage least squares estimators to estimate the liquidity risk and performance model of banks. The results showed that liquidity risk was the endogenous determinant of bank performance. The study further observed that liquidity risk lowered bank profitability due to higher cost of funds, but it increased banks' net interest margins. Interestingly, the negative impact of liquidity risk on bank performance was more pronounced in market-based financial systems compared to bank-based financial

systems. While this study highlights important dynamics of liquidity risk, it focuses on advanced economies, which may not translate to the unique challenges faced by deposit-taking SACCOs in Kenya, suggesting a gap in understanding how these institutions specifically manage liquidity risks and their implications for financial performance.

Khan and Sattar (2019) also looked at the variables that could have an impact on Pakistani banks from 2007 to 2020. Statistical analysis showed that internal variables such capital adequacy ratio, cost of funds, and bank size had distinct relationships with the ratios of liquid assets to total assets and total loans to deposits, respectively. Bank liquidity was affected differently by external, macro variables such as GDP, which were likewise statistically significant. The research did find a weak correlation between liquidity and profitability. Despite the large-scale growth in the banking sector of Pakistan since 2018, the study observed that the sector encountered pressures such as liquidity and solvency problems, which significantly impacted its performance. Their observations on the pressures faced by the banking sector are informative, but the lack of significant findings regarding liquidity and performance limits the applicability of these results to SACCOs, which may experience different operational and regulatory pressures, particularly in a developing economy like Kenya. This points to a need for further research that directly connects liquidity risk with financial performance metrics specific to SACCOs.

Using a panel data sample of twenty-four institutions spanning a decade, Musa, Erasmus, Kwazi, and Dodzi (2018) investigated how interest rate spread affected the profitability of commercial banks in Ghana. Since banks were able to charge more interest on loans

than on deposits, the research concludes that this practice contributed to their greater profitability. This finding is supported by statistical evidence. Implications for interest rate spread and Ghanaian policy were highlighted in the research. While their study indicates how interest rates influence financial performance, it does not specifically explore liquidity risk or its implications for SACCOs, which often function under different financial paradigms. Consequently, the study leaves a gap regarding the specific impact of liquidity management on SACCO financial health and profitability.

Marozva (2020) looked examined data from 1998 to 2019 to determine how liquidity affected the performance of South African banks. The research investigated the connection between liquidity and net interest margin using an autoregressive distributed lag bound testing strategy and ordinary least square approaches. The findings demonstrated that liquidity risk is significantly and negatively correlated with net interest margin. While the findings are relevant for understanding liquidity's impact on performance, they do not directly address the unique structures and challenges faced by SACCOs in Kenya. This lack of context limits the relevance of the findings for local SACCOs, necessitating research that directly examines liquidity dynamics within the Kenyan cooperative context.

Research by Mucheru, Shukla, and Kibachia (2017) examined how liquidity management impacted the efficiency of Rwandan commercial banks. The study used a descriptive research approach and drew its main quantitative data from 2019–2020 commercial banks' audited financial statements and secondary data from self-administered structured questionnaires. Commercial banks in Rwanda saw a negative correlation between

liquidity credit risk and their financial performance, according to the data. Although this study offers insights into liquidity management practices, it does not account for specific challenges and regulatory frameworks unique to Kenyan SACCOs, leaving a gap in understanding how these institutions can effectively manage liquidity risks to enhance financial performance.

Muheebwa (2018) looked at the SACCOs in Fort Portal, Uganda, to see how their liquidity correlated with their financial success. Using a correlational research approach, the study examined 135 SACCOs as a whole and discovered a strong connection between financial success and liquidity. According to the research, SACCOs can't function without liquidity, which is also an important indicator of the soundness of potential investments. This study's focus on SACCOs provides useful context, but its findings may not fully capture the operational realities in Kenya, as SACCOs can vary significantly in structure and regulatory oversight. Further investigation into Kenyan SACCOs is warranted to confirm or contrast these findings.

For their 2018 study, Makaa and Ondigo looked at how liquidity risk affected the bottom lines of Kenyan commercial banks. The study used a correlational research approach and relied on secondary data culled from the 2018–2020 financial statements, income statements, and notes of thirty-three banks in Kenya. In a research conducted in Kenya, it was discovered that commercial banks' profitability was severely impacted by a rise in liquidity gap and leverage. Their research is relevant but limited to commercial banks, failing to extend insights to SACCOs, which have distinct operational challenges and

financial dynamics. This gap emphasizes the need for research that specifically targets liquidity risk in Kenya's deposit-taking SACCO sector.

In their 2018 study, Gweyi, Olweny, and Oloko looked at how deposit-taking SACCOs in Kenya fared financially due to liquidity risk. The study drew on secondary data culled from 135 deposit-taking SACCOs' audited financial statements and using a descriptive research approach. Financial performance was negatively and significantly affected by liquidity risk, according to the data. While this study directly addresses the SACCO context, it could be enhanced by exploring how various liquidity management practices influence performance over time, particularly during periods of economic instability.

For the years 2019 and 2019, Muriithi and Waweru (2017) analyzed the impact of liquidity risk on the bottom lines of forty-three Kenyan commercial banks that were on record. Secondary data was culled from financial statements submitted by commercial banks to the Central Bank of Kenya, and a quantitative research approach was used for the study. Liquidity risk negatively impacted financial performance, according to the research. However, their focus on commercial banks rather than SACCOs highlights a crucial gap; SACCOs may have different liquidity management strategies and risk profiles that warrant dedicated research to understand their unique performance determinants.

A study conducted by Osoro and Muturi (2020) looked at how SACCOs in Kisii County, Kenya, fared financially as a result of liquidity credit risk policies. Primary quantitative data came from structured questionnaires, while secondary data came from financial

records; the research utilized a descriptive survey approach. The research indicated that SACCOs' return on assets (ROA) was greatly influenced by capital sufficiency, while asset quality and capital leverage had no discernible effect on savings mobilization. While this study is relevant, it does not fully explore how liquidity risk as a standalone variable impacts financial performance, suggesting that additional analysis is needed to isolate these effects specifically for SACCOs.

The impact of liquidity risk on the financial performance of Kenyan insurance businesses listed on the stock market was investigated by Kamau and Njeru (2018). Operations risk, market risk, and credit risk were the risks that needed to be examined. The intended audience for the 2020–2020 fiscal year was the six insurance providers that were named. This research just provided descriptive data. In order to compare the firms' return on equity and net premiums generated for those years, we looked at their financial statements. These businesses' bottom lines took a hit due to operational, market, and credit concerns, according to the research. Although this study enriches the understanding of risk impacts in the financial sector, it does not address SACCOs directly, indicating a significant gap in literature concerning liquidity risk within the cooperative finance model.

In Nairobi County, Kenya, 27 deposit-taking SACCOs regulated by SASRA were studied by Song'e (2020) to determine the impact of liquidity management on their financial performance. From 2020 to 2019, we used secondary data gathered from the published financial statements of 27 deposit-taking Saccos regulated by the Sacco Society Regulatory Authority. Data reliability was ensured since it was sourced from Sasra, an

agency tasked with regulating the functioning of deposit-taking sacco. Descriptive statistics, regression analysis, and correlation were the effective methods used by the researcher. Financial performance was determined to be strongly correlated with liquidity risk, operational efficiency, quick ratio, log of total assets, and profit before taxes as a percentage of total assets, according to the research. This study contributes valuable insights; however, it would benefit from a more nuanced analysis of liquidity management strategies and how they can be optimized for better performance outcomes. For the years 2019–2018, Njeri (2019) studied the impact of liquidity on the bottom lines of Kenyan microfinance firms that accepted deposits. This research relies on information culled from five years' worth of audit reports released by the institution in question, as well as reports from the AMF and the CBK on bank supervision. Inferential statistics were used in this research to provide a quantitative explanation of the collection's primary traits, including data analysis using linear regression and correlation. The liquidity of DTMFIs was determined by dividing their total assets by the value of their cash and equivalents, while return on assets was used to assess financial performance. Financial success was positively correlated with liquidity risk, according to the research. This research adds to the understanding of liquidity dynamics, yet it still overlooks the specific challenges faced by SACCOs, which have their regulatory frameworks and operational characteristics.

In conclusion, the studies discussed above collectively highlight the crucial role of liquidity credit risk in influencing the financial performance of banks and financial institutions. The findings underscore the significance of effective liquidity credit risk

practices and policies to ensure financial stability and profitability in the banking and financial sectors. However, it is essential to recognize that the impact of liquidity risk on financial performance may vary across different banking systems, countries, and specific contexts, necessitating tailored approaches in managing liquidity risk.

2.4.3 Credit Risk and Financial Performance

Several empirical studies have explored the relationship between credit risk and financial performance in various banking contexts. These studies provide valuable insights into the impact of credit risk on banks' profitability and overall financial health. The research spans different countries and utilizes diverse indicators to measure credit risk and financial performance.

Authored by Abiola and Olausi (2019) aims to examine the impact of credit risk on the financial performance of commercial banks in Nigeria. The researchers employed a quantitative research design using panel data analysis to explore this relationship. The study area focused on the Nigerian banking industry, specifically analyzing 10 commercial banks selected based on their asset size. Secondary data was collected from the annual reports and financial statements of these banks, covering the period from 2019 to 2020. The findings revealed a significant negative relationship between credit risk, measured by non-performing loans (NPLs), and the financial performance of banks, indicated by Return on Assets (ROA) and Return on Equity (ROE). The study concluded that higher levels of credit risk adversely affect the profitability and performance of banks, suggesting that effective credit risk management is crucial for enhancing bank performance in Nigeria. However, while the study provides valuable insights into the

Nigerian banking context, it does not explore the unique operational and regulatory challenges faced by deposit-taking SACCOs in Kenya, indicating a gap in understanding how credit risk impacts their performance specifically.

In this study, Bashir and Hassan (2020) explored the effect of credit risk management on the financial performance of banks in Nepal. The objective was to analyze how credit risk management practices influence the profitability and stability of banks. The research employed a descriptive research design with a focus on commercial banks in Nepal. The sample consisted of 20 commercial banks, selected based on their market presence and performance. Data was collected through both primary and secondary sources, including surveys of bank employees and financial data from bank reports from 2020 to 2020. The study found that sound credit risk management practices, such as stringent loan approval processes and effective monitoring of credit portfolios, positively impacted the banks' financial performance. The study concluded that banks with robust credit risk management frameworks were more likely to achieve higher profitability and stability, emphasizing the importance of adopting effective credit risk management strategies. While this study highlights the importance of credit risk management, it primarily focuses on commercial banks and may not be directly applicable to SACCOs, which often operate under different regulatory environments and member-driven models. This limitation suggests a need for research that considers the specific credit risk management practices within SACCOs.

Ahmed, Takeda and Thomas (2017) investigated the impact of credit risk on the financial performance of commercial banks in Pakistan. The research objective was to analyze

how credit risk affects the profitability and efficiency of banks in the Pakistani context. The study employed a panel data approach, focusing on a sample of 15 commercial banks operating in Pakistan from 2019 to 2020. Data was gathered from secondary sources, including annual financial statements and reports published by the banks. The study's findings indicated a significant negative correlation between credit risk, measured by the ratio of non-performing loans to total loans, and bank performance metrics such as Return on Equity (ROE) and Return on Assets (ROA). The researchers concluded that credit risk is a critical determinant of bank performance and that effective risk management practices are essential for improving financial outcomes in the banking sector. While these findings are crucial for understanding credit risk's role in bank performance, they do not extend to the cooperative banking sector in Kenya, particularly to deposit-taking SACCOs. Research that examines the distinct financial dynamics and credit risk management strategies within SACCOs is necessary to fill this gap.

Afriyie and Akotey (2019) examined the effect of credit risk on the financial performance of commercial banks in Ghana. The objective was to explore the relationship between credit risk and key performance indicators in the Ghanaian banking sector. The researchers used a panel data analysis approach, focusing on a sample of 25 commercial banks in Ghana from 2007 to 2017. Secondary data was collected from the banks' annual reports and the Bank of Ghana's publications. The findings revealed that credit risk, particularly the level of non-performing loans, negatively impacted the banks' financial performance, as evidenced by reduced profitability and efficiency. The study concluded that managing credit risk is vital for enhancing the financial performance of banks in

Ghana, recommending that banks implement effective risk management frameworks to mitigate adverse effects. Although the study emphasizes effective credit risk management frameworks, it does not focus on SACCOs, which have different operational modalities. This omission highlights the need for tailored research that addresses credit risk management practices specific to the cooperative sector in Kenya.

In this study, Wanjira and Muriuki (2018) investigated the relationship between credit risk management and the financial performance of commercial banks in Kenya. The research objective was to assess how credit risk management practices influence bank performance metrics such as profitability and stability. The study adopted a descriptive research design and focused on 30 commercial banks in Kenya, selected based on their market share and financial standing. Data collection involved both primary and secondary sources, including questionnaires administered to bank managers and financial data from bank reports covering the period from 2020 to 2017. The study found that effective credit risk management practices, such as regular credit assessments and monitoring, significantly contributed to improved financial performance in Kenyan banks. The study concluded that banks with robust risk management strategies were better positioned to maintain profitability and withstand economic shocks, highlighting the importance of investing in credit risk management systems. While this research is relevant, it focuses solely on commercial banks, leaving a gap regarding how these findings apply to deposit-taking SACCOs. There is a need for research that investigates the unique credit risk management challenges faced by SACCOs and their implications for financial performance.

Poudel (2018) explored the impact of credit risk on the financial performance of banks within the European banking sector. The objective was to analyze how credit risk influences the profitability and operational efficiency of banks across Europe. The study employed a quantitative research design, utilizing a sample of 50 banks from various European countries over the period from 2018 to 2020. Secondary data was obtained from banks' annual reports and financial statements, along with data from the European Central Bank. The findings demonstrated a significant negative impact of credit risk on bank performance, with higher levels of non-performing loans correlating with reduced profitability indicators such as Return on Assets (ROA) and Return on Equity (ROE). The study concluded that credit risk management plays a critical role in shaping the financial performance of banks, and effective risk mitigation strategies are essential for enhancing stability and profitability in the European banking sector. While this study contributes to understanding credit risk in a global context, it does not address the cooperative banking model or SACCOs specifically. This gap suggests the necessity for research focused on how credit risk affects the financial performance of deposit-taking SACCOs in Kenya, given their unique operational context.

In conclusion, even though the empirical literature provides valuable insights into the relationship between credit risk and financial performance, it is essential to consider specific banking contexts and time periods to understand the variations in findings. Other factors, such as bank size, management performance, and macroeconomic variables, have also been taken into account to provide a comprehensive understanding of the factors influencing bank performance. Furthermore, effective credit risk is crucial for

maintaining the financial performance and profitability of commercial banks across different countries. Banks must implement proper risk assessment, monitoring, and mitigation strategies to address credit risk and ensure their long-term stability and success in a competitive and dynamic banking landscape.

2.6 Summary of Literature Review and Research Gaps

The literature review explores various monetary theories and credit risk models that shed light on the relationship between monetary policy, interest rates, and financial performance in deposit-taking SACCOs in Kenya. The quantity theory of money explains how the supply of money affects interest rates, impacting the financial performance of SACCOs. Additionally, the credit risk model emphasizes how high borrowing costs for SACCOs with elevated credit risk exposure can influence their financial performance.

Kimutai (2022) examined liquidity management's impact on financial performance in Kericho County's deposit-taking SACCOs. Independent variables included cashflow, credit, and contingent funding management. Net profits and net sales measured performance. Results revealed a positive influence of liquidity management on financial performance. However, the study suggested investigating additional factors like inflation rate, liquidity risk, and credit risk to further enhance understanding of SACCOs' performance drivers and bridge existing research gaps.

Opala (2019) explored the impact of financial stability, including liquidity, capital adequacy, Sacco size, and management quality, on DT-SACCOs' performance in Nairobi County. Results highlighted these factors' significance influence on financial performance. The researcher recommended further study to encompass all deposit-taking

Savings and Credit Co-operative Societies for wider application in Kenya. Furthermore, the study proposed examination of additional independent variables like inflation rate, liquidity risk, and credit risk to address research gaps and enhance understanding of DT-SACCOs' performance dynamics.

Despite extensive literature on drivers influencing Kenyan SACCOs' financial performance, significant research gaps persist, inviting further investigation. This necessitates deeper exploration to unveil reasons for the limited impact. While studies on SACCOs' financial factors (Wangui & Muturi, 2020) and liquidity risk (Muriithi & Waweru, 2017) exist, a unique void remains in examining interest rate drivers and deposit-taking SACCOs' financial performance, offering an unexplored avenue for further research.

Table 2. 1: Summary of Research Gaps

Research er	Focus Study	Methodology/ Approach	Findings	Knowledge Gap
Boyd <i>et al.</i> (2021)	Relationship between inflation and financial performance in the United States of America.	The study utilized a pure cross-sectional regression and panel Generalized-Moments (GMM) estimator to explore theoretical predictions regarding the impact of inflation on the financial system.	The results indicated that at low-to-moderate rates of inflation, there was a strong negative association between inflation and lending by the financial sector to the private sector	However, this study primarily focused on a developed economy, potentially limiting its applicability to the unique context of Kenya's SACCO sector
Basnet and Upadhya (2020)	Impact of oil price shocks on real output, inflation, and the real exchange rate	Structural VAR model	Study found that oil price fluctuations did not have a significant long-run impact on	The study lacked direct implications for SACCOs in Kenya, thus leaving a gap in

	in several ASEAN-5 countries		the ASEAN-5 economies	understanding how such dynamics play out specifically in the cooperative sector and under different inflation scenarios.
Tsaurai (2017)	Impact of inflation on financial sector performance in sub-Saharan African countries	The study utilized dynamic panel data covering 45 countries in the region between 1980 and 2020	Both anticipated and unanticipated inflation were found to have a negative effect on the financial sector performance in these countries	It does not specifically analyze SACCOs, nor does it consider the unique regulatory and operational challenges faced by these institutions in Kenya
Irungu and Muturi (2020)	Relationship between macroeconomic variables and financial performance of firms in the energy and allied sector listed in the Nairobi Securities Exchange	The study used descriptive correlation research design. The population of this study comprised of all firms quoted in the energy and allied sector in the Nairobi Securities Exchange. The study employed annual secondary data which was obtained from the Central Bank of Kenya	The study found significant influence of lagging macroeconomic indicators on the financial performance of these firms.	study's focus on a different sector means its findings cannot be directly extrapolated to SACCOs. There is a pressing need for research that explicitly investigates how macroeconomic variables, particularly inflation, affect the unique financial performance dynamics within Kenya's SACCO sector

Oganga and Oyugi (2020)	Effects of inflation volatility on the financial performance of SACCOs in Kisumu City, Kenya	The study used a descriptive survey research design. Stratified random sampling technique was applied on a population of 528 top managers in 176 deposits taking SACCOs in Kenya	The study found a strong negative correlation between annualized inflation rates and the SACCOs' financial performance, indicating that incremental inflationary forces had a diminishing effect on the SACCOs' financial performance	While the study effectively highlights the detrimental effects of inflation on SACCOs, it lacks a longitudinal analysis that could provide deeper insights into trends over time
Mwaniki (2017)	Effect of macroeconomic variables on the average financial performance of deposit-taking SACCOs in Nairobi, Kenya	The study used a descriptive design. Target population was 35 DTS registered by SASRA to operate up to December 2017 in Kenya. The sample size for this study comprised of 15 DTS operating in Nairobi Kenya, which were licenced to operate FOSA by SASRA.	The study found no statistically significant relationship between return on assets and lagged values of inflation rate, interest rate, and money supply.	This result raises questions about the robustness of the findings and suggests the need for further investigation, particularly with more comprehensive data that considers additional factors influencing SACCO performance.
Kiptoo and Wanyoike (2020)	Effect of cost-push inflation on the financial performance of SACCOs in Eldama Ravine Sub	Data was collected using a structured questionnaire and analyzed using descriptive and inferential statistics. The target population of the	The study found a weak relationship between financial performance of SACCOs and cost-push	The limited scope of the analysis also highlights the need for more in-depth studies that encompass various

	County, Kenya.	study comprised 150 Board members, SACCO unionizable staff and SACCO management staff	inflation. While this study is valuable in its exploration of cost-push inflation, it fails to account for other inflation types and broader economic factors that could significantly affect SACCO performance.	inflationary pressures and their multifaceted impacts on financial outcomes in the SACCO sector.
Shen <i>et al.</i> (2018)	Causes of liquidity risk in commercial banks	Unbalanced panel dataset of 12 advanced economies, including Taiwan. The study used panel data instrumental variables regression, employing two-stage least squares estimators to estimate the liquidity risk and performance model of banks	The results showed that liquidity risk was the endogenous determinant of bank performance	It focuses on advanced economies, which may not translate to the unique challenges faced by deposit-taking SACCOs in Kenya
Musa <i>et al.</i> (2018)	Effect of interest rate spread on the profitability of commercial banks	Using panel data sampled from 24 banks over a ten-year period	The study found a positive and statistically significant association between interest rate spread and bank profitability.	It does not specifically explore liquidity risk or its implications for SACCOs, which often function under different financial paradigms
Marozva (2020)	Effect of liquidity on	The study used autoregressive	The results established a	While the findings are

	bank performance in South Africa for the period between 1998 and 2019.	distributed bound approach ordinary square methods to examine the relationship between net interest margin and liquidity.	lag testing and least square methods to the relationship between net interest margin and liquidity.	negative significant deterministic relationship between net interest margin and liquidity risk	relevant for understanding liquidity's impact on performance, they do not directly address the unique structures and challenges faced by SACCOs in Kenya
Makaa and Ondigo (2018)	Relationship between liquidity risk and financial performance of commercial banks in Kenya	The study used correlational research design with secondary data from the balance sheets, income statements, and notes of 33 Kenyan banks during 2018-2020.		The study found that profitability of the commercial banks in Kenya was negatively affected by an increase in liquidity gap and leverage	Their research is relevant but limited to commercial banks, failing to extend insights to SACCOs, which have distinct operational challenges and financial dynamics

Source: Researcher (2022)

2.7 Conceptual Framework

The dependent variable is financial performance while the independent variable is interest rate drivers.

Independent variables

Dependent Variable

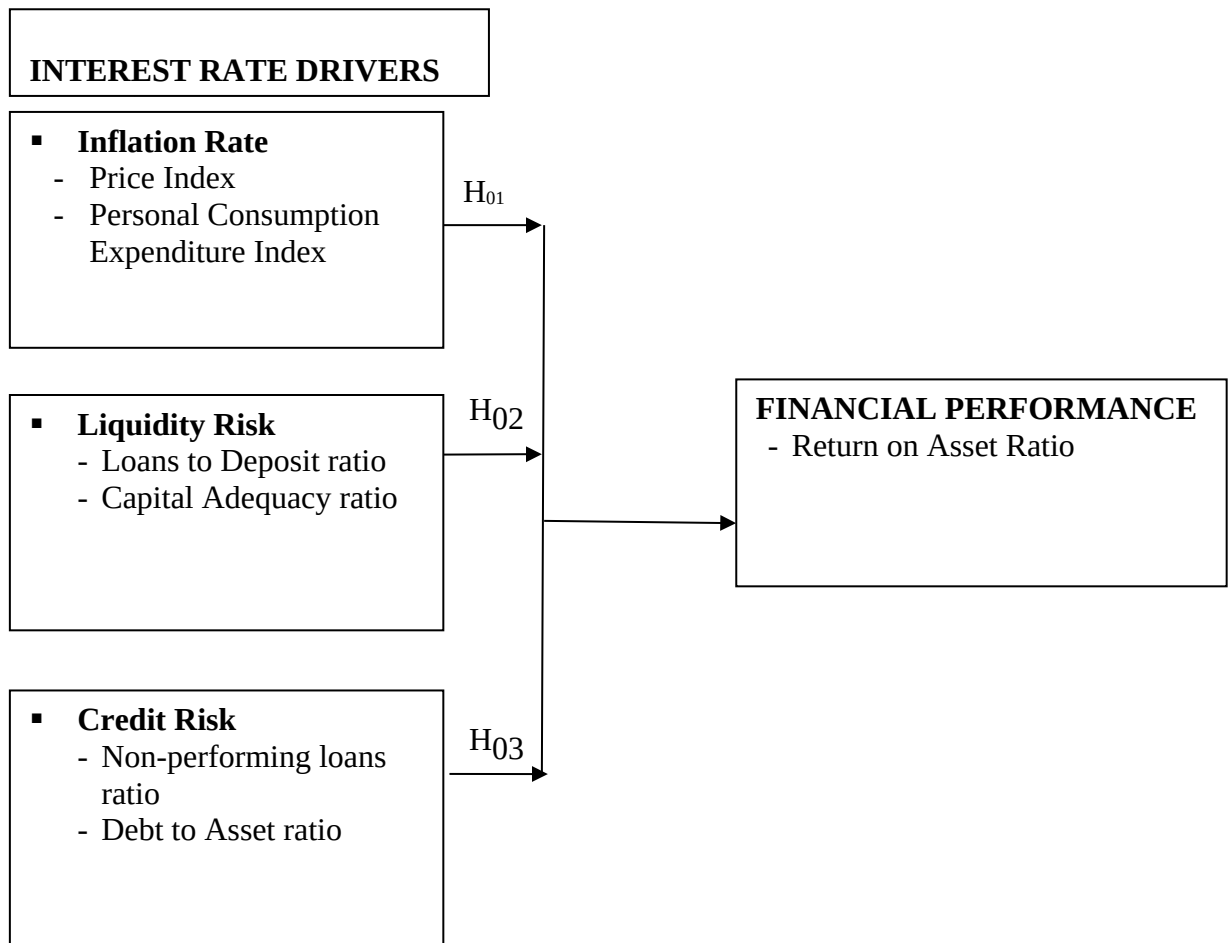


Figure 2.1: Conceptualizing the Relationship between Interest rate drivers and Financial Performance

Source: Researcher self-conceptualization (2023)

The inflation rate, often measured by indicators such as the Price Index and the Personal Consumption Expenditure Index (PCE), reflects the percentage increase in prices of goods and services, significantly impacting SACCOs' lending and investment strategies.

Studies have shown that inflation can diminish the real returns on savings and affect borrowing costs (Kiptoo & Wanyoike, 2020; Ade-Tweneboah, 2018; Tsaurai, 2017). Liquidity risk, assessed using the Loans to Deposit Ratio (LDR) and Capital Adequacy Ratio (CAR), refers to the SACCO's ability to meet short-term obligations, with higher ratios indicating potential liquidity challenges. Research indicates that liquidity management is crucial for sustaining operations and ensuring financial health (Muriithi & Waweru, 2017; Song'e, 2020; Muheebwa, 2018). Credit risk, represented by the Non-Performing Loans Ratio (NPL Ratio) and Debt to Asset Ratio, highlights the risk of borrower defaults and the degree of financial leverage, both of which can adversely affect financial stability. Effective credit risk management practices are essential for safeguarding profitability in SACCOs (Wanjira & Muriuki, 2018; Afriyie & Akotey, 2019; Poudel, 2018). Finally, financial performance is often gauged by the Return on Assets (ROA), indicating how effectively a SACCO utilizes its assets to generate profit, reflecting overall operational efficiency. Studies consistently show that strong financial performance is correlated with effective risk management and sound operational practices (Gweyi, Olweny, & Oloko, 2018; Irungu & Muturi, 2020; Kiptoo & Wanyoike, 2020).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discussed the research design, the description of the population, data collection instruments and sample procedure, validity and reliability of research and data analysis procedures.

3.2 Study Area

The research was carried out in Kenya focusing on 175 SASRA licensed DT-SACCO as of 2022 (Appendix II). In Kenya, deposits taking SACCOs have witnessed a fast growth in the recent past. SACCOs are formed by members with the objective of mobilizing savings for the purpose of creating sources of credit for its members at competitive rates of interest (Moturi & Mbiwa, 2020). Since many of the members tend to be in low income.

brackets, by their very nature, SACCOs are aimed at alleviating poverty. They are part of the co-operative movement which supports 45% of Kenya's economic activities, and it is therefore one of the options for achieving sustained economic growth (Marwa & Aziakpono, 2020).

Deposits taking SACCOs have continued to expand their physical presence and operations to various parts of the country, with a total of 464 physical branches spread out in different parts of the country being recorded in 2017. Further to head office locations which are channels of delivery, DT-SACCOs account for almost 638 physical

financial delivery channels spread across the country. Even though there is evidentially high concentration of these physical branches in about a third of all the counties, it is noteworthy that the branch networks of SACCOs are generally situated in small market and trading centers, in which they are the only known formal financial institution, thereby heavily deepening the availability of financial services to the Kenyan populace.

This study focuses on deposit-taking Savings and Credit Cooperative Societies (SACCOs) in Kenya due to their crucial role in promoting financial inclusion and economic development within the country. SACCOs provide essential financial services to underserved populations, facilitating access to affordable credit and savings options that traditional banks may not offer (Karanja, 2020; Ouma & Ochieng, 2021). Given the significant growth of SACCOs, which collectively mobilized over KSh 500 billion in deposits, understanding the impact of interest rate drivers on their financial performance is vital for their sustainability (SASRA, 2021). Moreover, as interest rates fluctuate in response to macroeconomic changes, they directly influence borrowing costs and savings returns, necessitating effective interest rate management by SACCOs to maintain profitability and liquidity (Waweru & Waweru, 2020).

3.3 Research Design

A descriptive research design and correlational research design were used in the study. Descriptive research is a type of research design that tries to explain the relationship between two or more variables without making any claims about cause and effect. It includes collecting and analyzing data on at least two variables to see if there is a link between them. In descriptive research, researchers do not change any variables or try to

find cause-and-effect connections. Instead, they just watch and measure the variables of interest and then look at the patterns and relationships that emerge from the data.

Correlational research designs measure the magnitude and direction of the relationship between two or more variables, revealing their associations. At the outset created initial equivalence between the groups or variables being compared is essential in descriptive research. The independent variable occurs prior to the measurement of the measured dependent variable in descriptive research. Its goal is to explain the traits or actions of a certain population or group and look at the connections between independent and dependent variables. It also helped in describing the influence of interest rate drivers on DT SACCOs' financial performance.

3.4 Target Population

Any collection of items, services, individuals, or homes that are the subject of an investigation are collectively referred to as a population (Wanyoike, 2018). According to Muganda (2018), in order to choose a representative sample, it is necessary to reach out to a subset of the population known as the target population. This subset represents specified qualities and may be realistically reached. In Kenya, there are 176 SACCOs that accept deposits (Appendix II). Therefore, the target population was 176 DT-Saccos from which a sample was drawn from. The study used secondary data that was collected from audited reports & financial statements over 7 (seven) years' period between 2020 to 2022 from the sampled DT-Saccos in Kenya.

3.5 Sample Size and Sampling Techniques

If you want to draw conclusions about a full population based on a tiny subset of that population, you need to take a sample. Kothari and Gaurav (2019) state that it aims to estimate population characteristics that are not known. In order to get a good representation of the larger population under investigation, researchers use a technique called sampling (Mugenga & Mugenda, 2018). Considerations such as the study's goals, available time, and the geographic distribution of DT-SACCOs in Kenya informed the sample procedure.

3.5.1 Determination of Sample Size

When trying to determine a sample size, researchers often turn to the formula developed by Krejcie and Morgan (1970). The population sample size is determined using the Krejcie and Morgan form.

$$S = \frac{X^2 NP (1-P)}{d^2 (N-1) + X^2 P (1-P)}$$

Where

S is the desired sample size

X^2 is the table value of chi-square for one degree of freedom at desired confidence level which is $1.96 \times 1.96 = 3.841$

N is the population size

P is the population proportion assumed to be 0.5 since this was provided maximum sample size and d is the degree of accuracy expressed as a proportion 0.05

$$S = \frac{3.8416 \times 176 \times 0.5 (1 - 0.5)}{0.05^2 (176 - 1) + 3.8416 \times 0.5 (1 - 0.5)} = 120.9 \text{ Respondents} \approx 121 \text{ SACCOs.}$$

A sample of 121 DT-Saccos was drawn from the target population of 176 DT-Saccos countrywide.

Table 3.1: Sample Size Distribution

TIER SIZE	No. of DTS in each Tier	Distribution of DT-Saccos (%)	SACCOs to be sampled
Large Tiered Size	39	22	27
Medium Tiered Size	55	31	37
Small Tiered Size	82	47	57
Total	176	100	121

Source: SASRA (2022).

3.5.2 Sampling Technique

The study adopted the stratified random sampling. According to Mugenda and Mugenda (2018) a third of the population is an ideal sample. The population was divided into strata and a sample is selected from each stratum. This enabled the researcher to control the sample size in the strata, increase statistical efficiency, and provide data to represent and analyze subgroups and enable use of different methods in the strata. Data was collected from each stratum as defined by tiered classification as per SASRA.

3.6 Data Collection

Secondary data was gathered from SASRA's annual reports which contain relevant information relating to SACCOs performance indicators in Kenya vis-a viz interest rate drivers. Published annual reports and journals on the websites in relation to various sampled SACCOs formed a crucial interaction site and source for data collection. Data was collected for seven years between 2016 and 2022.

3.7 Data Analysis and Presentation

The purpose of data analysis is to find consistent patterns and summarize the important facts shown in the inquiry by making sense of the collected data (Bryman, 2020). In order to find patterns in the data collecting process with respect to the variables that were gathered, the data was analyzed using the study's goals and objectives as well as the measurements that were taken. This reduced the number of extreme cases that may invalidate the results. Data analysis made use of both descriptive and inferential statistics.

The research used percentages, means, and standard deviations as descriptive statistics. Panel regression analysis and Pearson's product moment correlation were the inferential statistical procedures that were to be used. A 5% threshold of significance was used to assess all of the acquired data. Multiple regression analysis and Pearson's correlation analyses comprised inferential statistics was employed. The results obtained from the analysis was presented in form of tables, graphs, and charts.

3.7.1 Analytical Model

A strong tool for proving a causal link between the independent and dependent variables, several linear regression models were chosen and justified for use in the investigation. Thus, DT-SACCOs in Kenya were studied to see whether there was a correlation between interest rate drivers and their financial performance using ordinary least square multiple regression. In order to get the best regression equation, we first regressed all of the independent variable constructions with the dependent variable. We only kept the constructs having a significant influence. This is the form of the regression model:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where:

Y = DT SACCOs Financial performance- β_0 Constant Term

ε = Error Term

X_1 = Credit Risk

X_2 = Liquidity Risk

X_3 = Inflation Rate

3.7.2 Assumptions of Regression

3.6.2.1 Normality Test

In multiple regression, the assumption requiring a normal distribution applies only to the residuals, not to the independent variables as is often believed (Williams, Grajales & Kurkiewicz, 2019). The residuals are simply the errors in the relationship between the independent variable and the dependent variable in a regression model. It is the distribution of the residuals or noise for all cases in the sample that should be normally distributed.

Skewness is a measure of symmetry, or more precisely, the lack of symmetry. A distribution, or data set, is symmetric if it looks the same to the left and right of the center point.

For univariate data $Y_1, Y_2, \dots, Y_N$, the formula for skewness is:

$$g_1 = \frac{\sum_{i=1}^N (Y_i - \bar{Y})^3}{N s^3}$$

where $\bar{Y}$ is the mean, s is the standard deviation, and N is the number of data points.

Kurtosis is a measure of whether the data are heavy-tailed or light-tailed relative to a normal distribution

For univariate data $Y_1, Y_2, \dots, Y_N$, the formula for kurtosis is:

$$\text{kurtosis} = \frac{\sum_{i=1}^N (Y_i - \bar{Y})^4}{N s^4}$$

Jarque-Bera test: Goodness of fit test, The Jarque-Bera test is a goodness-of-fit test that measures if sample data has skewness and kurtosis that are similar to a normal distribution. The Jarque-Bera test statistic is always positive, and if it is not close to zero, it shows that the sample data do not have a normal distribution.

Where n is the number of observations (or degrees of freedom in general)

s is the sample skewness,

k is the sample kurtosis.

3.6.2.2 Unit root test

Unit root test tests whether a time series variable is non-stationary and possesses a unit root. The null hypothesis is generally defined as the presence of a unit root and the alternative hypothesis is either stationarity, trend stationarity or explosive root depending on the test used.

Levin lin and Chu: The Levin–Lin–Chu (2002), Harris–Tzavalis (1999), Breitung (2000; Breitung and Das 2019), Im–Pesaran–Shin (2003), and Fisher-type (Choi 2021) tests have as the null hypothesis that all the panels contain a unit root. The Hadri (2000) Lagrange multiplier (LM) test has as the null hypothesis that all the panels are (trend) stationary. Options allow you to include fixed effects and time trends in the model of the data-generating process.

IM Pesaran test: The asymptotic assumptions made by the various tests vary with respect to the number of panels and time periods in your dataset. `xtunitroot` covers all

your bases, with tests that are suitable for two types of datasets: one with a small number of panels and a few time periods, and another with many panels and a lot of time periods. While most tests need a balanced panel dataset, one may use an imbalanced panel with the Im-Pesaran-Shin and Fisher-type tests.

Augmented Dickey Fuller unit root test (ADF): It tests the null hypothesis that a unit root is present in a series sample. The alternative hypothesis is different depending on which version of the test is used, but is usually stationarity or trend-stationarity. It is an augmented version of the Dickey–Fuller test for a larger and more complicated set of time series models. An augmented Dickey–Fuller test (ADF) tests the null hypothesis that a unit root is present in a time series sample. The alternative hypothesis is different depending on which version of the test is used, but is usually stationarity or trend-stationarity. It is an augmented version of the Dickey–Fuller test for a larger and more complicated set of time series models. The augmented Dickey–Fuller (ADF) statistic, used in the test, is a negative number. The more negative it is, the stronger the rejection of the hypothesis that there is a unit root at some level of confidence.

3.6.2.3 Autocorrelation Test

Data with low or nonexistent autocorrelation cannot be used for linear regression analysis. When there is a lack of independence amongst the residuals, autocorrelation occurs. Source of autocorrelation is the effect of deletion of some variables. As serial correlation biases standard errors in linear panel-data models and makes results less efficient, researchers must define serial correlations in the idiosyncratic error word in a panel-data model. Wooldridge tested this premise with an autocorrelation. The study tried

to test the zero hypothesis that there is no serial first-order correlation.

3.6.2.4 Multi-collinearity Test

Multi-collinearity refers to the relationship among the independent variables. Presence of multicollinearity makes it difficult to isolate the impact of each independent variable on the dependent variable and also standard errors for each independent variable become inflated (Yoo, 2019). Multicollinearity can be corrected by excluding one or more of the corrected by excluding one or more of the correlated independent variables from the regression model (Cai, Wu, Xu & Zeng, 2017). To check for multicollinearity Variance inflation Factor and Tolerance level was used. A VIF of less than 10 or a tolerance level of greater than 0.1 is acceptable

3.6.2.5 Heteroscedasticity Test

In regression analysis, heteroscedasticity means a condition in which the variance of dependent variable varies across the data. On the other hand, homoscedasticity means a situation which the variance of the dependent variable is the same for all the data, (Huang & Yao, 2019). For heteroscedasticity, the researcher utilized the Breusch-Pagan/Cook-Weisberg test. The null hypothesis claims that the variance is constant, whereas the alternative hypothesis claims that heteroscedasticity exists. When homoscedasticity is violated, heteroskedasticity increases.

3.6.2.6 Hausman Test

In order to analyze panel data, the research choose between a fixed effects and a random effects model. A common intercept that changed at random across companies was assumed by the random effect model, in contrast to the fixed effect model's assumption that firm-specific intercepts and the recorded effects of those variables were continuous

and unique to each business (Baltagi, 2018). The two models, one with fixed effects and the other with random effects, were estimated to see which one was more appropriate. To find out whether the impact was fixed or random, we employed Hausman's 1978 specification test (Guggenberger, 2020). If the assumption that $E(\mu_i/x_i) = 0$ cannot be denied, then the random effect is a good estimator. On the other hand, if the assumption is rejected, then the fixed effect estimation provides a more accurate beta value.

3.8 Ethical Consideration

Ethical methods benefit all parties participating in a research effort, not only the research study itself (Schurink, 2019). Multiple entities provided their consent for this investigation. It all started with a request for approval from the Graduate Studies department at Masinde Muliro University of Science and Technology (MMUST). Two, a research permission was acquired from the National Commission for Science, Technology and Innovation (NACOSTI) in accordance with the Science and Technology Act, Chapter 250, Laws of Kenya.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSIONS

4.1 Introduction

In this section, the study's aims are considered as you present, analyze, and debate the research results. The results may be better discussed with the use of descriptive statistics, regression, and correlation analyses. Data is shown visually in the form of tables and figures.

4.2 Descriptive Statistics

The research used descriptive statistics to characterize the data set's properties and characteristics. In it, the study's data and metrics were summarized. Measures of central tendency and dispersion were among the descriptive statistics used. The spread measures employed in this research were minimum, values, standard error, and maximum. Mean was one of the central tendency metrics used with this dataset. Standard deviation, mean, maximum, and lowest values were computed in the research. Financial performance is the dependent variable in this case, whereas inflation rate, liquidity risk, and credit risk are the independent factors. This analysis covers the years 2020–2022. This variable's descriptive statistics look like this:

4.2.1 Inflation rate

Inflation rate was measured by use Price Index and Personal Consumption Expenditure Index between 2020 and 2022. The results are presented in Table 4.1

Table 4. 1: Descriptive Statistics- Inflation rate

Stats	N	Min	Max	Mean	Std Dev.
Personal Consumption Expenditure Index	847	57164	86627	73754	9661.97
Consumer Price Index	847	108.689	201.805	156.3894	36.30452

Source: Researcher (2024)

Between 2020 and 2022, the Personal Consumption Expenditure Index (PCE) experienced notable fluctuations, ranging from a minimum of Ksh57,164 to a maximum of Ksh86,627. This index serves as a key measure of the average expenses incurred by consumers on goods and services. The mean expenditure over this period stood at Ksh. 73,754, indicating the typical spending pattern. However, the standard deviation of Ksh9,661.97 reveals considerable variability in consumer spending habits around this average. This variability suggests shifts in consumer behavior and economic conditions, contributing to fluctuations in expenditure levels.

Similarly, the consumer price Index, reflecting changes in the prices of a basket of goods and services, exhibited significant movement during the same timeframe. Beginning at a minimum of 108.689 and reaching a peak of 201.805, this index indicates a general increase in prices over the period. The mean price index of 156.3894 provides an average measure of inflationary trends, indicating a consistent upward pressure on prices. However, the standard deviation of 36.30452 highlights the variability in price changes around this average. This variability reflects the dynamic nature of price movements, influenced by factors such as supply and demand dynamics, economic policies, and external shocks.

Overall, the statistics underscore a period of economic expansion and inflation between 2020 and 2022. The increase in both the Personal Consumption Expenditure Index and the Price Index signifies growing consumer demand and upward pressure on prices. However, the variability observed in both indices suggests the presence of underlying factors shaping consumer behavior and price dynamics, contributing to fluctuations in expenditure levels and price movements.

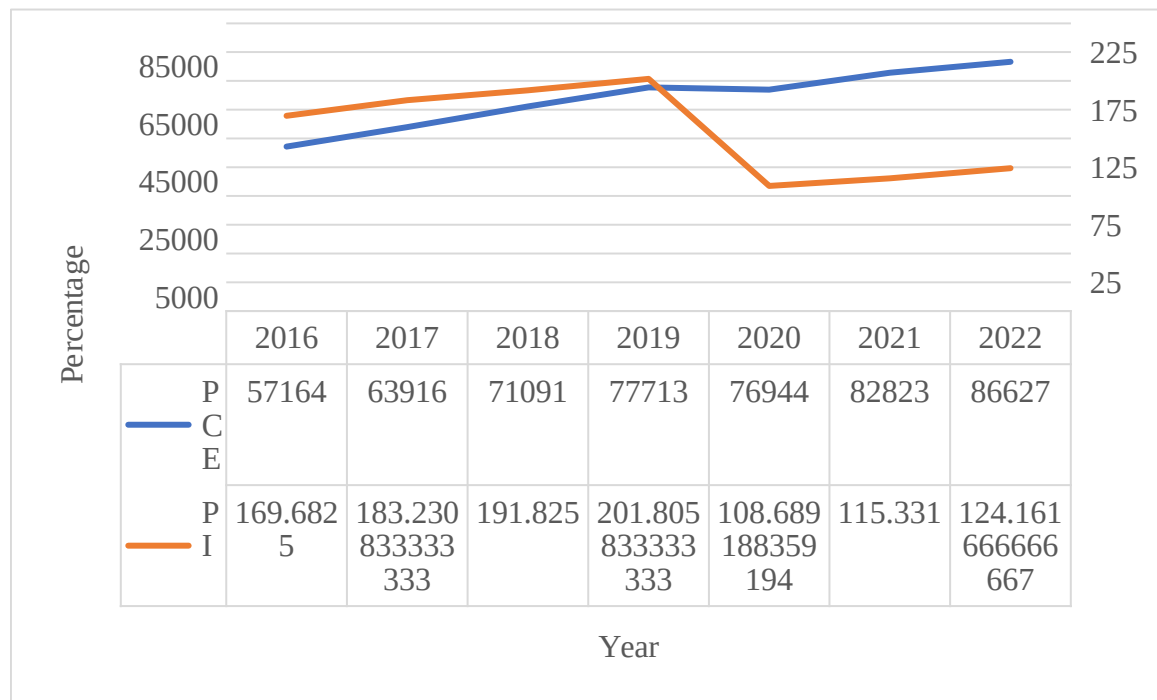


Figure 4. 1: Inflation Rate Trend Chart between 2020 and 2022
Source: Researcher (2024)

Personal Consumption Expenditure starts at 57,164 in 2020, gradually increasing annually to reach 63,916 in 2017, 71,091 in 2018, and 77,713 in 2019. However, the numbers experience a sudden decline in 2020 to 76,944. Subsequently, Personal Consumption Expenditure bounces back strongly in 2021, registering a new high of 82,823. Finally, in 2022, Personal Consumption Expenditure rises marginally to settle at 86,627.

Price Index follows an irregular path, making it difficult to pinpoint clear triggers for the movements. Nevertheless, the general trend sees a slow climb from 169.68 in 2020 to 183.23 in 2017. After plateauing briefly, the Price Index jumps considerably in 2018 to 191.83. The Price Index continues its rise in 2019, reaching 201.81. Interestingly, the Price Index collapses dramatically in 2020, falling to 108.69. Prices begin to normalize in 2021, pushing the Price Index to 115.33, and continuing in 2022 as the Price Index reaches 124.16.

4.2.2 Liquidity risk

Liquidity risk was measured using Loans to Deposit ratio and Capital Adequacy ratio. The results are presented in Table 4.2.

Table 4. 2: Descriptive Statistics- Liquidity risk

Stats	N	Min	Max	Mean	Std Dev.
Core Capital/Total Assets	847	13.96%	16.36%	15.07%	0.008844
Total Loans/Total Deposits	847	108.39 %	112.16%	109.85%	0.012751

Source: Researcher (2024)

The ratio of core capital to total assets is a crucial measure of a bank's financial strength and stability. The statistics show that this ratio ranges from 13.96% to 16.36%, with an average of 15.07%. The low standard deviation of 0.008844 indicates minimal variability around the mean. Overall, these figures suggest that, on average, Saccos maintain a healthy level of core capital relative to their total assets, indicating robust financial health and resilience to potential losses. A strong core capital ratio (as suggested by the average of 15.07%) can be a positive factor in managing liquidity risk.

The ratio of total loans to total deposits is a key indicator of a DT Sacco's lending activities relative to its deposit base. It reflects the DT Sacco's ability to generate income through lending while managing liquidity risks associated with deposit withdrawals. The statistics show that this ratio ranges from 108.39% to 112.16%, with an average of 109.85%. The low standard deviation of 0.012751 suggests relatively low variability around the mean. These figures indicate that, on average, DT Saccos maintain a loan portfolio size slightly higher than their deposit base, suggesting an efficient utilization of deposits for lending activities. The average loan-to-deposit ratio exceeding 100% (109.85%) indicates a potential liquidity risk concern.

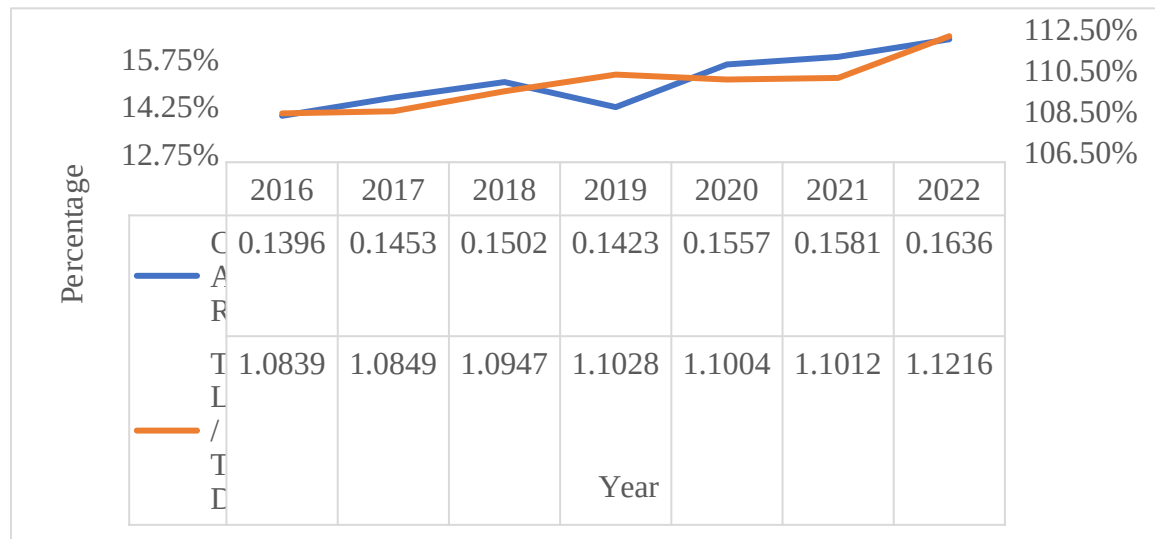


Figure 4. 2: Liquidity Risk Trend Chart between 2020 and 2022

Source: Researcher (2024)

The ratio of Core Capital to Total Assets, representing the proportion of a Sacco's primary equity capital to its total assets, shows a consistent upward trend from 13.96% in 2020 to 16.36% in 2022. This indicates a strengthening of the Sacco's financial position and resilience over the years. The steady increase suggests that the Sacco has been building up its core capital relative to its asset base. The ratio of Total Loans to Total

Deposits, reflecting the proportion of a Sacco's loans relative to its deposit base, exhibits relatively stable levels over the period, with slight fluctuations. While there is a slight increase from 108.39% in 2020 to 112.16% in 2022, the changes are relatively modest. This indicates that the Sacco's lending activities have generally kept pace with its deposit growth, maintaining a balanced loan-to-deposit ratio over the years.

4.2.3 Credit risk

Credit risk was measured using non-performing loans ratio and Debt to Asset ratio. The results are as shown in Table 4.3.

Table 4. 3: Descriptive Statistics- Credit risk

Stats	N	Min	Max	Mean	Std Dev.
Non-Performing Loans Ratio	847	5.23%	8.86%	7.07%	0.014425
Debt to Asset ratio	847	3.20%	5.04%	4.05%	0.006685

Source: Researcher (2024)

The Non-Performing Loans (NPL) Ratio, ranging from 5.23% to 8.86% with a mean of 7.07%, serves as a pivotal indicator of credit risk. This ratio denotes the proportion of loans within a bank's portfolio that are categorized as non-performing due to overdue payments or defaults. A higher NPL Ratio suggests a greater likelihood of loan defaults or delinquencies, signifying elevated credit risk. Such non-performing assets can hinder a bank's ability to generate expected income from its loan portfolio, potentially leading to financial losses and impairments. The narrow standard deviation of 0.014425 around the mean implies relatively consistent levels of credit risk across the dataset, albeit with some variability.

The Debt to Asset Ratio provides insights into a bank's financial leverage and susceptibility to adverse events. With a range of 3.20% to 5.04% and a mean of 4.05%, this ratio signifies the proportion of a bank's assets financed through debt. A higher Debt

to Asset Ratio indicates greater reliance on borrowed funds, amplifying the potential impact of losses and economic downturns. Banks with elevated debt levels may face challenges in servicing debt obligations, particularly during periods of financial stress. The relatively low standard deviation of 0.006685 suggests relatively stable levels of financial leverage across the dataset.

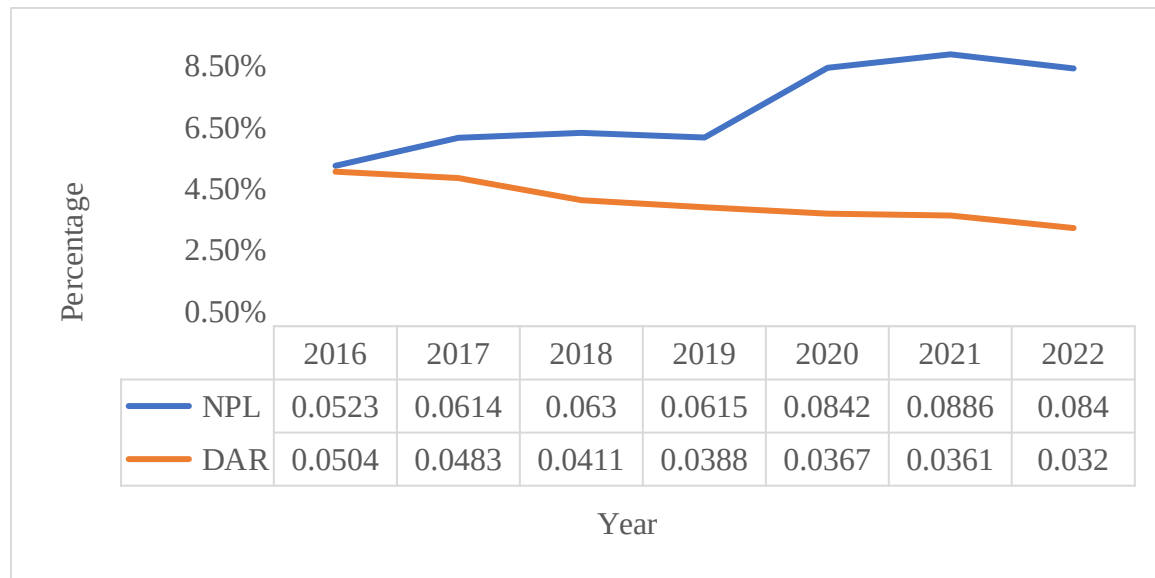


Figure 4. 3: Credit Risk Trend Chart between 2020 and 2022
Source: Researcher (2024)

The NPL Ratio, which measures the proportion of non-performing loans relative to the total loan portfolio, shows a fluctuating trend over the period. It begins at 5.23% in 2020, increases steadily until 2020, peaking at 8.42%, and then slightly decreases to 8.40% in 2022. The initial uptrend from 2020 to 2020 suggests a deterioration in asset quality, indicated by an increasing proportion of loans that are non-performing or at risk of default. The subsequent slight decrease in the NPL Ratio from 2021 to 2022 indicates a potential improvement or stabilization in asset quality. The Debt to Asset Ratio, representing the proportion of debt relative to total assets, commencing at 5.04% in 2020, the Debt to Asset ratio displays a downward trend consistently throughout the

observation period. Between 2020 and 2017, a marginal reduction ensues, followed by a steeper descent ranging from 2017 till 2020. Eventually, the ratio settles at 3.20% in 2022, marking an approximate halving of the original magnitude.

4.2.4 Financial Performance

Financial performance which is the dependent variable was determined using returns on Assets. The results are indicated in Table 4.4

Table 4. 4: Financial Performance

Variable	N	Min	Max	Mean	Std Dev.
ROA	847	1.59%	2.69%	2.43%	0.003839

Source: Researcher (2024)

The dataset provides insights into the Return on Assets (ROA), a fundamental financial metric used to assess a company's profitability relative to its asset base. The ROA figures range from a minimum of 1.59% to a maximum of 2.69%, with an average of 2.43% and a narrow standard deviation of 0.003839. At the lowest point, the company achieved a ROA of 1.59%, implying it generated approximately 1.59 cents of profit for every shilling of assets. Conversely, at the highest point, the ROA reached 2.69%, suggesting a more efficient utilization of assets with around 2.69 cents of profit generated per shillings of assets. The mean ROA of 2.43% signifies the average profitability observed across the dataset. Moreover, the narrow standard deviation indicates limited variability in ROA values, suggesting consistent profitability performance across the dataset.

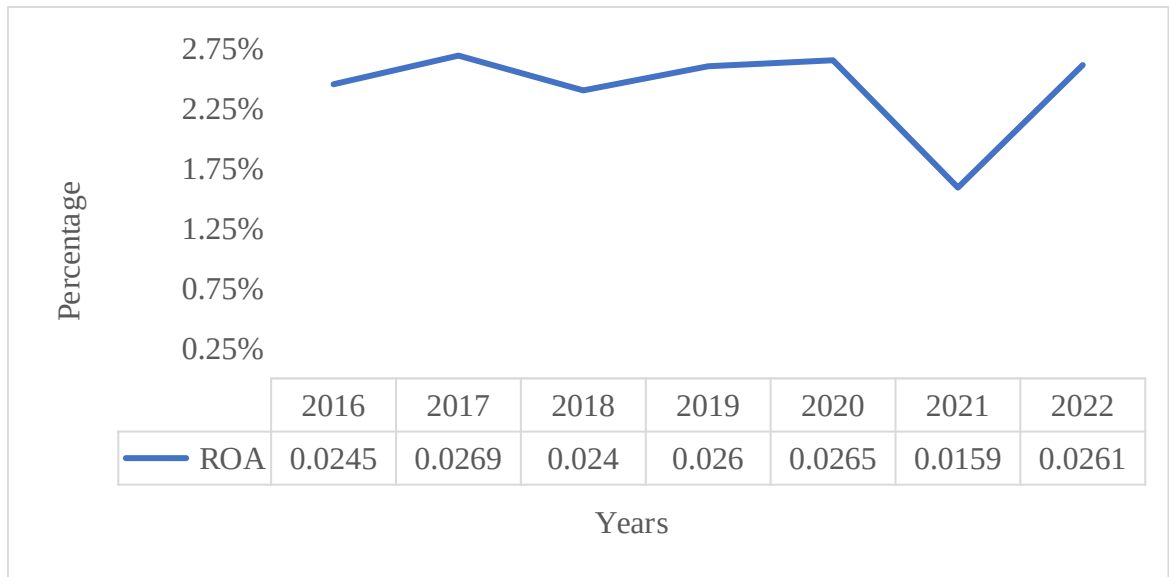


Figure 4. 4: Financial Performance Trend Chart between 2020 and 2022

Source: Researcher (2024)

The Return on Asset (RoA) ratio exhibits some variability over the years from 2020 to 2022. Starting in 2020, RoA begins at 2.45%, then experiences an increase in 2017 to reach 2.69%, showing strong performance in asset utilization. However, the RoA subsequently drops in 2018 to 2.40%. Following the drop, RoA recovers in 2019, climbing back up to 2.60%, surpassing the previous high achieved in 2017. There is another increase in 2020, with RoA hitting 2.65%. Unfortunately, the trend reverses sharply in 2021, with RoA dropping significantly to just 1.59%. Lastly, RoA manages to recover partially in 2022, closing the period at 2.61%, almost matching the record high seen in 2020.

4.3 Correlation Analysis

Pearson moment correlation analysis was used in the research. Researchers looked for a connection between the response variable financial performance and the predictor variables inflation rate, liquidity risk, company size, and credit risk using the correlation

coefficient. They also looked for evidence of interdependence between the predictor variables. Table 4.5 summarizes the relevant findings.

Table 4. 5: Pearson Correlation Analysis

		Financial Performance	Inflation Rate	Liquidity Risk	Credit Risk
Financial Performance	Pearson Correlation				
	Sig. (2-tailed)	1			
	N	847			
Inflation rate	Pearson Correlation	- 0.5539	1		
	Sig. (2-tailed)	0.000			
	N	847	847		
Liquidity risk	Pearson Correlation	- 0.1055	-0.2706	1	
	Sig. (2-tailed)	0.002	0.000		
	N	847	847	847	
Credit risk	Pearson Correlation	-0.3786	0.4395	-0.1506	1
	Sig. (2-tailed)	0.000	0.000	0.000	
	N	847	847	847	847

Source: Researcher (2024)

A strong negative correlation between Financial Performance and Inflation Rate ($r = -0.5539$, $p < 0.05$) suggests that companies' financial performance tends to decline as inflation rates rise. This result aligns with economic theory, as high inflation erodes purchasing power and increases costs for businesses, leading to lower profitability. These results are supported by Hossain (2020) who examined the impact of inflation on the financial performance of firms in Bangladesh. The findings corroborated the negative correlation observed in your analysis, indicating that firms' profitability tends to decrease during periods of high inflation. Abbas (2021) investigated the relationship between inflation and financial performance in the Pakistani manufacturing sector. The results supported the notion that higher inflation rates adversely affect firms' financial performance, particularly in industries with limited pricing power. Contrary to the

negative correlation found in your analysis, a study by Liu (2020) conducted in China suggested that the relationship between inflation and financial performance may be nonlinear and vary across different economic sectors. The study found that moderate levels of inflation were associated with improved financial performance in certain industries due to increased consumer spending. Similarly, research by Song (2021) examined the impact of inflation on the financial performance of firms in the United States. The study found mixed results, with some sectors experiencing declines in profitability during periods of high inflation, while others benefited from increased pricing power and demand.

A moderate negative correlation between Financial Performance and Credit Risk ($r = -0.1055$, $p < 0.05$) implies that financial performance tends to decrease as credit risk increases. This result is intuitive, as higher credit risk indicates a greater likelihood of default on loans or obligations, which can impair Sacco's financial performance. Cheng (2021) explored the relationship between credit risk and financial performance among Chinese banks. The study provided evidence consistent with the findings, showing that higher credit risk is associated with lower profitability and financial performance in the banking sector. Kim (2020) investigated the impact of credit risk on the financial performance of firms in South Korea. The findings supported the negative correlation observed in this study, suggesting that firms with elevated credit risk face challenges in maintaining profitability and operational stability. However, a study by Li and Zhou (2021) challenged the notion of a straightforward negative relationship between credit risk and financial performance. The research, conducted in the context of Chinese listed

companies, found that while higher credit risk may lead to short-term declines in profitability, it can also incentivize firms to adopt risk management strategies and improve long-term financial resilience. Similarly, a study by Al-Malkawi (2021) examined the impact of credit risk on the financial performance of banks in Jordan. The results suggested that while credit risk poses challenges for banks, proactive risk management measures and diversified revenue streams can mitigate its negative effects on financial performance (Al-Malkawi, 2021).

Financial Performance demonstrates a weak negative correlation with Liquidity Risk ($r = -0.3786$, $p < 0.05$). This suggests that as liquidity risk tends to increase, financial performance reduces. A recent study by Chen (2022) investigated the relationship between liquidity risk and financial performance in the context of Chinese manufacturing firms. The findings supported the weak negative correlation observed in this analysis, indicating that higher liquidity risk is associated with reduced profitability and operational efficiency. Wang (2021) examined the impact of liquidity risk on the financial performance of real estate firms in the United States. The research provided evidence consistent with these findings, suggesting that firms exposed to higher liquidity risk experience declines in financial performance due to increased financing costs and operational constraints. In contrast to the negative correlation found in your analysis, a study by Jiang (2021) conducted in the Chinese banking sector challenged the straightforward relationship between liquidity risk and financial performance. The research suggested that while liquidity risk can pose challenges for banks, proactive liquidity management strategies and effective capital allocation can mitigate its negative

impact on profitability. Similarly, research by Park (2020) examined the relationship between liquidity risk and financial performance among small and medium-sized enterprises (SMEs) in South Korea. The findings suggested that while higher liquidity risk may lead to short-term financial constraints, it can also incentivize SMEs to improve operational efficiency and explore alternative financing options, ultimately enhancing long-term financial performance.

4.4 Diagnostic Tests

In order to determine if the research model was appropriate, the study conducted a battery of diagnostic tests. Several diagnostic tests were calculated, including tests for heteroscedasticity, autocorrelation, multicollinearity, and normality. Data distribution, data fit for inference, and regression analysis assumption fulfillment were all assessed using the test.

4.4.1 Normality Test

Normality was tested using skewness, Kurtosis and Jargue-Bera. skewness values between -0.5 and +0.5 are considered approximately symmetric. A kurtosis value of 3 (excess kurtosis = 0) is considered normal or mesokurtic (Tabor, 2020).

Table 4. 6: Normality Test

Stats	PCE	PI	TL/TD	CC/TA	NPL	DAR	ROA
Skewness	1.380	0.394	-0.153	-1.952	0.230	-1.436	-0.467
Kurtosis	13.790	1.709	1.275	14.624	1.659	6.180	2.099
Jargue-Bera	8.345	2.656	1.786	7.538	1.032	7.153	.3445
Probability	.0154	.265	.4094	.0231	.5969	.028	.8418

Source: Researcher (2024)

Table 4.6 shows that the skewness values for the price index, total loan to total deposit, nonperforming loan, and return on asset were within the range of +0.5 to -0.5. This means that the data was sufficient and conformed to the normal distribution assumption.

Nevertheless, kurtosis levels, which should be below 3, did not back up this finding. These requirements were only satisfied by four variables: the Price Index, the Non-Performing Loan Ratio, the Return on Assets, and the Total Loans to Deposits Ratio. A more rigorous method called Jarque-Bera (JB) was also used to further confirm the normalcy in the research. The investigation did not succeed in rejecting the null hypothesis since Jarque-Bera had probability values larger than 5% for the Price Index, Non-Performing Loan Ratio, return on assets, and total loans to deposits ratio. We kept these factors for further investigation.

4.4.2 Multicollinearity Test

Due to the non-linear relationship between the predictor variable and the inflated regression coefficients, this test was carried out using Variance Inflated Factor (VIF). With a VIF of 1, we may say that there is no association, with 1–5 showing moderate correlation and 5–10 showing strong correlation.

Table 4. 7: Multicollinearity Test

Variables	Tolerance	VIF
Inflation rate	0.978	1.022
Liquidity risk	0.961	1.040
Credit risk	0.969	1.032

Source: Researcher (2024)

For the table 4.7 provided, the tolerances for all three variables exceed 0.1, and their respective VIF scores are below 5. Therefore, there are no apparent issues with multicollinearity among the explanatory variables. The results confirmed that there is no serious concern regarding multicollinearity in the study's regression model.

4.4.3 Auto Correlation Test

Researchers must detect serial correlation in the idiosyncratic error term of a panel-data model in order to avoid decreasing the efficiency of the findings and biasing the standard errors in linear panel-data models.

Table 4. 8: Testing for serial correlation (Independence)

Wooldridge test for autocorrelation in panel data			
H0: no first order autocorrelation			
F(1, 120) = 3.988			
Prob > F = 0.1190			

Source: Researcher (2024)

In order to verify this hypothesis, the research used the Wooldridge test for autocorrelation. We set out to see if there was any first-order serial correlation at all by testing the null hypothesis. Researchers were unable to rule out the possibility of the null hypothesis due to the high p-value ($P > 0.05$). This time, the p-value is more than 0.05, coming in at 0.1190. This research did not find evidence of first-order autocorrelation in the panel data, hence the null hypothesis cannot be rejected. The findings of the Wooldridge test support this conclusion.

4.4.4 Heteroscedasticity Test

When the range of values for the second component that predicts it is uniform, we say that there is heteroscedasticity (Vinod, 2018). That the variance and error terms are equal served as the test's null hypothesis (Vinod, 2018). According to Park (2018), homoscedasticity cannot be shown if the value is higher than 0.05. The results are shown in table 4.9.

Table 4. 9: Breuch-Pagan Test for Heteroscedasticity

Modified Wald test for groupwise heteroskedasticity			
in fixed effect regression model			
H0: $\sigma(i)^2 = \sigma^2$ for all i			
Statistics	df	Stat Value	P-Value

Chi-square	121	12.30	0.1031
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Source: Researcher (2024)

From the findings presented in the table 4.9, P-Value of 0.1031 is greater than the selected level of significance which was 0.05. Therefore, the Breusch-Pagan test does not find significant evidence of heteroscedasticity (varying error variance) in the fixed-effect regression model. This suggests that the assumption of constant error variance across groups or entities is reasonable.

4.4.5 Unit Root Test

This research used enhanced Dickey-Fuller and Phillips-Perron tests to look for unit roots in panels that integrate data from the time series and cross-section dimensions. This allowed them to test with fewer time observations since there was more power available. The findings may be seen in Table 4.10.

Table 4. 10: Unit Root Test

Variable	Levin lin and Chu	Augmented Dickey-Fuller Tests	IM Pesaran test
Financial Performance	-75.9321 0.0000**	6.7573 0.0000**	-3.3475 0.0000**
Inflation rate	-30.0777 0.0000**	15.2327 0.0000**	-3.3326 0.0004**
Liquidity risk	-8.5562 0.0000**	3.2756 0.0005**	-2.8344 0.0033**
Credit risk	-22.7924 0.0000**	8.4008 0.0000**	-5.0131 0.0000**

** sig at 1% level, *sig at 5% level

Source: Researcher (2024)

The table 4.10 presents the results of unit root tests conducted on four variables: Financial Performance, Inflation Rate, Liquidity Risk, and Credit Risk. Unit root tests are used to determine if a time series variable is stationary or non-stationary. Stationarity

implies that the statistical properties of a variable do not change over time. In unit root tests, the null hypothesis (H0) is that the data series has a unit root (non-stationary). We shall reject the null hypothesis if the p-value is less than our chosen significance level (usually 1%, 5%, or 10%). Overall, based on the results of these unit root tests, it can be concluded that all the variables in the study (Financial Performance, Inflation Rate, Liquidity Risk, and Credit Risk) are stationary, meaning their statistical properties do not vary significantly over time.

4.4.6 Hausman Test (Choice Specification)

To find out whether the coefficients calculated using the fixed-effects model and the random-effects model are substantially different, the Hausman test was used. The chosen model might be either random effects or fixed effects; the former is the null hypothesis and the latter is the alternative hypothesis. Any number below the 5% p-value was to be chosen as FEM, and any value over that as REM, since the p-value was deemed significant at that level. Table 4.11 displays the outcomes.

Table 4. 11: Hausman Test

	(b) Fixed	(B) Random	(b-B) Difference	$\sqrt{\text{diag}(V_b - V_B)} \text{S.E.}$
Inflation rate	-0.8889	0.86734	-1.756241	0.002972
Liquidity risk	-0.1434	-0.2312	0.0878317	0.004197
Credit risk	-0.7288	-0.7999	0.0710826	0.006984

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test:Ho: difference in coefficients not systematic

$$\chi^2(3) = (b-B)'[(V_b - V_B)^{-1}](b-B)$$

$$= 13.65$$

$$\text{Prob} > \chi^2 = 0.0034$$

Source: Researcher (2024)

Given the very low p-value (0.0034), the study strongly rejected the null hypothesis of the Hausman test. This implied that the difference in coefficients between fixed effects

and random effects models is systematic, suggesting the choice of a fixed effects model. This selection preference emerges because the fixed effects model generates consistent parameter estimates under both null and alternative hypotheses, unlike the random effects model. In other words, choosing the fixed effects model guarantees that the estimates aren't affected by omitted variable bias.

4.5 Multiple Linear Regression

The hypothesis on the relationship between the independent and dependent variables was tested using regression analysis. Regression analysis's primary goal is to reveal the relative importance of the independent variables in influencing the dependent variables. To determine how much of an impact each independent variable has on the dependent variable, researchers employ regression analysis.

4.5.1 Model Summary

To see what proportion of the variation in the dependent variable can be accounted for by changes in the independent variable, one may look at the model summary. Amounts of changes in financial performance that may be attributed to changes in inflation rate, liquidity risk, and credit risk were shown in the model summary. The three independent variables were input as a block in this regression. An overview of the selected fixed effect model is shown in Table 4.12.

Table 4. 12: Model Summary Fixed Effect of Interest rate drivers

Fixed-effects (within) regression	Number of obs	=	847			
Group variable: DTS	Number of groups	=	121			
R-sq:	Obs per group:					
within = 0.9247	min =		7			
between = 0.7653	avg =		7			
overall = 0.8277	max =		7			
	F(3,998)=		2958.81			
	Prob > F=		0.000			
Financial Performance	Coef.	Std. Err.	T	P>t	[95% Conf. Interval]	
Inflation Rate	-0.88890	0.009659	-92.03	0.000	-1.169939	0.707866
Liquidity Risk	-0.14344	0.012546	-11.43	0.000	-0.16807	-0.11881
Credit Risk	-0.72877	0.015424	-47.25	0.000	-0.959051	-0.59849
_cons	-0.61335	0.047096	-13.02	0.000	-0.70581	-0.52089

Source: Researcher (2024)

According to the results, the panels were quite evenly distributed for this multivariate study. This research included 847 observations from 121 different entity groups, suggesting that the panels are quite balanced. Every group had an average of seven observations, with a minimum of seven and a maximum of seven. The fixed effect model's findings showed that interest rate drivers explained 82.77% (Overall R square=0.8277) of the variance in the financial performance of Kenyan SACCOS that accepted deposits. As the model's F-statistic (3,998) is 2958.81, which is non-zero, we may infer that the estimated model parameters are not zero. There are three factors that influence the financial success of deposit-taking SACCOS in Kenya, according to this. A Statistically Significant Effect (P=0.000)

4.5.2 Regression Coefficient

To illustrate the connection between a predictor variable and the answer, regression coefficients provide estimations of the unknown population characteristics. Coefficients are the values that multiply the values of the predictors in linear regression. In regression analysis, the nature and statistical significance of model effects are shown by combining

p-values with coefficients. Each of the interest rate drivers is described by its coefficient, which in turn describes the dependent variable (financial success). To find out whether these impacts are significant statistically, look at the p-values of the coefficients. The following is the study's regression model, derived from the data in the table:

$$Y = -0.61335 - 0.88890X_1 - 0.14344X_2 - 0.72877X_3$$

Where:

Y = Financial performance

X₁ = Inflation rate

X₂ = Liquidity risk

X₃ = Credit risk

As shown in Table 4.12, in the absence of three interest rate drivers constructs, financial performance of deposits taking SACCOS in Kenya will be -0.61335 at 0.05 significance level.

H₀₁: There is no significant effect of inflation rate on financial performance of deposits taking SACCOS in Kenya.

The results show that when liquidity risk and credit risk are controlled, a one unit increase in inflation rate over time and among Kenyan SACCOS that accept deposits would lead to a notable drop of 0.88890 units in financial performance. This is supported by the fact that the regression coefficient (β_1) for inflation rate is -0.88890, and the p-value is 0.001. There is a substantial influence of inflation rate on the financial performance of deposit-taking SACCOS in Kenya, since the initial null hypothesis was rejected due to the P value being less than 0. Ade-Tweneboah (2018), who employed a

causal study methodology to look at how interest and inflation rates affected the growth of Ghana's financial industry from 1980 to 2020, backs up the findings. There was a weak negative correlation between inflation and banking sector growth, according to the research. Statistical analysis also revealed a negative correlation between interest rates and the growth of the financial industry. Tsaurai (2017) looked examined how inflation affected the efficiency of the banking industry in nations in sub-Saharan Africa. According to the research, the financial industry suffers when inflation rates are high. On the other hand, Mwaniki (2017) looked at how financial performance of deposit-taking SACCOs in Nairobi, Kenya was affected by macroeconomic factors. The correlation between ROA and lag values of interest rate, money supply, and inflation rate was not statistically significant, according to the research. Notably, Song (2021) also looked at how inflation affected the bottom lines of US companies. Some industries saw a fall in profitability under high inflation, according to the report, while others saw an uptick in demand and pricing power.

H₀₂: There is no significant effect of liquidity risk on financial performance of deposits taking SACCOS in Kenya.

The study found that liquidity risk had a regression coefficient (β_2) of -0.14344, $p=0.000$. This means that there is a significant decrease of 0.14344 units in financial performance for every unit increase in liquidity risk over time among deposit-taking SACCOS in Kenya, when credit risk and inflation rate are controlled. The second null hypothesis was rejected since the P value was smaller than 0, indicating that liquidity risk has a substantial influence on the financial performance of deposit-taking SACCOS in Kenya.

Based on their analysis of an imbalanced panel dataset consisting of 12 developed nations, including Taiwan, Shen, Chen, Kao, and Yeh (2018) found similar findings when studying the factors contributing to liquidity risk in commercial banks. The research found that liquidity risk reduced profitability for banks because of greater funding costs, but it improved their net interest margins. A negative correlation between liquidity credit risk and the financial performance of Rwandan commercial banks was found by Mucheru, Shukla, and Kibachia (2017). In contrast, Khan and Sattar (2019) investigated the elements impacting Pakistani banks from 2007 to 2020. The analysis indicated that there was no significant relationship between profitability and liquidity. Njeri (2019) looked at the financial performance of Kenyan microfinance organizations that accepted deposits from 2019 to 2018 and how liquidity affected it. The research concluded that liquidity risk is positively correlated with financial success.

H₀₃: Credit risk has no significant effect on financial performance of deposits taking SACCOS in Kenya.

In Kenya, SACCOS that accept deposits would see a notable drop of 0.72877 units in financial performance for every one unit increase in credit risk over time, as indicated by a regression coefficient (β_3) of -0.72877, $p=0.000$. This holds true even when controlling for inflation rate and liquidity risk. As a result of credit risk's substantial impact on the financial performance of Kenyan SACCOS that accept deposits, the third null hypothesis was rejected (P^0). In Nigeria, research by Samuel (2020) and Ebenezer and Omar (2020) indicated that credit risk has a negative impact on bank performance. It seems that the Nigerian banking industry has worse profitability and financial performance as a

result of increasing credit risk. The UK, Rwanda, Eritrea, and Araka, Otieno, and Mogwambo, 2020; Embaye, Zereyesus, and Tsiboe, 2017; and Saeed and Zahid, 2020 were among the other nations that noted similar tendencies. All of these research point to the same conclusion: credit risk metrics, including non-performing loans, hurt banks' bottom lines. But in Ghana, Boahene, Dasah, and Agyei (2020) discovered that bank profitability was positively correlated with credit risk. Marshal and Onyekachi (2019) and Akotey and Afriyie (2018) were among the other Ghanaian researchers that found similar results. According to their research, Ghanaian banks see a positive correlation between credit risk and profitability.

4.6 Testing of Null Hypothesis

Table 4. 13: Testing of Null Hypothesis

Hypothesis	P<0.05	Verdict
H₀₁: There is no significant effect of inflation rate on financial performance of deposits taking SACCOS in Kenya.	.000	Rejected
H₀₂: There is no significant effect of liquidity risk on financial performance of deposits taking SACCOS in Kenya.	.000	Rejected
H₀₃: Credit risk has no significant effect on financial performance of deposits taking SACCOS in Kenya.	.000	Rejected

Source: Researcher (2024)

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The chapter concludes with a brief synopsis of the study's key results as well as its conclusions and suggestions. All of the study's recommendations and conclusions are based on trying to accomplish those goals. Lastly, it proposes directions for further studies.

5.2 Summary of the Findings

Based on the stated goals of the research, this section provides a synopsis of the results. This research set out to do one overarching thing: analyze how deposit-accepting SACCOS in Kenya fared financially in relation to the various interest rate determinants. The particular goals that stemmed from this overarching goal were to ascertain the impact of inflation, liquidity risk, and credit risk on the financial performance of Kenyan SACCOS that accept deposits. This study's data came from secondary sources, such as SASRA and the websites of the various DTSSs. Researchers measured the research variables using financial ratios. We dealt with the issue of huge numbers and eliminated heteroscedasticity by doing multiple regressions for a univariate analysis after converting the data to their natural logs. We performed a unit root test to ensure that the data was stationary. We used the fixed effects model and ran the Hausman test. We used STATA version 15.00 to perform this. Here are the main findings:

5.2.1 Effect of Inflation rate on financial performance of deposits taking SACCOS in Kenya

The first objective of the study was to establish the effect of inflation rate on financial performance of deposits taking SACCOS in Kenya. Inflation rate was measured by use Price Index and Personal Consumption Expenditure Index between 2020 and 2022. The mean expenditure over this period stood at Ksh73,754, indicating the typical spending pattern. The mean price index of 156.3894 provides an average measure of inflationary trends, indicating a consistent upward pressure on prices. Panel data Pearson correlation results show a significant negative relationship between inflation rate and financial performance of deposits taking SACCOS in Kenya ($R=-0.5539$, $P=0.000$). Fixed effect multiple regression analysis revealed that when other variables are controlled in the model, a unit increase in inflation rate would results to a significant decrease in financial performance ($\beta=-0.88890$, $p=0.000$).

5.2.2 Effect of Liquidity Risk on Financial performance of deposits taking SACCOS in Kenya

The second objective of the study was to determine the effect of liquidity risk on financial performance of deposits taking SACCOS in Kenya. Liquidity risk was measured using Loans to Deposit ratio and Capital Adequacy ratio. The statistics show that Capital Adequacy ratio ranges from 13.96% to 16.36%, with an average of 15.07%. The statistics show that Loans to Deposit ratio ranges from 108.39% to 112.16%, with an average of 109.85%. Panel data Pearson correlation results revealed a significant negative relationship between liquidity risk and financial performance of deposits taking SACCOS in Kenya($R=-0.1055$, $P=0.002$). Fixed effect multiple regression analysis revealed that when other variables are controlled in the model, a unit increase in

liquidity risk would results to significant decrease in financial performance of deposit taking Saccos ($\beta=-0.14344$, $p=0.000$).

5.2.3 Effect of Credit Risk on Financial Performance of Deposits Taking SACCOS in Kenya

The third objective of the study was to establish the effect of credit risk on financial performance of deposits taking Saccos in Kenya. Credit risk was measured using non-performing loans ratio and Debt to Asset ratio. The Non-Performing Loans (NPL) Ratio, ranging from 5.23% to 8.86% with a mean of 7.07%, serves as a pivotal indicator of credit risk. The Debt to Asset Ratio ranged from 3.20% to 5.04% and a mean of 4.05%, this ratio signifies the proportion of a bank's assets financed through debt. Panel data Pearson correlation results revealed a significant negative relationship between credit risk and financial performance of deposits taking SACCOS in Kenya($R=-0.3786$, $P=0.000$). Fixed effect multiple regression analysis revealed that when other variables are controlled in the model, a unit increase in credit risk would results to significant increase in financial performance of deposit taking Saccos ($\beta=-0.72877$, $p=0.000$).

5.3 Conclusions of the Study

Based on the empirical evidence, a number of logical conclusions can be made as follows and presented in terms of study objectives:

In line with the first objective, the study concluded that inflation rate has significant negative effect on financial performance of deposit taking Saccos. An increase in inflation rate would results to significant decrease in financial performance. The first null hypothesis was rejected. When inflation rates rise, lenders typically adjust interest rates

upwards to maintain the real value of their returns. In this context, a significant negative effect of inflation on financial performance suggests that higher inflation rates lead to higher interest rates, which can reduce the demand for loans and decrease interest income for Saccos.

From second objective, the study concluded that liquidity risk has significant negative effect on financial performance. This implies that board composition and number of board audit committee has no significant role on financial performance. The second null hypothesis was supported. This implied that fluctuations in liquidity levels influenced the interest rates offered by Saccos on deposits and loans. In this scenario, higher liquidity risk may lead to increased interest rates on loans, which can reduce borrower demand and potentially affect the Saccos' interest income.

The study concluded that credit risk has significant negative effect on financial performance. An increase in credit risk would result to significant decrease in financial performance. The third null hypothesis was not supported. Higher levels of credit risk are associated with higher interest rates on loans to compensate for the increased risk of default. Higher levels of credit risk can result in a higher incidence of loan defaults and non-performing assets, which can erode profitability, increase provisioning costs, and reduce net interest income.

5.4 Recommendations of the Study

The following recommendations have been made based on the study conclusions as explained below:

Saccos should develop strategies such as real-time inflation monitoring, flexible interest rate structure and risk-based pricing to adjust their loan interest rates more readily in response to inflation changes. This can help maintain profitability by ensuring interest income keeps pace with inflation. Besides, Deposit-taking Saccos should introduce inflation-indexed loan products where the interest rates are tied to an inflation index, such as the Consumer Price Index. As inflation rates rise, the interest rates on these loans would automatically adjust upwards, ensuring that borrowers are not disadvantaged by the erosion of purchasing power caused by inflation.

Saccos should conduct regular liquidity stress tests to assess their ability to withstand adverse liquidity shocks, especially in scenarios where interest rate fluctuations may exacerbate liquidity risk. These stress tests should simulate various interest rate scenarios, including sudden changes in market rates, to evaluate the impact on liquidity positions. By incorporating interest rate-driven liquidity stress scenarios into their testing framework, Saccos can identify potential liquidity vulnerabilities arising from changes in interest rate environments and implement proactive measures to mitigate associated risks. Saccos should adopt a dynamic approach to loan pricing that takes into account not only the credit risk associated with borrowers but also prevailing interest rate conditions. In environments characterized by interest rate volatility, Saccos should periodically review and adjust interest rates on loans to reflect changes in market rates and ensure adequate compensation for credit risk. By aligning loan pricing with interest rate movements, Saccos can mitigate the impact of interest rate fluctuations on their net interest margins and maintain profitability while managing credit risk effectively.

5.5 Suggestion for Further Studies

The purpose of the study was to examine interest rate drivers and the financial performance of deposits taking SACCOS in Kenya. From the limitations of the study, the following are suggestion for further studies.

While the study focused on deposit-taking SACCOs regulated by SASRA, future research could broaden its scope to include other types of financial institutions, such as commercial banks and microfinance banks. Comparing and contrasting the impact of interest rate drivers on the financial performance of various types of financial institutions would provide valuable insights into the sector as a whole.

In addition to the independent variables considered in the study (inflation rate, liquidity risk, and credit risk), further research could explore the effects of other interest rate drivers, such as foreign currency exchange rates. Investigating how these additional factors influence the financial performance of SACCOs would provide a more comprehensive understanding of the dynamics at play.

Future studies could introduce moderating or mediating variables to enhance the analysis of interest rate drivers and financial performance. For example, variables such as Sacco Size could act as moderators, influencing the strength or direction of the relationship between interest rate drivers and financial performance. Similarly, variables related to Loan Portfolio Management could serve as mediators, helping to explain the mechanisms through which interest rate drivers impact financial performance.

While the study relied solely on secondary data collected from 2016 to 2022, future research could benefit from using a combination of secondary and primary data sources.

Collecting primary data through surveys, interviews, or focus groups would allow researchers to gather firsthand insights from SACCOs and their stakeholders, providing a more nuanced understanding of the issues under investigation and enhancing the validity and reliability of the findings.

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APPENDICES
APPENDIX I: DATA COLLECTION TOOL

Name of DT-SACCO:.....

VARIABLES	2020 (Kshs Bn)	2017 (Kshs Bn)	2018 (Kshs Bn)	2019 (Kshs Bn)	2020 (Kshs Bn)	2021 (Kshs Bn)	2022 (Kshs Bn)
Non-performing loans							
Total loans							
Total Debt							
Total Assets							
Total Deposits							
Current Assets							
Current Liabilities							
Profits After Tax(EAT)							
Profits Before Tax(EBT)							
Core Capital							
Retained Earnings							
Disclosed Reserves							
Price Index							
Personal Consumption Expenditure							

**APPENDIX II: List of DT-SACCOs classified into 3 Tiers; Large tiered Size,
Medium Tiered Size & Small Tiered Size in Kenya**

	LARGE TIERED (SIZED) DT-SACCOS BY TOTAL ASSETS	POSTAL ADDRESS
1	Mwalimu National Sacco Society Ltd	P.O.Box 62641 – 00200, Nairobi.
2	Stima Sacco Society Ltd	P.O.Box 75629 – 00100, Nairobi.
3	Kenya Police Sacco Society Ltd	P.O.Box 51042 – 00200, Nairobi.
4	Harambee sacco societyltd	P.O.Box47815–00100,Nairobi.
5	Afya sacco Societyltd	P.O.Box11607–00400,Nairobi.
6	Unaitas Sacco Society Ltd	P.O.Box 38791– 00100, Nairobi.
7	Imarisha Sacco Society Ltd	P.O.Box 682 – 20200, Kericho.
8	Tower Sacco Society Ltd	P.O.Box 259 – 20303, Ol'kalou.
9	United Nations Sacco Society Ltd	P.O.Box 30552 – 00100, Nairobi.
10	Ukulima Saco Society Ltd	P.O.Box 44071 – 00100, Nairobi.
11	Invest & Grow (IG) Sacco Society Ltd	P.O.Box 1150 –50100, Kakamega.
12	Gusii mwalimu sacco society ltd	P.O.Box1335 – 40200,Kisii.
13	Hazina Sacco Society Ltd	P.O.Box 59877 – 00200, Nairobi.
14	Bandari sacco society ltd	P.O.Box95011–80104,Mombasa.
15	Metropolitan National Sacco Society Ltd	P.O.Box 871 – 00900, Kiambu.
16	Imarika Sacco Society Ltd	P.O.Box 712 – 80108, Kilifi.
17	Mentor Sacco Society Ltd	P.O.Box 789 – 10200, Murang'a.
18	Kenya Bankers Sacco Society Ltd	P.O.Box 73236 – 00200, Nairobi.
19	New Forties Sacco Society Ltd	P.O.Box 1939 – 10100, Nyeri.
20	Boresha sacco society ltd	P.O.Box80–20103,Eldamaravine.
21	Safaricom Sacco Society Ltd	P.O.Box 66827 – 00800, Nairobi.
22	Kwale Teachers Sacco Society Ltd	P.O. Box 123-80403, Kwale.
23	Winas Sacco Society Ltd	P.O.Box 696 – 60100, Embu.
24	Trans Nation Sacco Society Ltd	P.O.Box 15 – 60400, Chuka.
25	Cosmopolitan sacco society ltd	P.O.Box1931 – 20100,Nakuru.
26	Kitui Teachers Sacco Society Ltd	P.O.Box 254 – 90200, Kitui.
27	Sheria Sacco Society Ltd	P.O.Box 34390 – 00100, Nairobi.
28	Mombasa Port Sacco Society Ltd	P.O.Box 95372–80104, Mombasa.
29	Solution Sacco Society Ltd	P.O.Box 1694 – 60200, Meru.
30	Magereza Sacco Society Ltd	P.O.Box 53131 – 00200, Nairobi.
31	Ollin Sacco Society Ltd	P.O Box 83-10300, Kerugoya.
32	Bingwa sacco society ltd	P.O.Box434–10300,Kerugoya.
33	Waumini Sacco Society Ltd	P.O.Box 66121 – 00800, Nairobi.
34	Unison Sacco Society Ltd	P.O Box 414-10400, Nanyuki.
35	Mwingi Mwalimu Sacco Society Ltd	P.O Box 489-90400, Mwingi.
36	Suba Teachers Sacco Society Ltd	P.O. Box 237-40305, Mbita.
37	Nacico Sacco Society Ltd	P.O.Box 34525 – 00100, Nairobi.
38	K-Unity Sacco Society Ltd	P.O.Box 268 – 00900, Kiambu.
39	Jamii Sacco Society Ltd	P.O.Box 57929 – 00200, Nairobi.
	Medium Tiered (Sized) Dt-Saccos By Total Assets	
1	Maisha Bora Sacco Society Ltd	P.O.Box 30062 – 00100, Nairobi.
2	Kwetu Sacco Society Ltd	P.O Box 818-90100, Machakos.
3	Yetu Sacco Society Ltd	P.O.Box 511 – 60202, Nkubu.
4	Fortune sacco society ltd	P.O.Box559–10300,Kerugoya.
5	Chaisacco Society Ltd	P.O.Box47815–00100,Nairobi.
6	Tembo Sacco Society Ltd	P.O.Box 91–00618,Ruaraka Nairobi.
7	Nyati Sacco Society Ltd	P.O. Box 7601 – 00200, Nairobi
8	Taifa Sacco Society Ltd	P.O.Box 1649 – 10100, Nyeri.
9	Capital sacco society ltd	P.Obox 1479-60200,Meru.

10	Shirika Sacco Society Ltd	P.O Box 43429-00100, Nairobi.
11	Ndege Chai Sacco Society Ltd	P.O.Box 857 – 20200, Kericho.
12	Kenpipe Sacco Society Ltd	P.O.Box 314 – 00507, Nairobi.
13	Githunguri Dairy & Community Sacco society Ltd	P.O.Box896–00216,Githunguri.
14	Tai Sacco Society Ltd	P.O.Box 718 –00216, Githunguri.
15	Kenya Highlands Sacco Society Ltd	P.O.Box 2085 – 002000, Kericho.
16	Ng'arisha Sacco Society Ltd	P.O.Box 1199 – 50200, Bungoma.
17	Kenversity Sacco Society Ltd	P.O.Box 10263 – 00100, Nairobi.
18	Noble Sacco Society Ltd	P.O.Box 3466 – 30100, Eldoret.
19	Nawiri Sacco Society Ltd	P.O Box 400-16100, Embu.
20	Qwetu Sacco Society Ltd	P.O Box 1186-80304, Wundanyi
21	Asilisaccosocietyltd	P.O.Box49064–00100,Nairobi.
22	Nandi Hekima Sacco Society Ltd	P.O. Box 211 -30300, Kapsabet
23	Nation Sacco Society Ltd	P.O.Box 22022 – 00400, Nairobi.
24	Biashara sacco societyltd	P.O.Box1895– 10100,Nyeri.
25	Mwito Sacco Society Ltd	P.O.Box 56763 – 00200, Nairobi.
26	Ardhi sacco society ltd	P.O.Box28782-00200, Nairobi.
27	Transnational Times Sacco Society Ltd	P.O. Box 2274 – 30200, Kitale
28	Skyline Sacco Society Ltd	P.O.Box 660 – 20103, Eldama Ravine.
29	Trans Nation Sacco Society Ltd	P.O.Box 15 – 60400, Chuka.
30	Egerton sacco society ltd	P.O.Box178–20115,Egerton.
31	Elgon Teachers Sacco society Ltd	P.Obox27-50203,Kapsokwony.
32	Chuna Saccosociety Ltd	P.O.Box30197–00100,Nairobi.
33	Ukristo Na Ufanisi Wa Angalicana Sacco Society Ltd	P.O Box 872-00605, Nairobi.
34	Kingdom Sacco Society Ltd	P.O.Box 8017 – 00300, Nairobi.
35	Simba Chai Sacco Society Ltd	P.O.Box 977 – 20200, Kericho.
36	Faridi sacco society ltd	P.O. Box 448-50400, Busia.
37	Wakenya Pamoja Sacco Society Ltd	P.O.Box 829 – 40200, Kisii.
38	Imenti Sacco Society Ltd	P.O.Box 3192 – 60200, Meru.
39	Trans- Elite County Sacco Society Ltd	P.O Box 547-30300, Kapsabet.
40	Daima Sacco society ltd	P.O.Box2032 – 60100, Embu.
41	Southern Star Sacco Society Ltd	P.O Box 514-60400, Chuka
42	Wanandeg Sacco Society Ltd	P.O.Box 19074 -00501, Nairobi.
43	Universal Traders Sacco Society Ltd	P.O.Box 2119– 90100, Machakos.
44	Wananchi Sacco Society Ltd	P.O.Box 910 – 10106, Othaya.
45	Smart Life Sacco Society Ltd	P.O Box 118-30705, Kapsowar.
46	Wanaanga Sacco Society Ltd	P.O.Box 34680 – 00501, Nairobi.
47	Elimu sacco society Ltd	P.Obox10073-00100, Nairobi.
48	Centenary sacco society ltd	P.O.Box1207 – 60200, Meru.
49	Eco-Pillar Sacco Society Ltd	P.O. Box 48 – 30600, Kapenguria
50	Defence Sacco Society Ltd	P.O Box 40668 – 00100, Nairobi
51	Kite Sacco Society Ltd	P.O.Box 2073 – 40100, Kisumu.
52	Mafanikio Sacco Society Ltd	P.O Box 86515-80100, Mombasa.
53	Muki Sacco Society Ltd	P.O Box 398-20318, North Kinangop
54	Telepost Sacco Society Ltd	P.O. Box 49557 – 00100, Nairobi
55	Fundilima sacco society ltd	P.O.Box62000–00200,Nairobi.
Small Tiered (Sized) Nwdt-Saccos By Total Assets		
1	Kmfri Sacco Society Ltd	P.O.Box 80862, 80100 Mombasa.
2	Airports Sacco Society Ltd	P.O. Box 19001-00501, Nairobi
3	Nyahururu Umoja Sacco Society Ltd	P.O Box 2183-20300, Nyahururu.
4	Times U Sacco Society Ltd	P.O.Box 310 – 60202, Nkubu.
5	2nk sacco society ltd	P.Obox 12196-10100 Nyeri
6	Prime Time Sacco	P.O. Box 512 – 30700, Iten
7	Konoin Sacco Society Ltd	P.O.Box 83 –20403, Mogogosiek.
8	Magadi Sacco Society Ltd	P.O.Box 13 – 00205, Magadi.
9	Banana Hill Sacco Society Ltd	P.O. Box 333 – 00219, Karuri
10	Nassefu Sacco Society Ltd	P.O.Box 43338 – 00100, Narobi.
11	Taraji Sacco Society Ltd	P.O.Box 605 – 40600, Siaya.

12	Orient Sacco Society Ltd	P.O.Box 1842 – 01000, Thika.
13	County sacco society ltd	P.O.Box21–60103,Runyenjes.
14	Wakulima Commercial Sacco Society Ltd	P.O.Box 232 – 10103, Mukurweni.
15	Dhabitisaccosocietyltd	P.O.Box353–60600,Maua.
16	Nyala Vision Sacco Society Ltd	P.O Box 27-20306, Ndaragwa.
17	Thamani Sacco Society Ltd	P.O.Box 467 – 60400, Chuka.
18	Nafaka Sacco Society Ltd	P.O.Box 30586 – 00100, Nairobi.
19	Kimbilio Daima Sacco Society Ltd	P.O. Box 81-20225, Kimulot.
20	Shoppers Sacco Society Ltd	P.O. Box 16 – 00507, Nairobi
21	Narok Teachers Sacco Society Ltd	P.O.Box 158 – 20500, Narok.
22	Supa Sacco Society Ltd	P.O.Box 271 – 20600, Maralal.
23	Vision Point Sacco Society Ltd	P.O.Box 42 – 40502, Nyansiongo.
24	Nrs Sacco Society Ltd	P. O Box 575-00902, Kikuyu.
25	Lainisha Sacco Society Ltd	P.O. Box 272-10303, Wang'uru.
26	Moi University Sacco Society Ltd	P.O. Box 23 – 30107, Moi University
27	Vision Africa Sacco Society Ltd	P.O Box 18263-20100, Nakuru.
28	Jitegemee Sacco Society Ltd	P.O. Box 86937-80100, Mombasa.
29	Siraji Sacco Society Ltd	P.O.Box Private Bag, Timau.
30	Patnas Sacco Society Ltd	P.O Box 601-20210, Litein.
31	Fariji sacco society ltd	P.O.Box589–00216,Githunguri.
32	Miliki Sacco Society Ltd	P.O.Box 43582 – 10100 Nairobi
33	Wevarsity Sacco Society Ltd	P.O Box 873-50100, Kakamega
34	Kenya Achievas Sacco Society Ltd	P.O. Box 3080-40200, Kisii.
35	Lengo Sacco Society Ltd	P.O.Box 1005 – 80200, Malindi.
36	Mudete Tea Growers Sacco Society Ltd	P.O.Box 221 – 41053, Khayega.
37	Baraka sacco society ltd	P.O.Box1548 – 10101,Karatina.
38	Smart Champions Sacco Society Ltd	P.O Box 64-60205, Githingo
39	Marsabit Teachers Sacco Society Ltd	P.O.Box 90 – 60500, Marsabit.
40	Ufanisi Sacco Society Ltd	P.O Box 2973-00200, Nairobi.
41	Strategic Dt-Sacco Society Ltd	P.O Box 78596, Nairobi
42	Kenya Cannors Sacco Society Ltd	P.O.Box 1124 – 01000, Thika.
43	Tenhos Sacco Society Ltd	P.O.Box 391 – 20400, Bomet.
44	All churches sacco society ltd	P.Obox 2036-01000,Thika.
45	Chuka University Sacco Society Ltd	P.O Box 109 – 60400, Chuka
46	Puan Sacco Society Ltd	P.O Box 404-20500, Narok.
47	Gastameco sacco society ltd	P.Obox189-60101,Manyatta.
48	Washa Sacco Society Ltd	P.O.Box 83256–80100, Mombasa.
49	Home Business Sacco Society Ltd	P.O Box 1073 – 20300, Nyahururu
50	Murata Sacco Society Ltd	P.O.Box 816 – 10200, Murang'a.
51	Joinas Sacco Society Ltd	P.O.Box 669 – 00219, Karuri.
52	Dumisha sacco society ltd	P.Obox84-20600,Mararal.
53	Stake Kenya Sacco Society Ltd	P.O.Box 208 – 40413, Kehancha.
54	Ilkisonko Sacco Society Ltd	P.O Box 91-00209, Loitokitok.
55	Nyambene Arimi Sacco Society Ltd	P.O.Box 493 – 60600, Maua.
56	Sotico Sacco Society Ltd	P.O.Box 959 – 20406, Sotik.
57	Kipsigis Edis Sacco Society Ltd	P.O Box 228-20400, Bomet.
58	Nufaika Sacco Society Ltd	P.O Box 735-10300, Kerugoya.
59	Lamu Teachers Sacco Society Ltd	P.O. Box 110-80500, Lamu.
60	Jumuika Sacco Society Ltd	P.O. Box 14-40112, Awasi.
61	Transcounties Sacco Society Ltd	P.O. Box 2965-30200, Kitale.
62	Sukari Sacco Society Ltd	P.O Box 841-50102, Mumias
63	Eneasaccosocietyltd	P.O.Box1836 – 10101,Karatina.
64	Ndosha Sacco Society Ltd	P.O.Box 532– 60401, Chogoria –Maara.
65	Baraton University sacco Society Ltd	P.Obox2500-30100,Eldoret.
66	Kolenge Tea Sacco Society Ltd	P.O Box 291-30301, Nandi Hills.
67	Kenya Midland Sacco Society Ltd	P.O Box 287-20400, Bomet.
68	Agro-Chemsacco society ltd	P.Obox94-40107,Muhoroni.
69	Jacaranda Sacco Society Ltd	P.O. Box 176744-00232, Ruiru

70	Nandi Farmers Sacco Society Ltd	P.O Box 333-30301, Nandi Hills
71	Mwietheri Sacco Society Ltd	P.O. Box 2445-060100, Embu.
72	Rachuonyo Teachers Sacco Society Ltd	P.O. Box 147-40332, Kosele.
73	Nitunze Sacco Society Ltd	P.O. Box 295 – 50102, Mumias
74	Ainabkoi Sacco Society Ltd	P.O. Box 120, Ainabkoi
75	Uni-County Sacco Society Ltd	P.O Box 10132-20100, Nakuru
76	The Apple Sacco Society Ltd	P.O Box 153-50305, Sirwa.
77	Kathera Rural Sacco Society Ltd	P.O Box 251-60202, Nkubu.
78	Koru Sacco Society Ltd	P.O. Box Private Bag-40100, Koru
79	Good Faith Sacco Society Ltd	P.O. Box 224 – 00222, Uplands
80	Vihiga County Farmers Sacco Society Ltd	P.O Box 309-50317, Chavakali.
81	Goodway sacco society ltd	P.Obox 626-10300, Kerugoya.
82	Kabiyet Sacco Society Ltd	P.O Box 195 – 30303, Kabiyet

Source: Sacco Societies Regulatory Authority (2022)

APPENDIX III : MAP OF KENYA



APPENDIX IV: RAW DATA

NO	SACCO	YEA R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
1	2NK	2016	0.809	0.602	0.588	0.086	0.014	13.44	57164	169.68	6.32	0.049
2	2NK	2017	0.836	0.62	0.618	0.09	0.002	13.48	63916	183.23	8.02	0.049
3	2NK	2018	0.74	0.52	0.47	0.09	0.05	14.23	71091	191.83	4.7	0.064
4	2NK	2019	0.79	0.52	0.57	0.1	0.05	15.19	77713	201.81	5.2	0.058
5	2NK	2020	0.81	0.66	0.57	0.05	0.09	12.27	76944	108.69	5.2	0.029
6	2NK	2021	0.87	0.69	0.71	0.1	0.02	12.61	82823	115.33	6.11	0.047
7	2NK	2022	0.97	0.71	0.77	0.11	0.06	13.66	86627	124.16	7.65	0.048
8	ACUMEN	2016	2.266	1.726	1.659	0.284	0.067	13.13	57164	169.68	6.32	0.057
9	ACUMEN	2017	1.955	1.492	1.436	0.245	0.056	13.11	63916	183.23	8.02	0.057
10	ACUMEN	2018	0.69	0.56	0.58	0.1	0.02	12.32	71091	191.83	4.7	0.057
11	ACUMEN	2019	8.025	6.019	5.73	0.997	0.289	12.47	77713	201.81	5.2	0.058
12	ACUMEN	2020	0.29	0.26	0.24	0.03	0.02	0.08	76944	108.69	5.2	0.042
13	ACUMEN	2021	0.37	0.3	0.31	0.05	0.01	14.5	82823	115.33	6.11	0.054
14	ACUMEN	2022	0.4	0.32	0.32	0.05	0.005	15.7	86627	124.16	7.65	0.052
15	AFYA	2020	19.404	14.514	13.952	2.394	0.562	13.37	57164	169.68	6.32	0.057
16	AFYA	2017	19.66	14.7	13.828	2.46	0.872	13.37	63916	183.23	8.02	0.059
17	AFYA	2018	17.56	13.09	14.42	2.27	1.33	13.41	71091	191.83	4.7	0.052
18	AFYA	2019	19.05	13.99	14.21	2.45	0.22	13.62	77713	201.81	5.2	0.057
19	AFYA	2020	19.88	15.18	13.9	2.36	1.28	13.1	76944	108.69	5.2	0.057
20	AFYA	2021	20.87	15.61	13.4	2.43	2.21	13.37	82823	115.33	6.11	0.06
21	AFYA	2022	20.94	15.63	13.21	2.79	2.42	13.4	86627	124.16	7.65	0.07

NO	SACCO	YEA R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
22	AGRO CHEM	2020	0.151	0.096	0.11	0.023	0.014	15.77	57164	169.68	6.32	0.069
23	AGRO CHEM	2017	0.154	0.098	0.108	0.024	0.01	15.71	63916	183.23	8.02	0.074
24	AGRO CHEM	2018	0.14	0.09	0.1	0.02	0.01	15.56	71091	191.83	4.7	0.067
25	AGRO CHEM	2019	0.15	0.09	0.12	0.03	0.03	16.67	77713	201.81	5.2	0.083
26	AGRO CHEM	2020	0.15	0.1	0.11	0.02	0.01	15	76944	108.69	5.2	0.061
27	AGRO CHEM	2021	0.16	0.1	0.11	0.02	0.01	16	82823	115.33	6.11	0.061
28	AGRO CHEM	2022	0.17	0.11	0.1	0.03	0.01	15.45	86627	124.16	7.65	0.1
29	AINABKOI	2020	0.108	0.053	0.015	0.034	0.038	20.45	57164	169.68	6.32	0.766
30	AINABKOI	2017	0.11	0.054	0.014	0.03	0.04	20.37	63916	183.23	8.02	0.714
31	AINABKOI	2018	0.09	0.05	0.02	0.01	0.03	18	71091	191.83	4.7	0.167
32	AINABKOI	2019	0.11	0.06	0.02	0.01	0.04	18.33	77713	201.81	5.2	0.167
33	AINABKOI	2020	0.11	0.05	0.01	0.11	0.04	22	76944	108.69	5.2	3.667
34	AINABKOI	2021	0.12	0.05	0.01	0.01	0.04	24	82823	115.33	6.11	0.333
35	AINABKOI	2022	0.12	0.06	0.01	0.01	0.05	20	86627	124.16	7.65	0.333
36	AIRPORTS	2020	0.848	0.646	0.645	0.127	0.001	13.13	57164	169.68	6.32	0.065
37	AIRPORTS	2017	0.869	0.649	0.666	0.131	0.018	13.39	63916	183.23	8.02	0.066
38	AIRPORTS	2018	0.905	0.665	0.705	0.135	0.04	13.61	71091	191.83	4.7	0.064
39	AIRPORTS	2019	0.8	0.64	0.6	0.12	0.04	14	77713	201.81	5.2	0.067
40	AIRPORTS	2020	0.82	0.63	0.61	0.12	0.02	16.7	76944	108.69	5.2	0.066
41	AIRPORTS	2021	0.95	0.66	0.75	0.15	0.09	17	82823	115.33	6.11	0.067
42	AIRPORTS	2022	1.05	0.73	0.86	0.15	0.13	18	86627	124.16	7.65	0.058
43	AMICA	2020	4.36	3.431	3.333	0.764	0.098	12.71	57164	169.68	6.32	0.076
44	AMICA	2017	4.708	3.674	3.576	0.808	0.098	12.81	63916	183.23	8.02	0.075

NO	SACCO	YEA R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
45	AMICA	2018	3.06	2.62	2.45	0.65	0.17	11.68	71091	191.83	4.7	0.088
46	AMICA	2019	3.82	3.02	2.79	0.61	0.23	12.65	77713	201.81	5.2	0.073
47	AMICA	2020	4.55	3.51	3.52	0.77	0.01	12.96	76944	108.69	5.2	0.073
48	AMICA	2021	5.66	4.33	4.33	0.98	0.044	13.07	82823	115.33	6.11	0.075
49	AMICA	2022	6.45	4.89	4.79	1.03	0.1	13.19	86627	124.16	7.65	0.072
50	AMMAR	2020	0.18	0.124	0.15	0.03	0.026	14.47	57164	169.68	6.32	0.067
51	AMMAR	2017	0.184	0.129	0.15	0.03	0.021	14.2	63916	183.23	8.02	0.067
52	AMMAR	2018	0.195	0.138	0.16	0.03	0.023	14.18	71091	191.83	4.7	0.063
53	AMMAR	2019	0.16	0.11	0.14	0.03	0.03	14.55	77713	201.81	5.2	0.071
54	AMMAR	2020	0.18	0.12	0.15	0.03	0.03	15	76944	108.69	5.2	0.067
55	AMMAR	2021	0.2	0.15	0.15	0.03	0.003	13.33	82823	115.33	6.11	0.067
56	AMMAR	2022	0.24	0.17	0.2	0.03	0.03	14.12	86627	124.16	7.65	0.05
57	ARDHI	2020	1.991	1.576	1.672	0.244	0.096	12.64	57164	169.68	6.32	0.049
58	ARDHI	2017	2.044	1.608	1.718	0.252	0.11	12.71	63916	183.23	8.02	0.049
59	ARDHI	2018	1.79	1.45	1.57	0.23	0.12	12.34	71091	191.83	4.7	0.049
60	ARDHI	2019	1.89	1.51	1.62	0.23	0.11	12.52	77713	201.81	5.2	0.047
61	ARDHI	2020	2.04	1.6	1.68	0.25	0.08	12.75	76944	108.69	5.2	0.05
62	ARDHI	2021	2.19	1.71	1.77	0.26	0.06	12.81	82823	115.33	6.11	0.049
63	ARDHI	2022	2.31	1.77	1.95	0.29	0.18	13.05	86627	124.16	7.65	0.05
64	ASILI	2020	2.633	1.685	1.448	0.265	0.237	15.63	57164	169.68	6.32	0.061
65	ASILI	2017	2.716	1.706	1.45	0.274	0.256	15.92	63916	183.23	8.02	0.063
66	ASILI	2018	2.36	1.58	1.56	0.24	0.02	14.94	71091	191.83	4.7	0.051
67	ASILI	2019	2.59	1.69	1.42	0.25	0.27	15.33	77713	201.81	5.2	0.059

NO	SACCO	YE R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
68	ASILI	2020	2.74	1.73	1.36	0.26	0.37	15.84	76944	108.69	5.2	0.064
69	ASILI	2021	2.76	1.72	1.45	0.3	0.27	16.05	82823	115.33	6.11	0.069
70	ASILI	2022	3.13	1.81	1.46	0.32	0.35	17.29	86627	124.16	7.65	0.073
71	AZIMA	2020	1.694	1.029	1.194	0.232	0.166	16.46	57164	169.68	6.32	0.065
72	AZIMA	2017	1.748	1.044	1.222	0.242	0.178	16.74	63916	183.23	8.02	0.066
73	AZIMA	2018	1.48	0.96	1.13	0.21	0.17	15.42	71091	191.83	4.7	0.062
74	AZIMA	2019	1.64	1.02	1.23	0.23	0.21	16.08	77713	201.81	5.2	0.062
75	AZIMA	2020	1.71	1.05	1.15	0.22	0.1	16.29	76944	108.69	5.2	0.064
76	AZIMA	2021	1.89	1.07	1.24	0.26	0.17	17.66	82823	115.33	6.11	0.07
77	AZIMA	2022	2.02	1.12	1.36	0.29	0.24	18.04	86627	124.16	7.65	0.071
78	BANDARI	2020	9.881	6.29	6.946	1.296	0.656	15.71	57164	169.68	6.32	0.062
79	BANDARI	2017	10.236	6.498	7.11	1.342	0.612	15.75	63916	183.23	8.02	0.063
80	BANDARI	2018	8.66	5.41	6.34	1.07	0.93	16.01	71091	191.83	4.7	0.056
81	BANDARI	2019	9.48	6.01	6.9	1.34	0.89	15.77	77713	201.81	5.2	0.065
82	BANDARI	2020	10.01	6.54	6.99	1.34	0.45	15.31	76944	108.69	5.2	0.064
83	BANDARI	2021	11.02	6.99	7.39	1.39	0.4	15.77	82823	115.33	6.11	0.063
84	BANDARI	2022	12.01	7.54	7.93	1.57	0.39	15.93	86627	124.16	7.65	0.066
85	BARAKA	2020	0.362	0.236	0.2	0.058	0.036	15.34	57164	169.68	6.32	0.096
86	BARAKA	2017	0.37	0.24	0.202	0.06	0.038	15.42	63916	183.23	8.02	0.099
87	BARAKA	2018	0.32	0.21	0.19	0.05	0.02	15.24	71091	191.83	4.7	0.088
88	BARAKA	2019	0.36	0.24	0.21	0.06	0.03	15	77713	201.81	5.2	0.095
89	BARAKA	2020	0.38	0.25	0.2	0.06	0.05	15.2	76944	108.69	5.2	0.1
90	BARAKA	2021	0.38	0.24	0.2	0.06	0.04	15.83	82823	115.33	6.11	0.1

NO	SACCO	YE R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
91	BARAKA	2022	0.41	0.26	0.21	0.07	0.05	15.77	86627	124.16	7.65	0.111
92	BINGWA	2020	5.949	3.064	3.707	0.881	0.643	19.42	57164	169.68	6.32	0.079
93	BINGWA	2017	6.094	3.11	3.726	0.894	0.616	19.59	63916	183.23	8.02	0.08
94	BINGWA	2018	5.15	2.78	3.15	0.82	0.37	18.53	71091	191.83	4.7	0.087
95	BINGWA	2019	5.82	2.94	3.83	0.88	0.89	19.8	77713	201.81	5.2	0.077
96	BINGWA	2020	6.21	3.23	3.95	0.91	0.72	19.23	76944	108.69	5.2	0.077
97	BINGWA	2021	6.47	3.26	3.88	0.9	0.62	19.85	82823	115.33	6.11	0.077
98	BINGWA	2022	6.82	3.34	3.82	0.96	0.48	20.42	86627	124.16	7.65	0.084
99	BORESHA	2020	7.807	5.167	6.395	1.194	1.228	15.11	57164	169.68	6.32	0.062
100	BORESHA	2017	8.156	5.454	6.726	1.232	1.272	14.95	63916	183.23	8.02	0.061
101	BORESHA	2018	6.71	4.02	5.41	1.06	1.39	16.69	71091	191.83	4.7	0.065
102	BORESHA	2019	7.31	4.7	5.98	1.2	1.28	15.55	77713	201.81	5.2	0.067
103	BORESHA	2020	7.94	5.45	6.47	1.17	1.02	14.57	76944	108.69	5.2	0.06
104	BORESHA	2021	8.92	6.21	7.39	1.31	1.18	14.36	82823	115.33	6.11	0.059
105	BORESHA	2022	9.9	6.89	8.38	1.42	1.49	14.37	86627	124.16	7.65	0.056
106	CAPITAL	2020	3.804	3.006	3.113	0.626	0.107	12.66	57164	169.68	6.32	0.067
107	CAPITAL	2017	3.918	3.088	3.164	0.638	0.076	12.69	63916	183.23	8.02	0.067
108	CAPITAL	2018	3.32	2.77	2.7	0.58	0.07	11.99	71091	191.83	4.7	0.072
109	CAPITAL	2019	3.67	2.91	3.15	0.6	0.24	12.61	77713	201.81	5.2	0.063
110	CAPITAL	2020	4.03	3.06	3.31	0.64	0.25	13.17	76944	108.69	5.2	0.064
111	CAPITAL	2021	4.08	3.2	3.24	0.67	0.04	12.75	82823	115.33	6.11	0.069
112	CAPITAL	2022	4.49	3.5	3.42	0.7	0.08	12.83	86627	124.16	7.65	0.068
113	CENTENARY	2020	1.116	0.854	0.898	0.147	0.044	13.06	57164	169.68	6.32	0.054

NO	SACCO	YE R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
114	CENTENARY	2017	1.15	0.872	0.902	0.154	0.03	13.19	63916	183.23	8.02	0.057
115	CENTENARY	2018	0.87	0.7	0.75	0.12	0.05	12.43	71091	191.83	4.7	0.053
116	CENTENARY	2019	1.09	0.83	0.94	0.15	0.11	13.13	77713	201.81	5.2	0.053
117	CENTENARY	2020	1.17	0.91	0.94	0.14	0.03	12.86	76944	108.69	5.2	0.05
118	CENTENARY	2021	1.3	0.96	0.96	0.17	0.003	13.54	82823	115.33	6.11	0.059
119	CENTENARY	2022	1.32	0.96	0.92	0.19	0.04	13.75	86627	124.16	7.65	0.069
120	CHAI	2020	3.916	2.75	3.291	0.569	0.541	14.24	57164	169.68	6.32	0.058
121	CHAI	2017	4.05	2.838	3.434	0.596	0.596	14.27	63916	183.23	8.02	0.058
122	CHAI	2018	3.49	2.46	3.03	0.51	0.57	14.19	71091	191.83	4.7	0.056
123	CHAI	2019	3.67	2.61	3.09	0.55	0.48	14.06	77713	201.81	5.2	0.059
124	CHAI	2020	4.03	2.84	3.29	0.56	0.45	14.19	76944	108.69	5.2	0.057
125	CHAI	2021	4.34	3	3.61	0.63	0.61	14.47	82823	115.33	6.11	0.058
126	CHAI	2022	4.72	3.28	4.15	0.73	0.87	14.39	86627	124.16	7.65	0.059
127	CHUNA	2020	1.777	1.415	0.984	0.204	0.431	11	57164	169.68	6.32	0.069
128	CHUNA	2017	1.816	1.416	1.05	0.218	0.366	10	63916	183.23	8.02	0.069
129	CHUNA	2018	1.89	1.65	1	0.16	0.65	11.45	71091	191.83	4.7	0.053
130	CHUNA	2019	1.64	1.36	0.83	0.18	0.53	12.06	77713	201.81	5.2	0.072
131	CHUNA	2020	1.72	1.32	0.92	0.21	0.4	13.03	76944	108.69	5.2	0.076
132	CHUNA	2021	1.82	1.33	1.12	0.25	0.21	13.68	82823	115.33	6.11	0.074
133	CHUNA	2022	2.01	1.42	1.38	0.29	0.04	14.15	86627	124.16	7.65	0.07
134	COSMOPOLITA N	2020	6.699	5.353	5.27	0.906	0.083	12.51	57164	169.68	6.32	0.057
135	COSMOPOLITA N	2017	7.104	5.684	5.688	0.952	0.004	12.5	63916	183.23	8.02	0.056

NO	SACCO	YE R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
136	COSMOPOLITA N	2018	5.35	4.29	4.3	0.83	0.01	12.47	71091	191.83	4.7	0.064
137	COSMOPOLITA N	2019	6.14	4.85	4.65	0.82	0.2	12.66	77713	201.81	5.2	0.059
138	COSMOPOLITA N	2020	6.95	5.56	5.34	0.89	0.22	12.5	76944	108.69	5.2	0.056
139	COSMOPOLITA N	2021	7.95	6.38	6.37	1.04	0.01	12.46	82823	115.33	6.11	0.054
140	COSMOPOLITA N	2022	9.13	7.34	7.78	1.18	0.44	12.44	86627	124.16	7.65	0.051
141	DHABITI	2020	0.647	0.369	0.429	0.128	0.06	17.53	57164	169.68	6.32	0.1
142	DHABITI	2017	0.666	0.366	0.436	0.132	0.07	18.2	63916	183.23	8.02	0.101
143	DHABITI	2018	0.6	0.36	0.38	0.13	0.02	16.67	71091	191.83	4.7	0.114
144	DHABITI	2019	0.62	0.4	0.43	0.13	0.03	15.5	77713	201.81	5.2	0.101
145	DHABITI	2020	0.64	0.37	0.44	0.12	0.07	17.3	76944	108.69	5.2	0.091
146	DHABITI	2021	0.71	0.35	0.46	0.13	0.11	20.29	82823	115.33	6.11	0.094
147	DHABITI	2022	0.76	0.35	0.47	0.15	0.12	21.71	86627	124.16	7.65	0.106
148	DIMKES	2020	1.807	1.45	1.552	0.252	0.102	12.46	57164	169.68	6.32	0.054
149	DIMKES	2017	1.916	1.512	1.63	0.27	0.118	12.67	63916	183.23	8.02	0.055
150	DIMKES	2018	1.59	1.35	1.37	0.21	0.02	11.78	71091	191.83	4.7	0.051
151	DIMKES	2019	1.66	1.37	1.45	0.24	0.08	12.12	77713	201.81	5.2	0.055
152	DIMKES	2020	1.76	1.42	1.51	0.24	0.09	12.39	76944	108.69	5.2	0.053
153	DIMKES	2021	2.11	1.6	1.8	0.3	0.2	13.19	82823	115.33	6.11	0.056
154	DIMKES	2022	2.46	1.82	2.02	0.36	0.2	13.52	86627	124.16	7.65	0.059
155	ECO-PILLAR	2020	1.144	0.745	0.44	0.136	0.305	15.35	57164	169.68	6.32	0.103
156	ECO-PILLAR	2017	1.178	0.764	0.47	0.142	0.294	15.42	63916	183.23	8.02	0.101

NO	SACCO	YE R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
157	ECO-PILLAR	2018	1.02	0.65	0.32	0.11	0.33	15.69	71091	191.83	4.7	0.115
158	ECO-PILLAR	2019	1.08	0.71	0.41	0.13	0.3	15.21	77713	201.81	5.2	0.106
159	ECO-PILLAR	2020	1.18	0.78	0.47	0.14	0.31	15.13	76944	108.69	5.2	0.099
160	ECO-PILLAR	2021	1.26	0.82	0.53	0.16	0.29	15.37	82823	115.33	6.11	0.101
161	ECO-PILLAR	2022	1.35	0.86	0.62	0.17	0.24	15.7	86627	124.16	7.65	0.091
162	EGERTON UNIVERSITY	2020	2.228	1.529	1.546	0.278	0.017	14.57	57164	169.68	6.32	0.06
163	EGERTON UNIVERSITY	2017	2.128	1.474	1.458	0.262	0.016	14.44	63916	183.23	8.02	0.06
164	EGERTON UNIVERSITY	2018	2.38	1.6	1.75	0.34	0.15	14.88	71091	191.83	4.7	0.065
165	EGERTON UNIVERSITY	2019	2.38	1.62	1.65	0.31	0.03	14.69	77713	201.81	5.2	0.063
166	EGERTON UNIVERSITY	2020	2.3	1.55	1.58	0.26	0.03	14.84	76944	108.69	5.2	0.055
167	EGERTON UNIVERSITY	2021	1.95	1.4	1.29	0.22	0.11	13.93	82823	115.33	6.11	0.057
168	EGERTON UNIVERSITY	2022	1.63	1.2	1.02	0.18	0.18	13.58	86627	124.16	7.65	0.059
169	ELIMU	2020	1.219	0.908	0.78	0.212	0.128	13.43	57164	169.68	6.32	0.09
170	ELIMU	2017	1.246	0.93	0.808	0.218	0.122	13.4	63916	183.23	8.02	0.09
171	ELIMU	2018	1.1	0.83	0.69	0.19	0.14	13.25	71091	191.83	4.7	0.092
172	ELIMU	2019	1.21	0.89	0.77	0.2	0.12	13.6	77713	201.81	5.2	0.087
173	ELIMU	2020	1.23	0.92	0.81	0.22	0.11	13.37	76944	108.69	5.2	0.091
174	ELIMU	2021	1.31	0.97	0.82	0.23	0.15	13.51	82823	115.33	6.11	0.093
175	ELIMU	2022	1.38	1.04	0.95	0.25	0.09	13.27	86627	124.16	7.65	0.088
176	FARIJI	2020	0.381	0.221	0.243	0.078	0.022	17.23	57164	169.68	6.32	0.108

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177	FARIJI	2017	0.406	0.236	0.264	0.082	0.028	17.2	63916	183.23	8.02	0.104
178	FARIJI	2018	0.26	0.14	0.17	0.06	0.03	18.57	71091	191.83	4.7	0.118
179	FARIJI	2019	0.34	0.2	0.22	0.08	0.02	17	77713	201.81	5.2	0.121
180	FARIJI	2020	0.42	0.25	0.26	0.08	0.01	16.8	76944	108.69	5.2	0.103
181	FARIJI	2021	0.48	0.28	0.3	0.09	0.02	17.14	82823	115.33	6.11	0.1
182	FARIJI	2022	0.53	0.31	0.37	0.1	0.06	17.1	86627	124.16	7.65	0.09
183	FORTITUDE	2020	0.209	0.134	0.159	0.041	0.025	31.34	57164	169.68	6.32	0.085
184	FORTITUDE	2017	0.226	0.142	0.176	0.044	0.034	31.31	63916	183.23	8.02	0.083
185	FORTITUDE	2018	0.16	0.12	0.11	0.02	0.01	31.38	71091	191.83	4.7	0.061
186	FORTITUDE	2019	0.19	0.12	0.15	0.04	0.03	31.25	77713	201.81	5.2	0.089
187	FORTITUDE	2020	0.22	0.14	0.18	0.05	0.04	31.5	76944	108.69	5.2	0.093
188	FORTITUDE	2021	0.25	0.15	0.18	0.05	0.03	31	82823	115.33	6.11	0.093
189	FORTITUDE	2022	0.31	0.18	0.26	0.06	0.08	32	86627	124.16	7.65	0.077
190	GDC	2020	2.7	1.974	2.365	0.328	0.392	13.68	57164	169.68	6.32	0.046
191	GDC	2017	2.958	2.168	2.606	0.362	0.438	13.64	63916	183.23	8.02	0.046
192	GDC	2018	1.83	1.3	1.59	0.26	0.29	14.08	71091	191.83	4.7	0.055
193	GDC	2019	2.24	1.61	1.91	0.28	0.3	13.91	77713	201.81	5.2	0.049
194	GDC	2020	2.88	2.14	2.46	0.32	0.32	13.46	76944	108.69	5.2	0.043
195	GDC	2021	3.59	2.65	3.26	0.42	0.61	13.55	82823	115.33	6.11	0.043
196	GDC	2022	4.25	3.14	3.81	0.53	0.67	13.54	86627	124.16	7.65	0.046
197	GUSII MWALIMU	2020	10.059	7.29	8.939	1.622	1.65	13.8	57164	169.68	6.32	0.06
198	GUSII MWALIMU	2017	10.524	7.608	9.326	1.702	1.718	13.83	63916	183.23	8.02	0.061

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199	GUSII MWALIMU	2018	8.28	5.94	7.47	1.32	1.53	13.94	71091	191.83	4.7	0.059
200	GUSII MWALIMU	2019	9.44	6.76	8.38	1.53	1.62	13.96	77713	201.81	5.2	0.061
201	GUSII MWALIMU	2020	10.44	7.62	9.39	1.68	1.77	13.7	76944	108.69	5.2	0.06
202	GUSII MWALIMU	2021	11.61	8.52	10.13	1.88	1.61	13.63	82823	115.33	6.11	0.062
203	GUSII MWALIMU	2022	12.85	9.2	11.26	2.1	2.06	13.97	86627	124.16	7.65	0.062
204	HARAMBEE	2020	31.008	20.863	20.698	3.295	0.165	14.86	57164	169.68	6.32	0.053
205	HARAMBEE	2017	32.008	21.336	21.86	3.544	0.524	15	63916	183.23	8.02	0.054
206	HARAMBEE	2018	26.32	18.77	15.93	2.71	2.84	14.02	71091	191.83	4.7	0.057
207	HARAMBEE	2019	29.53	20.14	18.66	2.99	1.48	14.66	77713	201.81	5.2	0.053
208	HARAMBEE	2020	32.56	21.53	22.24	3.22	0.71	15.12	76944	108.69	5.2	0.048
209	HARAMBEE	2021	34.62	22.54	24.8	4.01	2.26	15.36	82823	115.33	6.11	0.054
210	HARAMBEE	2022	37.01	23.7	27.67	4.79	3.97	15.62	86627	124.16	7.65	0.058
211	HAZINA	2020	9.362	7.15	7.314	0.91	0.164	13.09	57164	169.68	6.32	0.041
212	HAZINA	2017	9.928	7.568	7.588	1.01	0.02	13.12	63916	183.23	8.02	0.044
213	HAZINA	2018	7.51	5.76	6.25	0.07	0.49	13.04	71091	191.83	4.7	0.004
214	HAZINA	2019	8.48	6.48	6.85	1	0.37	13.09	77713	201.81	5.2	0.049
215	HAZINA	2020	9.69	7.41	7.57	1.13	0.16	13.08	76944	108.69	5.2	0.05
216	HAZINA	2021	11.2	8.53	8.31	1.34	0.22	13.13	82823	115.33	6.11	0.054
217	HAZINA	2022	12.76	9.66	8.96	1.51	0.7	13.21	86627	124.16	7.65	0.056
218	IMARIKA	2020	9.119	6.114	7.805	1.534	1.691	14.91	57164	169.68	6.32	0.065
219	IMARIKA	2017	9.544	6.342	8.196	1.578	1.854	15.05	63916	183.23	8.02	0.064

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220	IMARIKA	2018	7.61	5.24	6.79	1.36	1.55	14.52	71091	191.83	4.7	0.067
221	IMARIKA	2019	8.62	5.88	7.32	1.52	1.44	14.66	77713	201.81	5.2	0.069
222	IMARIKA	2020	9.34	6.26	7.76	1.5	1.5	14.92	76944	108.69	5.2	0.064
223	IMARIKA	2021	10.48	6.85	8.96	1.71	2.11	15.3	82823	115.33	6.11	0.064
224	IMARIKA	2022	11.67	7.48	10.15	1.8	2.67	15.6	86627	124.16	7.65	0.059
225	IMARISHA	2020	13.882	9.453	11.06	2.197	1.607	14.69	57164	169.68	6.32	0.066
226	IMARISHA	2017	14.872	10.224	11.838	2.384	1.614	14.55	63916	183.23	8.02	0.067
227	IMARISHA	2018	10.92	7.02	8.66	1.62	1.64	15.56	71091	191.83	4.7	0.062
228	IMARISHA	2019	12.36	8.38	10.24	2.01	1.86	14.75	77713	201.81	5.2	0.065
229	IMARISHA	2020	14.16	9.86	11.1	2.15	1.24	14.36	76944	108.69	5.2	0.065
230	IMARISHA	2021	17.1	11.78	13.46	2.82	1.68	14.52	82823	115.33	6.11	0.07
231	IMARISHA	2022	19.82	14.08	15.73	3.32	1.65	14.08	86627	124.16	7.65	0.07
232	INVEST AND GROW (IG)	2020	10.207	5.737	7.382	1.479	1.645	17.79	57164	169.68	6.32	0.067
233	INVEST AND GROW (IG)	2017	10.666	5.954	7.738	1.526	1.784	17.91	63916	183.23	8.02	0.066
234	INVEST AND GROW (IG)	2018	8.72	4.96	7.15	1.37	2.19	17.58	71091	191.83	4.7	0.064
235	INVEST AND GROW (IG)	2019	9.48	5.33	6.81	1.43	1.48	17.79	77713	201.81	5.2	0.07
236	INVEST AND GROW (IG)	2020	10.48	5.99	7.27	1.41	1.28	17.5	76944	108.69	5.2	0.065
237	INVEST AND GROW (IG)	2021	11.69	6.45	7.94	1.66	1.49	18.12	82823	115.33	6.11	0.07
238	INVEST AND GROW (IG)	2022	12.96	7.04	9.52	1.76	2.48	18.41	86627	124.16	7.65	0.062
239	JAMII	2020	4.547	3.31	3.889	0.598	0.58	12.41	57164	169.68	6.32	0.051

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240	JAMII	2017	4.696	3.368	3.906	0.608	0.538	12.19	63916	183.23	8.02	0.052
241	JAMII	2018	3.91	2.8	3.36	0.53	0.56	12.63	71091	191.83	4.7	0.053
242	JAMII	2019	4.39	3.17	3.77	0.58	0.6	11.75	77713	201.81	5.2	0.051
243	JAMII	2020	4.67	3.46	4.09	0.61	0.63	13.5	76944	108.69	5.2	0.05
244	JAMII	2021	5.07	3.75	4.32	0.66	0.57	10	82823	115.33	6.11	0.051
245	JAMII	2022	5.44	3.66	3.99	0.66	0.33	17	86627	124.16	7.65	0.055
246	KENPIPE	2020	3.22	2.307	2.721	0.445	0.414	19.31	57164	169.68	6.32	0.054
247	KENPIPE	2017	3.38	2.404	2.834	0.464	0.43	19.28	63916	183.23	8.02	0.055
248	KENPIPE	2018	2.61	1.93	2.15	0.35	0.22	19.35	71091	191.83	4.7	0.054
249	KENPIPE	2019	3.04	2.22	2.52	0.41	0.3	19.2	77713	201.81	5.2	0.054
250	KENPIPE	2020	3.39	2.41	2.96	0.49	0.55	19.5	76944	108.69	5.2	0.055
251	KENPIPE	2021	3.68	2.57	3.14	0.51	0.57	18.9	82823	115.33	6.11	0.054
252	KENPIPE	2022	4.18	2.89	3.4	0.56	0.51	20.1	86627	124.16	7.65	0.055
253	KENVERSITY	2020	2.969	2.156	2.34	0.417	0.183	17	57164	169.68	6.32	0.059
254	KENVERSITY	2017	3.064	2.222	2.388	0.424	0.166	18	63916	183.23	8.02	0.059
255	KENVERSITY	2018	2.61	1.92	2.07	0.38	0.15	12.52	71091	191.83	4.7	0.061
256	KENVERSITY	2019	2.79	2.08	2.34	0.42	0.26	13.3	77713	201.81	5.2	0.06
257	KENVERSITY	2020	3.12	2.23	2.43	0.43	0.2	11	76944	108.69	5.2	0.059
258	KENVERSITY	2021	3.26	2.33	2.47	0.43	0.14	14.7	82823	115.33	6.11	0.058
259	KENVERSITY	2022	3.54	2.55	2.63	0.46	0.08	14.8	86627	124.16	7.65	0.058
260	KENYA ACHIEVAS	2020	0.398	0.19	0.172	0.115	0.019	20.88	57164	169.68	6.32	0.224
261	KENYA ACHIEVAS	2017	0.398	0.192	0.178	0.116	0.014	20.73	63916	183.23	8.02	0.217

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262	KENYA ACHIEVAS	2018	0.39	0.21	0.18	0.12	0.03	18.57	71091	191.83	4.7	0.222
263	KENYA ACHIEVAS	2019	0.41	0.19	0.18	0.12	0.01	21.58	77713	201.81	5.2	0.222
264	KENYA ACHIEVAS	2020	0.4	0.18	0.15	0.11	0.03	22.22	76944	108.69	5.2	0.244
265	KENYA ACHIEVAS	2021	0.39	0.18	0.17	0.11	0.01	21.67	82823	115.33	6.11	0.216
266	KENYA ACHIEVAS	2022	0.4	0.2	0.21	0.12	0.01	20	86627	124.16	7.65	0.19
267	KENYA BANKERS	2020	8.494	6.308	6.135	0.93	0.173	13.47	57164	169.68	6.32	0.051
268	KENYA BANKERS	2017	8.672	6.42	6.316	0.962	0.104	13.51	63916	183.23	8.02	0.051
269	KENYA BANKERS	2018	7.58	5.79	5.12	0.75	0.67	13.09	71091	191.83	4.7	0.049
270	KENYA BANKERS	2019	8.35	6.13	5.9	0.98	0.23	13.62	77713	201.81	5.2	0.055
271	KENYA BANKERS	2020	8.58	6.52	6.31	0.96	0.21	13.16	76944	108.69	5.2	0.051
272	KENYA BANKERS	2021	9.29	6.68	7.03	1	0.35	13.91	82823	115.33	6.11	0.047
273	KENYA BANKERS	2022	9.56	6.98	7.22	1.12	0.24	13.7	86627	124.16	7.65	0.052
274	KENYA HIGHLAND	2020	3.156	2.047	1.754	0.481	0.293	24.1	57164	169.68	6.32	0.091
275	KENYA HIGHLAND	2017	3.288	2.126	1.922	0.506	0.204	24.08	63916	183.23	8.02	0.088
276	KENYA HIGHLAND	2018	2.87	1.91	1.4	0.45	0.51	24.09	71091	191.83	4.7	0.107
277	KENYA HIGHLAND	2019	2.91	1.86	1.65	0.45	0.21	24.09	77713	201.81	5.2	0.091

NO	SACCO	YE R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
278	KENYA HIGHLAND	2020	3.21	2.12	1.64	0.44	0.48	24.09	76944	108.69	5.2	0.089
279	KENYA HIGHLAND	2021	3.5	2.22	2.16	0.56	0.06	24.09	82823	115.33	6.11	0.086
280	KENYA HIGHLAND	2022	3.95	2.52	2.76	0.63	0.24	24.09	86627	124.16	7.65	0.076
281	KENYA NATIONAL POLICE DT	2020	37.218	22.758	31.553	5.986	8.795	22	57164	169.68	6.32	0.063
282	KENYA NATIONAL POLICE DT	2017	39.178	23.78	33.224	6.312	9.444	25	63916	183.23	8.02	0.063
283	KENYA NATIONAL POLICE DT	2018	28.95	18.77	24.36	4.63	5.59	23	71091	191.83	4.7	0.063
284	KENYA NATIONAL POLICE DT	2019	34.82	21.55	29.31	5.89	7.76	27	77713	201.81	5.2	0.067
285	KENYA NATIONAL POLICE DT	2020	39.05	23.67	33.17	6.06	9.5	30	76944	108.69	5.2	0.061
286	KENYA NATIONAL POLICE DT	2021	44.09	26.02	37.7	7.04	11.68	31	82823	115.33	6.11	0.062
287	KENYA NATIONAL POLICE DT	2022	48.98	28.89	41.58	7.94	12.69	26.33	86627	124.16	7.65	0.064
288	KINGDOM	2020	1.517	1.114	1.15	0.185	0.036	13.62	57164	169.68	6.32	0.054
289	KINGDOM	2017	1.574	1.148	1.198	0.194	0.05	13.71	63916	183.23	8.02	0.054
290	KINGDOM	2018	1.27	0.97	0.94	0.16	0.03	13.09	71091	191.83	4.7	0.057
291	KINGDOM	2019	1.48	1.1	1.11	0.18	0.01	13.45	77713	201.81	5.2	0.054

NO	SACCO	YE R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
292	KINGDOM	2020	1.58	1.16	1.25	0.18	0.09	13.62	76944	108.69	5.2	0.048
293	KINGDOM	2021	1.68	1.19	1.25	0.21	0.06	14.12	82823	115.33	6.11	0.056
294	KINGDOM	2022	1.86	1.32	1.44	0.24	0.12	14.09	86627	124.16	7.65	0.056
295	KITUI TEACHERS	2020	6.24	4.528	5.427	1.112	0.899	13.78	57164	169.68	6.32	0.068
296	KITUI TEACHERS	2017	6.67	4.83	5.836	1.17	1.006	13.81	63916	183.23	8.02	0.067
297	KITUI TEACHERS	2018	4.72	3.38	4.1	0.9	0.72	13.96	71091	191.83	4.7	0.073
298	KITUI TEACHERS	2019	5.61	4.07	5.1	1.04	1.03	13.78	77713	201.81	5.2	0.068
299	KITUI TEACHERS	2020	6.52	4.74	5.64	1.13	0.9	13.76	76944	108.69	5.2	0.067
300	KITUI TEACHERS	2021	7.68	5.62	6.46	1.32	0.84	13.67	82823	115.33	6.11	0.068
301	KITUI TEACHERS	2022	8.82	6.34	7.88	1.46	1.54	13.91	86627	124.16	7.65	0.062
302	K-PILLAR	2020	0.703	0.379	0.598	0.119	0.219	18.56	57164	169.68	6.32	0.066
303	K-PILLAR	2017	0.736	0.384	0.65	0.126	0.266	19.17	63916	183.23	8.02	0.065
304	K-PILLAR	2018	0.6	0.4	0.39	0.09	0.01	15	71091	191.83	4.7	0.077
305	K-PILLAR	2019	0.64	0.33	0.5	0.16	0.17	19.39	77713	201.81	5.2	0.107
306	K-PILLAR	2020	0.77	0.42	0.66	0.09	0.24	18.33	76944	108.69	5.2	0.045
307	K-PILLAR	2021	0.77	0.36	0.79	0.13	0.43	21.39	82823	115.33	6.11	0.055
308	K-PILLAR	2022	0.9	0.41	0.91	0.16	0.5	21.95	86627	124.16	7.65	0.059
309	K-UNITY	2020	4.431	3.223	2.952	0.686	0.27	13.75	57164	169.68	6.32	0.077
310	K-UNITY	2017	4.646	3.354	3.172	0.698	0.182	13.85	63916	183.23	8.02	0.073
311	K-UNITY	2018	3.64	2.72	2.23	0.64	0.49	13.38	71091	191.83	4.7	0.096

NO	SACCO	YE R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
312	K-UNITY	2019	4.09	3.04	2.49	0.69	0.55	13.45	77713	201.81	5.2	0.092
313	K-UNITY	2020	4.6	3.34	2.91	0.71	0.43	13.77	76944	108.69	5.2	0.081
314	K-UNITY	2021	5.18	3.66	3.96	0.69	0.3	14.15	82823	115.33	6.11	0.058
315	K-UNITY	2022	5.72	4.01	4.27	0.76	0.26	14.26	86627	124.16	7.65	0.059
316	KWETU	2020	4.348	2.33	1.974	0.568	0.356	18.66	57164	169.68	6.32	0.096
317	KWETU	2017	4.42	2.39	2.098	0.59	0.292	18.49	63916	183.23	8.02	0.094
318	KWETU	2018	3.85	2.06	1.46	0.43	0.6	18.69	71091	191.83	4.7	0.098
319	KWETU	2019	4.38	2.2	1.76	0.61	0.44	19.91	77713	201.81	5.2	0.116
320	KWETU	2020	4.38	2.4	2.15	0.57	0.25	18.25	76944	108.69	5.2	0.088
321	KWETU	2021	4.71	2.6	2.4	0.64	0.2	18.12	82823	115.33	6.11	0.089
322	KWETU	2022	4.78	2.69	2.72	0.7	0.03	17.77	86627	124.16	7.65	0.086
323	MAFANIKIO	2020	0.964	0.612	0.752	0.163	0.14	9.52	57164	169.68	6.32	0.072
324	MAFANIKIO	2017	0.99	0.63	0.768	0.166	0.138	9.8	63916	183.23	8.02	0.072
325	MAFANIKIO	2018	0.88	0.54	0.66	0.15	0.12	8	71091	191.83	4.7	0.076
326	MAFANIKIO	2019	0.89	0.57	0.73	0.16	0.16	9	77713	201.81	5.2	0.073
327	MAFANIKIO	2020	0.97	0.62	0.76	0.16	0.14	10	76944	108.69	5.2	0.07
328	MAFANIKIO	2021	1.09	0.7	0.84	0.18	0.14	10.8	82823	115.33	6.11	0.071
329	MAFANIKIO	2022	1.12	0.72	0.85	0.18	0.13	11.2	86627	124.16	7.65	0.071
330	MAGADI	2020	0.693	0.512	0.552	0.12	0.04	13.53	57164	169.68	6.32	0.073
331	MAGADI	2017	0.716	0.532	0.572	0.122	0.04	13.46	63916	183.23	8.02	0.071
332	MAGADI	2018	0.59	0.43	0.48	0.11	0.05	13.72	71091	191.83	4.7	0.076
333	MAGADI	2019	0.66	0.49	0.55	0.12	0.06	13.47	77713	201.81	5.2	0.073
334	MAGADI	2020	0.73	0.54	0.61	0.13	0.07	13.52	76944	108.69	5.2	0.071

NO	SACCO	YE AR	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
335	MAGADI	2021	0.77	0.57	0.55	0.12	0.02	13.51	82823	115.33	6.11	0.073
336	MAGADI	2022	0.83	0.63	0.67	0.13	0.04	13.17	86627	124.16	7.65	0.065
337	MAGEREZA	2020	6.241	4.404	3.308	0.748	1.096	14.17	57164	169.68	6.32	0.075
338	MAGEREZA	2017	6.376	4.528	3.4	0.742	1.128	14.08	63916	183.23	8.02	0.073
339	MAGEREZA	2018	5.34	3.71	3.02	0.69	0.69	14.39	71091	191.83	4.7	0.076
340	MAGEREZA	2019	6.06	4.3	3.14	0.75	1.16	14.09	77713	201.81	5.2	0.08
341	MAGEREZA	2020	6.35	4.56	3.37	0.74	1.19	13.93	76944	108.69	5.2	0.073
342	MAGEREZA	2021	7.08	4.92	3.61	0.82	1.31	14.39	82823	115.33	6.11	0.076
343	MAGEREZA	2022	7.05	5.15	3.86	0.71	1.29	13.69	86627	124.16	7.65	0.061
344	MAISHA BORA	2020	4.054	3.101	2.838	0.505	0.263	8.9	57164	169.68	6.32	0.059
345	MAISHA BORA	2017	4.242	3.214	2.908	0.526	0.306	9	63916	183.23	8.02	0.06
346	MAISHA BORA	2018	3.27	2.56	2.57	0.4	0.01	9.6	71091	191.83	4.7	0.052
347	MAISHA BORA	2019	3.76	2.92	2.88	0.47	0.04	10.6	77713	201.81	5.2	0.054
348	MAISHA BORA	2020	4.26	3.28	2.86	0.53	0.42	12.4	76944	108.69	5.2	0.062
349	MAISHA BORA	2021	4.74	3.53	2.97	0.6	0.56	15.1	82823	115.33	6.11	0.067
350	MAISHA BORA	2022	5.18	3.78	3.26	0.63	0.52	17	86627	124.16	7.65	0.064
351	MENTOR	2020	8.734	6.532	6.59	1.197	0.058	13.37	57164	169.68	6.32	0.061
352	MENTOR	2017	9.24	6.928	6.938	1.254	0.01	13.34	63916	183.23	8.02	0.06
353	MENTOR	2018	7.16	5.14	5.84	1.04	0.7	13.93	71091	191.83	4.7	0.059
354	MENTOR	2019	7.94	5.97	6.24	1.19	0.27	13.3	77713	201.81	5.2	0.064
355	MENTOR	2020	8.92	6.78	6.58	1.18	0.2	13.16	76944	108.69	5.2	0.06
356	MENTOR	2021	10.41	7.84	7.35	1.32	0.49	13.28	82823	115.33	6.11	0.06
357	MENTOR	2022	11.77	8.91	8.68	1.54	0.23	13.21	86627	124.16	7.65	0.059

NO	SACCO	YE AR	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
358	METROPOLITA N	2020	13.862	7.426	15.697	1.633	8.271	18.67	57164	169.68	6.32	0.035
359	METROPOLITA N	2017	13.222	7.42	16.096	1.436	8.676	17.82	63916	183.23	8.02	0.03
360	METROPOLITA N	2018	13.65	6.93	12.85	2.12	5.92	19.7	71091	191.83	4.7	0.055
361	METROPOLITA N	2019	15.15	7.32	14.89	2.03	7.57	20.7	77713	201.81	5.2	0.045
362	METROPOLITA N	2020	16.73	7.64	16.67	1.99	9.03	21.9	76944	108.69	5.2	0.04
363	METROPOLITA N	2021	10.56	7.82	17.98	0.59	10.16	13.5	82823	115.33	6.11	0.011
364	METROPOLITA N	2022	10.02	7.39	18.09	0.45	10.7	13.56	86627	124.16	7.65	0.008
365	MOMBASA PORT	2020	6.39	3.388	4.156	0.851	0.768	30.91	57164	169.68	6.32	0.068
366	MOMBASA PORT	2017	6.682	3.588	4.33	0.884	0.742	31.63	63916	183.23	8.02	0.068
367	MOMBASA PORT	2018	5.32	2.67	3.57	0.71	0.9	30.41	71091	191.83	4.7	0.066
368	MOMBASA PORT	2019	6.03	3.09	4.01	0.84	0.92	31.02	77713	201.81	5.2	0.07
369	MOMBASA PORT	2020	6.57	3.52	4.33	0.85	0.81	30.72	76944	108.69	5.2	0.065
370	MOMBASA PORT	2021	7.35	4.07	4.54	0.97	0.47	30.87	82823	115.33	6.11	0.071
371	MOMBASA PORT	2022	8.14	4.59	5.2	1.05	0.61	30.79	86627	124.16	7.65	0.067
372	MUKI	2020	0.865	0.614	0.629	0.152	0.015	14.08	57164	169.68	6.32	0.08
373	MUKI	2017	0.924	0.652	0.676	0.158	0.024	14.17	63916	183.23	8.02	0.078
374	MUKI	2018	0.69	0.5	0.51	0.13	0.01	13.8	71091	191.83	4.7	0.085

NO	SACCO	YE R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
375	MUKI	2019	0.76	0.53	0.53	0.14	0.031	14.34	77713	201.81	5.2	0.088
376	MUKI	2020	0.9	0.65	0.62	0.15	0.03	13.85	76944	108.69	5.2	0.081
377	MUKI	2021	1.05	0.74	0.81	0.18	0.07	14.19	82823	115.33	6.11	0.074
378	MUKI	2022	1.22	0.84	0.91	0.19	0.07	14.52	86627	124.16	7.65	0.07
379	MWALIMU NATIONAL	2020	54.287	39.197	35.692	5.65	0.084	16.53	57164	169.68	6.32	0.072
380	MWALIMU NATIONAL	2017	55.916	40.546	37.05	5.998	0.082	16.45	63916	183.23	8.02	0.071
381	MWALIMU NATIONAL	2018	45.16	32.83	31.18	1.04	0.024	13.76	71091	191.83	4.7	0.011
382	MWALIMU NATIONAL	2019	52.03	36.9	33.73	6.41	0.041	14.1	77713	201.81	5.2	0.063
383	MWALIMU NATIONAL	2020	57.73	41.42	38.32	7.22	0.046	13.94	76944	108.69	5.2	0.063
384	MWALIMU NATIONAL	2021	60.6	44.29	38.18	7.58	0.036	13.68	82823	115.33	6.11	0.066
385	MWALIMU NATIONAL	2022	64.06	47.29	43.84	7.74	0.034	13.55	86627	124.16	7.65	0.059
386	MWITO	2020	2.038	1.518	1.714	0.283	0.196	17.6	57164	169.68	6.32	0.055
387	MWITO	2017	2.14	1.592	1.802	0.296	0.21	16.4	63916	183.23	8.02	0.055
388	MWITO	2018	1.65	1.25	1.42	0.23	0.17	18.1	71091	191.83	4.7	0.054
389	MWITO	2019	1.9	1.42	1.59	0.27	0.17	18.2	77713	201.81	5.2	0.057
390	MWITO	2020	2.13	1.59	1.75	0.28	0.16	17.6	76944	108.69	5.2	0.053
391	MWITO	2021	2.37	1.74	2.01	0.34	0.27	18.3	82823	115.33	6.11	0.056
392	MWITO	2022	2.65	1.96	2.24	0.36	0.28	18.4	86627	124.16	7.65	0.054
393	NACICO	2020	5.076	2.729	2.876	0.715	0.147	18.6	57164	169.68	6.32	0.083
394	NACICO	2017	5.148	2.774	2.9	0.714	0.126	18.56	63916	183.23	8.02	0.082

NO	SACCO	YE R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
395	NACICO	2018	4.71	2.59	2.63	0.65	0.04	18.19	71091	191.83	4.7	0.082
396	NACICO	2019	4.96	2.69	2.75	0.74	0.06	18.44	77713	201.81	5.2	0.09
397	NACICO	2020	5.13	2.7	2.95	0.73	0.25	19	76944	108.69	5.2	0.082
398	NACICO	2021	5.43	2.89	3.15	0.74	0.26	18.79	82823	115.33	6.11	0.078
399	NACICO	2022	5.51	3	3.02	0.71	0.02	18.37	86627	124.16	7.65	0.078
400	NAFAKA	2020	0.58	0.41	0.469	0.098	0.06	14.17	57164	169.68	6.32	0.07
401	NAFAKA	2017	0.602	0.428	0.486	0.1	0.058	14.07	63916	183.23	8.02	0.069
402	NAFAKA	2018	0.51	0.35	0.45	0.09	0.1	14.57	71091	191.83	4.7	0.067
403	NAFAKA	2019	0.54	0.37	0.45	0.09	0.08	14.59	77713	201.81	5.2	0.067
404	NAFAKA	2020	0.59	0.43	0.45	0.1	0.02	13.72	76944	108.69	5.2	0.074
405	NAFAKA	2021	0.66	0.47	0.51	0.11	0.04	14.04	82823	115.33	6.11	0.072
406	NAFAKA	2022	0.71	0.52	0.57	0.11	0.05	13.65	86627	124.16	7.65	0.064
407	NATION	2020	2.162	1.641	1.562	0.28	0.079	13.18	57164	169.68	6.32	0.06
408	NATION	2017	2.302	1.734	1.648	0.3	0.086	13.28	63916	183.23	8.02	0.061
409	NATION	2018	1.73	1.34	1.38	0.23	0.04	12.91	71091	191.83	4.7	0.056
410	NATION	2019	1.97	1.51	1.481	0.26	0.029	13.05	77713	201.81	5.2	0.059
411	NATION	2020	2.24	1.71	1.55	0.28	0.16	13.1	76944	108.69	5.2	0.06
412	NATION	2021	2.57	1.91	1.75	0.33	0.16	13.46	82823	115.33	6.11	0.063
413	NATION	2022	3	2.2	2.08	0.4	0.12	13.64	86627	124.16	7.65	0.064
414	NAWIRI	2020	2.321	1.367	1.548	0.429	0.181	16.97	57164	169.68	6.32	0.092
415	NAWIRI	2017	2.464	1.436	1.65	0.456	0.214	17.16	63916	183.23	8.02	0.092
416	NAWIRI	2018	1.78	1.14	1.12	0.33	0.02	15.61	71091	191.83	4.7	0.098
417	NAWIRI	2019	2.07	1.25	1.38	0.39	0.13	16.56	77713	201.81	5.2	0.094

NO	SACCO	YE R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
418	NAWIRI	2020	2.37	1.39	1.63	0.45	0.24	17.05	76944	108.69	5.2	0.092
419	NAWIRI	2021	2.92	1.62	1.96	0.52	0.34	18.02	82823	115.33	6.11	0.088
420	NAWIRI	2022	3.18	1.78	2.16	0.59	0.38	17.87	86627	124.16	7.65	0.091
421	NDEGE CHAI	2020	3.209	2.271	2.557	0.542	0.286	14.13	57164	169.68	6.32	0.071
422	NDEGE CHAI	2017	3.386	2.386	2.674	0.568	0.288	14.19	63916	183.23	8.02	0.071
423	NDEGE CHAI	2018	2.7	1.9	2.17	0.47	0.27	14.21	71091	191.83	4.7	0.072
424	NDEGE CHAI	2019	2.91	2.07	2.31	0.5	0.24	14.06	77713	201.81	5.2	0.072
425	NDEGE CHAI	2020	3.28	2.36	2.69	0.54	0.33	13.9	76944	108.69	5.2	0.067
426	NDEGE CHAI	2021	3.77	2.64	2.94	0.63	0.3	14.28	82823	115.33	6.11	0.071
427	NDEGE CHAI	2022	4.27	2.96	3.26	0.7	0.3	14.43	86627	124.16	7.65	0.072
428	NDOSHA	2020	0.232	0.141	0.108	0.024	0.034	16.46	57164	169.68	6.32	0.076
429	NDOSHA	2017	0.222	0.136	0.098	0.022	0.038	16.32	63916	183.23	8.02	0.075
430	NDOSHA	2018	0.27	0.16	0.16	0.03	0.03	16.88	71091	191.83	4.7	0.063
431	NDOSHA	2019	0.27	0.17	0.15	0.03	0.02	15.88	77713	201.81	5.2	0.067
432	NDOSHA	2020	0.21	0.12	0.07	0.03	0.05	17.5	76944	108.69	5.2	0.143
433	NDOSHA	2021	0.19	0.12	0.06	0.01	0.06	15.83	82823	115.33	6.11	0.056
434	NDOSHA	2022	0.17	0.11	0.05	0.01	0.06	15.45	86627	124.16	7.65	0.067
435	NEWFORTIS	2020	7.864	5.716	5.771	1.106	0.055	13.76	57164	169.68	6.32	0.064
436	NEWFORTIS	2017	8.252	6.012	5.936	1.152	0.076	13.73	63916	183.23	8.02	0.065
437	NEWFORTIS	2018	6.34	4.53	5.19	0.9	0.66	14	71091	191.83	4.7	0.058
438	NEWFORTIS	2019	7.34	5.33	5.64	1.04	0.31	13.77	77713	201.81	5.2	0.061
439	NEWFORTIS	2020	8.18	5.97	5.86	1.13	0.11	13.7	76944	108.69	5.2	0.064
440	NEWFORTIS	2021	9.21	6.74	6.23	1.31	0.51	13.66	82823	115.33	6.11	0.07

NO	SACCO	YE R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
441	NEWFORTIS	2022	10.19	7.49	6.76	1.38	0.73	13.6	86627	124.16	7.65	0.068
442	NGARISHA	2020	2.902	1.3	2.19	0.616	0.002	13.6	57164	169.68	6.32	0.038
443	NGARISHA	2017	3.032	1.368	2.288	0.64	0.002	13.86	63916	183.23	8.02	0.038
444	NGARISHA	2018	2.34	1.08	1.81	0.54	0.73	21.67	71091	191.83	4.7	0.099
445	NGARISHA	2019	2.87	1.2	2.01	0.56	0.81	23.92	77713	201.81	5.2	0.093
446	NGARISHA	2020	2.94	1.33	2.24	0.63	0.91	22.11	76944	108.69	5.2	0.094
447	NGARISHA	2021	3.33	1.52	2.6	0.71	1.08	21.91	82823	115.33	6.11	0.091
448	NGARISHA	2022	3.68	1.71	2.78	0.76	1.07	21.52	86627	124.16	7.65	0.091
449	NSSF	2020	2.31	1.473	1.687	0.325	0.056	13.05	57164	169.68	6.32	0.071
450	NSSF	2017	2.42	1.544	1.794	0.344	0.05	13.26	63916	183.23	8.02	0.071
451	NSSF	2018	1.97	1.25	1.5	0.28	0.25	15.76	71091	191.83	4.7	0.062
452	NSSF	2019	2.23	1.39	1.58	0.34	0.19	16.04	77713	201.81	5.2	0.072
453	NSSF	2020	2.34	1.52	1.64	0.32	0.12	15.39	76944	108.69	5.2	0.065
454	NSSF	2021	2.59	1.66	1.92	0.34	0.26	15.6	82823	115.33	6.11	0.059
455	NSSF	2022	2.97	1.9	2.33	0.44	0.43	15.63	86627	124.16	7.65	0.063
456	NYALA VISION	2020	0.58	0.425	0.406	0.091	0.004	16.19	57164	169.68	6.32	0.073
457	NYALA VISION	2017	0.61	0.444	0.432	0.094	0.002	16.78	63916	183.23	8.02	0.075
458	NYALA VISION	2018	0.43	0.31	0.29	0.07	0.02	13.87	71091	191.83	4.7	0.08
459	NYALA VISION	2019	0.54	0.4	0.37	0.09	0.03	13.5	77713	201.81	5.2	0.081
460	NYALA VISION	2020	0.62	0.46	0.44	0.1	0.02	13.48	76944	108.69	5.2	0.076
461	NYALA VISION	2021	0.7	0.51	0.5	0.1	0.01	13.73	82823	115.33	6.11	0.067
462	NYALA VISION	2022	0.76	0.54	0.56	0.11	0.02	14.07	86627	124.16	7.65	0.065
463	NYATI	2020	3.606	2.307	3.067	0.594	0.064	17.89	57164	169.68	6.32	0.101

NO	SACCO	YE R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
464	NYATI	2017	3.768	2.384	3.144	0.61	0.068	18.36	63916	183.23	8.02	0.102
465	NYATI	2018	2.99	2.05	2.73	0.51	0.68	27.78	71091	191.83	4.7	0.062
466	NYATI	2019	3.37	2.2	3.08	0.58	0.88	24	77713	201.81	5.2	0.063
467	NYATI	2020	3.79	2.39	3.15	0.6	0.76	25	76944	108.69	5.2	0.063
468	NYATI	2021	4.11	2.51	3.23	0.67	0.72	30.3	82823	115.33	6.11	0.069
469	NYATI	2022	4.58	2.77	3.53	0.69	0.76	31.8	86627	124.16	7.65	0.065
470	OLLIN	2020	5.804	3.903	4.736	0.839	0.76	25.89	57164	169.68	6.32	0.065
471	OLLIN	2017	6.2	4.196	5.1	0.894	0.76	26.77	63916	183.23	8.02	0.065
472	OLLIN	2018	4.52	2.96	3.76	0.66	0.8	15.27	71091	191.83	4.7	0.059
473	OLLIN	2019	5.28	3.5	4.4	0.76	0.9	15.09	77713	201.81	5.2	0.058
474	OLLIN	2020	6.02	4.08	4.87	0.86	0.79	14.75	76944	108.69	5.2	0.059
475	OLLIN	2021	7	4.78	5.55	1.02	0.77	14.64	82823	115.33	6.11	0.061
476	OLLIN	2022	8.18	5.66	6.92	1.17	1.26	14.45	86627	124.16	7.65	0.056
477	ORIENT	2020	0.73	0.417	0.172	0.033	0.833	14.87	57164	169.68	6.32	0.059
478	ORIENT	2017	0.732	0.416	0.178	0.034	0.904	14.78	63916	183.23	8.02	0.058
479	ORIENT	2018	0.74	0.46	0.16	0.03	0.3	16.09	71091	191.83	4.7	0.063
480	ORIENT	2019	0.74	0.37	0.15	0.04	0.22	20	77713	201.81	5.2	0.089
481	ORIENT	2020	0.7	0.41	0.18	0.03	0.23	17.07	76944	108.69	5.2	0.056
482	ORIENT	2021	0.74	0.43	0.19	0.03	0.24	17.21	82823	115.33	6.11	0.053
483	ORIENT	2022	0.74	0.41	0.21	0.04	0.2	18.05	86627	124.16	7.65	0.063
484	PATNAS	2020	0.508	0.168	0.164	0.118	0.246	17.51	57164	169.68	6.32	0.064
485	PATNAS	2017	0.51	0.172	0.17	0.118	0.238	17.6	63916	183.23	8.02	0.064
486	PATNAS	2018	0.5	0.16	0.08	0.12	0.08	31.25	71091	191.83	4.7	0.5

NO	SACCO	YE R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
487	PATNAS	2019	0.53	0.19	0.21	0.12	0.02	27.89	77713	201.81	5.2	0.19
488	PATNAS	2020	0.51	0.17	0.19	0.12	0.02	30	76944	108.69	5.2	0.211
489	PATNAS	2021	0.49	0.15	0.17	0.11	0.02	32.67	82823	115.33	6.11	0.216
490	PATNAS	2022	0.52	0.19	0.2	0.12	0.01	27.37	86627	124.16	7.65	0.2
491	PRIME-TIME	2020	0.782	0.599	0.383	0.1	0.004	30.17	57164	169.68	6.32	0.239
492	PRIME-TIME	2017	0.8	0.614	0.394	0.102	0.002	29.65	63916	183.23	8.02	0.231
493	PRIME-TIME	2018	0.7	0.53	0.35	0.08	0.18	13.21	71091	191.83	4.7	0.076
494	PRIME-TIME	2019	0.77	0.57	0.37	0.1	0.2	13.51	77713	201.81	5.2	0.09
495	PRIME-TIME	2020	0.8	0.63	0.39	0.1	0.24	12.7	76944	108.69	5.2	0.085
496	PRIME-TIME	2021	0.84	0.65	0.41	0.12	0.24	12.92	82823	115.33	6.11	0.098
497	PRIME-TIME	2022	0.89	0.69	0.45	0.11	0.24	12.9	86627	124.16	7.65	0.081
498	QWETU	2020	2.332	1.622	1.85	0.401	0.022	15.45	57164	169.68	6.32	0.052
499	QWETU	2017	2.48	1.708	1.962	0.424	0.022	15.5	63916	183.23	8.02	0.051
500	QWETU	2018	1.79	1.29	1.5	0.34	0.21	13.88	71091	191.83	4.7	0.076
501	QWETU	2019	2.17	1.49	1.75	0.4	0.26	14.56	77713	201.81	5.2	0.076
502	QWETU	2020	2.4	1.69	1.89	0.38	0.2	14.2	76944	108.69	5.2	0.067
503	QWETU	2021	2.82	1.93	2.15	0.46	0.22	14.61	82823	115.33	6.11	0.071
504	QWETU	2022	3.22	2.14	2.52	0.54	0.38	15.05	86627	124.16	7.65	0.071
505	SAFARICOM	2020	7.292	5.852	5.943	0.74	0.015	13.64	57164	169.68	6.32	0.069
506	SAFARICOM	2017	7.752	6.17	6.136	0.782	0.014	13.64	63916	183.23	8.02	0.063
507	SAFARICOM	2018	5.89	4.74	5.17	0.62	0.43	13.13	71091	191.83	4.7	0.04
508	SAFARICOM	2019	6.69	5.52	5.8	0.7	0.28	12	77713	201.81	5.2	0.04
509	SAFARICOM	2020	7.47	6.03	6.05	0.78	0.02	14	76944	108.69	5.2	0.043

NO	SACCO	YEA R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
510	SAFARICOM	2021	8.66	6.8	6.56	0.82	0.24	13	82823	115.33	6.11	0.042
511	SAFARICOM	2022	10.05	7.76	7.1	0.99	0.66	13.5	86627	124.16	7.65	0.046
512	SHERIA	2020	6.482	4.649	5.78	0.8	0.091	13.04	57164	169.68	6.32	0.042
513	SHERIA	2017	6.82	4.904	6.058	0.84	0.034	13.03	63916	183.23	8.02	0.042
514	SHERIA	2018	5.38	3.84	4.73	0.66	0.89	15.6	71091	191.83	4.7	0.047
515	SHERIA	2019	6.03	4.34	5.56	0.75	1.22	15.5	77713	201.81	5.2	0.045
516	SHERIA	2020	6.72	4.83	5.97	0.83	1.14	16	76944	108.69	5.2	0.046
517	SHERIA	2021	7.46	5.33	6.58	0.92	1.25	15.8	82823	115.33	6.11	0.047
518	SHERIA	2022	8.51	6.18	7.45	1.04	1.27	16.7	86627	124.16	7.65	0.047
519	SHIRIKA	2020	3.423	2.626	2.635	0.402	1.131	15.76	57164	169.68	6.32	0.046
520	SHIRIKA	2017	3.604	2.772	2.724	0.42	1.154	15.92	63916	183.23	8.02	0.046
521	SHIRIKA	2018	2.71	2.08	2.25	0.33	0.17	14.67	71091	191.83	4.7	0.049
522	SHIRIKA	2019	3.13	2.4	2.49	0.38	0.09	14.73	77713	201.81	5.2	0.051
523	SHIRIKA	2020	3.61	2.77	2.78	0.42	0.01	14.61	76944	108.69	5.2	0.05
524	SHIRIKA	2021	4.06	3.11	2.93	0.46	0.18	14.85	82823	115.33	6.11	0.052
525	SHIRIKA	2022	4.51	3.5	3.17	0.51	0.33	14.36	86627	124.16	7.65	0.054
526	SHOPPERS	2020	0.946	0.482	0.83	0.095	0.008	14.68	57164	169.68	6.32	0.051
527	SHOPPERS	2017	0.89	0.452	0.832	0.084	0.048	14.7	63916	183.23	8.02	0.051
528	SHOPPERS	2018	1.37	0.76	0.91	0.17	0.15	18.03	71091	191.83	4.7	0.062
529	SHOPPERS	2019	1.16	0.53	0.72	0.11	0.19	21.89	77713	201.81	5.2	0.051
530	SHOPPERS	2020	0.68	0.38	0.86	0.08	0.48	17.89	76944	108.69	5.2	0.031
531	SHOPPERS	2021	0.63	0.29	0.83	0.03	0.54	21.72	82823	115.33	6.11	0.012
532	SHOPPERS	2022	0.61	0.3	0.84	0.03	0.54	20.33	86627	124.16	7.65	0.012

NO	SACCO	YE A R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
533	SIMBA CHAI	2020	1.427	0.758	1.04	0.191	0.348	19.61	57164	169.68	6.32	0.038
534	SIMBA CHAI	2017	1.516	0.79	1.12	0.204	0.38	19.69	63916	183.23	8.02	0.034
535	SIMBA CHAI	2018	1.32	0.76	0.96	0.17	0.2	17.37	71091	191.83	4.7	0.059
536	SIMBA CHAI	2019	1.23	0.66	0.88	0.16	0.22	18.64	77713	201.81	5.2	0.061
537	SIMBA CHAI	2020	1.41	0.74	1.02	0.19	0.28	19.05	76944	108.69	5.2	0.062
538	SIMBA CHAI	2021	1.66	0.84	1.22	0.23	0.38	19.76	82823	115.33	6.11	0.063
539	SIMBA CHAI	2022	1.96	0.95	1.52	0.27	0.57	20.63	86627	124.16	7.65	0.059
540	SIRAJI	2020	0.462	0.334	0.335	0.076	0.282	18.83	57164	169.68	6.32	0.061
541	SIRAJI	2017	0.482	0.352	0.344	0.08	0.33	19.19	63916	183.23	8.02	0.061
542	SIRAJI	2018	0.42	0.27	0.3	0.08	0.03	15.56	71091	191.83	4.7	0.089
543	SIRAJI	2019	0.45	0.31	0.32	0.07	0.01	14.52	77713	201.81	5.2	0.073
544	SIRAJI	2020	0.45	0.35	0.34	0.07	0.01	12.86	76944	108.69	5.2	0.069
545	SIRAJI	2021	0.51	0.39	0.37	0.08	0.02	13.08	82823	115.33	6.11	0.072
546	SIRAJI	2022	0.58	0.44	0.39	0.1	0.05	13.18	86627	124.16	7.65	0.085
547	SKYLINE	2020	1.727	1.274	1.101	0.23	0	13.83	57164	169.68	6.32	0.076
548	SKYLINE	2017	1.864	1.368	1.224	0.25	0.008	13.69	63916	183.23	8.02	0.078
549	SKYLINE	2018	1.33	1.04	0.88	0.18	0.16	12.79	71091	191.83	4.7	0.068
550	SKYLINE	2019	1.54	1.15	0.98	0.21	0.17	13.39	77713	201.81	5.2	0.071
551	SKYLINE	2020	1.83	1.32	1.06	0.23	0.26	13.86	76944	108.69	5.2	0.072
552	SKYLINE	2021	2.07	1.49	1.36	0.28	0.13	13.89	82823	115.33	6.11	0.069
553	SKYLINE	2022	2.55	1.84	1.84	0.35	0.021	13.86	86627	124.16	7.65	0.063
554	SMART CHAMPION	2020	0.318	0.182	0.286	0.058	0.173	13.56	57164	169.68	6.32	0.07
555	SMART	2017	0.328	0.192	0.3	0.062	0.144	13.63	63916	183.23	8.02	0.068

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	CHAMPION											
556	SMART CHAMPION	2018	0.27	0.14	0.22	0.04	0.08	19.29	71091	191.83	4.7	0.061
557	SMART CHAMPION	2019	0.3	0.17	0.27	0.06	0.1	17.65	77713	201.81	5.2	0.074
558	SMART CHAMPION	2020	0.32	0.19	0.29	0.06	0.1	16.84	76944	108.69	5.2	0.069
559	SMART CHAMPION	2021	0.37	0.22	0.35	0.07	0.13	16.82	82823	115.33	6.11	0.067
560	SMART CHAMPION	2022	0.38	0.24	0.37	0.08	0.13	15.83	86627	124.16	7.65	0.072
561	SMARTLIFE	2020	1.22	0.797	0.972	0.13	0.104	17.41	57164	169.68	6.32	0.068
562	SMARTLIFE	2017	1.26	0.826	0.94	0.14	0.108	17.08	63916	183.23	8.02	0.069
563	SMARTLIFE	2018	1.06	0.64	0.88	0.11	0.24	16.56	71091	191.83	4.7	0.042
564	SMARTLIFE	2019	1.17	0.74	0.95	0.12	0.21	15.81	77713	201.81	5.2	0.042
565	SMARTLIFE	2020	1.24	0.87	0.99	0.12	0.12	14.25	76944	108.69	5.2	0.04
566	SMARTLIFE	2021	1.37	0.91	1.1	0.16	0.19	15.05	82823	115.33	6.11	0.048
567	SMARTLIFE	2022	1.46	0.97	0.78	0.19	0.19	15.05	86627	124.16	7.65	0.081
568	SOLUTION	2020	5.768	3.889	4.639	1.036	0.175	15.3	57164	169.68	6.32	0.045
569	SOLUTION	2017	6.192	4.116	5.006	1.128	0.114	15.25	63916	183.23	8.02	0.05
570	SOLUTION	2018	4.44	2.96	3.45	0.72	0.49	15	71091	191.83	4.7	0.07
571	SOLUTION	2019	5.22	3.49	4.03	0.9	0.54	14.96	77713	201.81	5.2	0.074
572	SOLUTION	2020	5.64	3.96	4.71	1.08	0.75	14.24	76944	108.69	5.2	0.076
573	SOLUTION	2021	7.35	4.92	6	1.35	1.08	14.94	82823	115.33	6.11	0.075
574	SOLUTION	2022	8.31	5.25	6.84	1.59	1.59	15.83	86627	124.16	7.65	0.077
575	SOTICO	2020	0.228	0.141	0.152	0.035	0.75	14.83	57164	169.68	6.32	0.074

NO	SACCO	YE R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
576	SOTICO	2017	0.23	0.146	0.158	0.036	0.89	15.04	63916	183.23	8.02	0.075
577	SOTICO	2018	0.22	0.12	0.12	0.03	0.023	18.33	71091	191.83	4.7	0.083
578	SOTICO	2019	0.25	0.13	0.13	0.03	0.002	19.23	77713	201.81	5.2	0.077
579	SOTICO	2020	0.21	0.15	0.17	0.04	0.02	14	76944	108.69	5.2	0.078
580	SOTICO	2021	0.23	0.16	0.18	0.04	0.02	14.38	82823	115.33	6.11	0.074
581	SOTICO	2022	0.24	0.17	0.19	0.04	0.02	14.12	86627	124.16	7.65	0.07
582	SOUTHERN STAR	2020	1.247	0.891	0.921	0.2	0.01	16.15	57164	169.68	6.32	0.077
583	SOUTHERN STAR	2017	1.294	0.926	0.964	0.208	0.012	15.75	63916	183.23	8.02	0.076
584	SOUTHERN STAR	2018	1.1	0.8	0.8	0.18	0.003	13.75	71091	191.83	4.7	0.075
585	SOUTHERN STAR	2019	1.19	0.84	0.87	0.2	0.03	14.17	77713	201.81	5.2	0.077
586	SOUTHERN STAR	2020	1.24	0.88	0.93	0.2	0.05	14.09	76944	108.69	5.2	0.072
587	SOUTHERN STAR	2021	1.41	1.01	1.04	0.21	0.03	13.96	82823	115.33	6.11	0.067
588	SOUTHERN STAR	2022	1.53	1.1	1.18	0.25	0.08	13.91	86627	124.16	7.65	0.071
589	STAWISHA	2020	0.26	0.176	0.197	0.046	0.028	15	57164	169.68	6.32	0.079
590	STAWISHA	2017	0.268	0.182	0.206	0.048	0.03	15	63916	183.23	8.02	0.085
591	STAWISHA	2018	0.21	0.14	0.15	0.04	0.01	15	71091	191.83	4.7	0.089
592	STAWISHA	2019	0.25	0.17	0.18	0.04	0.01	14.71	77713	201.81	5.2	0.074
593	STAWISHA	2020	0.27	0.18	0.21	0.05	0.03	15	76944	108.69	5.2	0.079
594	STAWISHA	2021	0.3	0.21	0.24	0.05	0.03	14.29	82823	115.33	6.11	0.069
595	STAWISHA	2022	0.31	0.21	0.25	0.06	0.04	14.76	86627	124.16	7.65	0.08

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596	STIMA DT-SACCO	2020	39.67	30.034	33.18	5.833	0.021	14.72	57164	169.68	6.32	0.077
597	STIMA DT-SACCO	2017	42.022	31.6	35.162	6.094	0.024	14.73	63916	183.23	8.02	0.078
598	STIMA DT-SACCO	2018	32.29	24.9	25.83	4.6	0.033	14.97	71091	191.83	4.7	0.059
599	STIMA DT-SACCO	2019	36.53	28.27	30.4	5.63	0.031	14.45	77713	201.81	5.2	0.062
600	STIMA DT-SACCO	2020	41.05	31.19	35.13	5.87	0.035	15.37	76944	108.69	5.2	0.056
601	STIMA DT-SACCO	2021	46.46	34.21	39.38	6.97	0.033	14.91	82823	115.33	6.11	0.059
602	STIMA DT-SACCO	2022	53.78	39.43	45.07	7.4	0.034	15.14	86627	124.16	7.65	0.055
603	SULUHU	2020	0.885	0.607	0.741	0.17	0.033	14.93	57164	169.68	6.32	0.059
604	SULUHU	2017	0.846	0.576	0.704	0.162	0.033	14.92	63916	183.23	8.02	0.058
605	SULUHU	2018	0.73	0.49	0.57	0.15	0.08	14.9	71091	191.83	4.7	0.088
606	SULUHU	2019	0.87	0.58	0.72	0.16	0.14	15	77713	201.81	5.2	0.074
607	SULUHU	2020	0.94	0.65	0.8	0.18	0.15	14.46	76944	108.69	5.2	0.075
608	SULUHU	2021	1.04	0.74	0.91	0.2	0.17	14.05	82823	115.33	6.11	0.073
609	SULUHU	2022	0.65	0.42	0.52	0.12	0.1	15.48	86627	124.16	7.65	0.077
610	SUPA	2020	0.497	0.406	0.402	0.056	0.134	14.58	57164	169.68	6.32	0.077
611	SUPA	2017	0.516	0.418	0.408	0.06	0.128	14.69	63916	183.23	8.02	0.077
612	SUPA	2018	0.39	0.33	0.34	0.04	0.01	11.82	71091	191.83	4.7	0.039
613	SUPA	2019	0.47	0.39	0.4	0.05	0.01	12.05	77713	201.81	5.2	0.042
614	SUPA	2020	0.52	0.42	0.42	0.06	0.005	12.38	76944	108.69	5.2	0.048
615	SUPA	2021	0.59	0.47	0.44	0.07	0.03	12.55	82823	115.33	6.11	0.053

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616	SUPA	2022	0.61	0.48	0.44	0.08	0.04	12.71	86627	124.16	7.65	0.061
617	TABASAMU	2020	0.817	0.51	0.373	0.132	0.004	12.26	57164	169.68	6.32	0.046
618	TABASAMU	2017	0.856	0.528	0.404	0.138	0.01	12.34	63916	183.23	8.02	0.049
619	TABASAMU	2018	0.67	0.42	0.29	0.1	0.13	15.95	71091	191.83	4.7	0.115
620	TABASAMU	2019	0.72	0.48	0.33	0.13	0.15	15	77713	201.81	5.2	0.131
621	TABASAMU	2020	0.88	0.54	0.39	0.14	0.15	16.3	76944	108.69	5.2	0.12
622	TABASAMU	2021	0.96	0.58	0.45	0.15	0.13	16.55	82823	115.33	6.11	0.111
623	TABASAMU	2022	1.05	0.62	0.56	0.17	0.06	16.94	86627	124.16	7.65	0.101
624	TABASURI DT	2020	0.422	0.286	0.324	0.072	0.137	16.04	57164	169.68	6.32	0.118
625	TABASURI DT	2017	0.412	0.28	0.32	0.07	0.124	16.21	63916	183.23	8.02	0.114
626	TABASURI DT	2018	0.39	0.27	0.3	0.06	0.03	14.44	71091	191.83	4.7	0.067
627	TABASURI DT	2019	0.42	0.29	0.31	0.06	0.02	14.48	77713	201.81	5.2	0.065
628	TABASURI DT	2020	0.44	0.29	0.33	0.08	0.04	15.17	76944	108.69	5.2	0.081
629	TABASURI DT	2021	0.45	0.3	0.36	0.09	0.06	15	82823	115.33	6.11	0.083
630	TABASURI DT	2022	0.36	0.25	0.3	0.06	0.05	14.4	86627	124.16	7.65	0.067
631	TAI	2020	3.004	2.031	2.156	0.485	0.038	14.77	57164	169.68	6.32	0.074
632	TAI	2017	3.188	2.164	2.372	0.516	0.04	14.71	63916	183.23	8.02	0.073
633	TAI	2018	2.4	1.59	1.6	0.38	0.01	15.09	71091	191.83	4.7	0.079
634	TAI	2019	2.72	1.83	2	0.45	0.17	14.86	77713	201.81	5.2	0.075
635	TAI	2020	3.13	2.13	2.23	0.49	0.1	14.69	76944	108.69	5.2	0.073
636	TAI	2021	3.58	2.44	2.58	0.59	0.14	14.67	82823	115.33	6.11	0.076
637	TAI	2022	4.11	2.83	3.45	0.67	0.62	14.52	86627	124.16	7.65	0.065
638	TAIFA	2020	3.591	2.659	2.06	0.472	0.126	14.79	57164	169.68	6.32	0.075

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639	TAIFA	2017	3.754	2.784	2.092	0.488	0.208	14.73	63916	183.23	8.02	0.073
640	TAIFA	2018	3.08	2.3	1.99	0.43	0.31	13.39	71091	191.83	4.7	0.072
641	TAIFA	2019	3.34	2.44	2.13	0.48	0.31	13.69	77713	201.81	5.2	0.075
642	TAIFA	2020	3.68	2.71	2.08	0.45	0.63	13.58	76944	108.69	5.2	0.072
643	TAIFA	2021	4.1	3.06	2.01	0.51	1.05	13.4	82823	115.33	6.11	0.085
644	TAIFA	2022	4.57	3.41	2.25	0.57	1.16	13.4	86627	124.16	7.65	0.084
645	TAQWA	2020	1.261	1.126	0.936	0.035	0.598	13.51	57164	169.68	6.32	0.076
646	TAQWA	2017	1.294	1.15	0.94	0.036	0.692	13.48	63916	183.23	8.02	0.078
647	TAQWA	2018	0.96	0.86	0.81	0.03	0.05	11.16	71091	191.83	4.7	0.012
648	TAQWA	2019	1.2	1.09	0.89	0.03	0.2	11.01	77713	201.81	5.2	0.011
649	TAQWA	2020	1.36	1.21	0.94	0.03	0.27	11.24	76944	108.69	5.2	0.011
650	TAQWA	2021	1.49	1.32	1.1	0.05	0.22	11.29	82823	115.33	6.11	0.015
651	TAQWA	2022	1.46	1.27	0.96	0.04	0.31	11.5	86627	124.16	7.65	0.014
652	TARAJI	2020	0.645	0.422	0.215	0.071	0.19	11.2	57164	169.68	6.32	0.013
653	TARAJI	2017	0.666	0.432	0.226	0.074	0.21	11.25	63916	183.23	8.02	0.013
654	TARAJI	2018	0.47	0.27	0.22	0.06	0.05	17.41	71091	191.83	4.7	0.091
655	TARAJI	2019	0.65	0.47	0.18	0.07	0.29	13.83	77713	201.81	5.2	0.13
656	TARAJI	2020	0.68	0.46	0.21	0.07	0.25	14.78	76944	108.69	5.2	0.111
657	TARAJI	2021	0.76	0.48	0.24	0.08	0.24	15.83	82823	115.33	6.11	0.111
658	TARAJI	2022	0.77	0.48	0.28	0.09	0.2	16.04	86627	124.16	7.65	0.107
659	TELEPOST	2020	1.162	0.459	0.289	0.161	0.207	15.27	57164	169.68	6.32	0.11
660	TELEPOST	2017	1.15	0.454	0.304	0.176	0.206	15.42	63916	183.23	8.02	0.109
661	TELEPOST	2018	1.37	0.5	0.18	0.05	0.32	27.4	71091	191.83	4.7	0.093

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662	TELEPOST	2019	1.25	0.48	0.29	0.21	0.19	26.04	77713	201.81	5.2	0.241
663	TELEPOST	2020	1	0.45	0.31	0.22	0.14	22.22	76944	108.69	5.2	0.237
664	TELEPOST	2021	1.04	0.41	0.36	0.15	0.05	25.37	82823	115.33	6.11	0.139
665	TELEPOST	2022	1.09	0.43	0.38	0.25	0.05	25.35	86627	124.16	7.65	0.219
666	TEMBO	2020	3.415	2.397	2.43	0.456	0.17	25.33	57164	169.68	6.32	0.186
667	TEMBO	2017	3.664	2.584	2.562	0.478	0.15	25.33	63916	183.23	8.02	0.193
668	TEMBO	2018	2.55	1.75	1.93	0.36	0.18	14.57	71091	191.83	4.7	0.062
669	TEMBO	2019	3.05	2.15	2.22	0.43	0.07	14.19	77713	201.81	5.2	0.065
670	TEMBO	2020	3.61	2.54	2.56	0.48	0.02	14.21	76944	108.69	5.2	0.063
671	TEMBO	2021	4.2	2.96	2.88	0.53	0.08	14.19	82823	115.33	6.11	0.061
672	TEMBO	2022	4.91	3.52	3.22	0.59	0.3	13.95	86627	124.16	7.65	0.061
673	THE NOBLE	2020	2.465	1.86	2.011	0.428	0.022	21.02	57164	169.68	6.32	0.102
674	THE NOBLE	2017	2.586	1.95	2.114	0.45	0.022	20.43	63916	183.23	8.02	0.098
675	THE NOBLE	2018	1.97	1.48	1.68	0.34	0.2	13.31	71091	191.83	4.7	0.067
676	THE NOBLE	2019	2.28	1.72	1.86	0.41	0.14	13.26	77713	201.81	5.2	0.073
677	THE NOBLE	2020	2.57	1.94	2.06	0.44	0.12	13.25	76944	108.69	5.2	0.071
678	THE NOBLE	2021	2.92	2.21	2.34	0.5	0.13	13.21	82823	115.33	6.11	0.071
679	THE NOBLE	2022	3.19	2.4	2.63	0.56	0.23	13.29	86627	124.16	7.65	0.071
680	TIMES U	2020	0.792	0.571	0.652	0.145	0.151	13.25	57164	169.68	6.32	0.071
681	TIMES U	2017	0.852	0.604	0.7	0.156	0.164	13.26	63916	183.23	8.02	0.071
682	TIMES U	2018	0.61	0.48	0.5	0.11	0.02	12.71	71091	191.83	4.7	0.073
683	TIMES U	2019	0.76	0.53	0.63	0.14	0.1	14.34	77713	201.81	5.2	0.074
684	TIMES U	2020	0.81	0.58	0.66	0.13	0.08	13.97	76944	108.69	5.2	0.066

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685	TIMES U	2021	0.93	0.66	0.77	0.19	0.11	14.09	82823	115.33	6.11	0.082
686	TIMES U	2022	1.15	0.77	0.94	0.21	0.17	14.94	86627	124.16	7.65	0.074
687	TOWER	2020	12.778	9.638	10.84	1.869	0.081	13.88	57164	169.68	6.32	0.074
688	TOWER	2017	13.91	10.448	11.572	2.034	0.096	14.11	63916	183.23	8.02	0.074
689	TOWER	2018	8.52	6.55	7.34	1.23	0.79	14.6	71091	191.83	4.7	0.056
690	TOWER	2019	11.16	8.63	9.58	1.59	0.95	14.3	77713	201.81	5.2	0.055
691	TOWER	2020	13.73	10.59	12.4	2.07	1.81	14.45	76944	108.69	5.2	0.056
692	TOWER	2021	16.57	11.97	13.31	2.42	1.34	14.38	82823	115.33	6.11	0.061
693	TOWER	2022	19.57	14.5	15.23	2.86	0.73	14.41	86627	124.16	7.65	0.063
694	TRANS ELITE	2020	1.355	0.662	0.582	0.171	0.021	13.94	57164	169.68	6.32	0.067
695	TRANS ELITE	2017	1.384	0.668	0.6	0.174	0.026	13.86	63916	183.23	8.02	0.07
696	TRANS ELITE	2018	1.01	0.63	0.52	0.15	0.11	16.03	71091	191.83	4.7	0.096
697	TRANS ELITE	2019	1.44	0.64	0.56	0.17	0.08	22.5	77713	201.81	5.2	0.101
698	TRANS ELITE	2020	1.46	0.68	0.62	0.18	0.06	21.47	76944	108.69	5.2	0.097
699	TRANS ELITE	2021	1.48	0.69	0.61	0.18	0.08	21.45	82823	115.33	6.11	0.098
700	TRANS ELITE	2022	1.53	0.7	0.69	0.19	0.01	21.86	86627	124.16	7.65	0.092
701	TRANS NATION	2020	6.196	4.496	5.715	1.157	0.08	20.48	57164	169.68	6.32	0.098
702	TRANS NATION	2017	6.78	4.95	6.276	1.254	0.068	20.72	63916	183.23	8.02	0.097
703	TRANS NATION	2018	4.37	3.03	3.78	0.79	0.75	15.8	71091	191.83	4.7	0.07
704	TRANS NATION	2019	5.11	3.75	4.63	0.98	0.88	16.17	77713	201.81	5.2	0.071
705	TRANS NATION	2020	6.62	4.8	6.27	1.24	1.47	15.51	76944	108.69	5.2	0.066
706	TRANS NATION	2021	8.1	5.95	7.62	1.52	1.67	15.84	82823	115.33	6.11	0.066
707	TRANS NATION	2022	9.7	7.22	9.08	1.74	1.86	15.68	86627	124.16	7.65	0.064

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708	TRANS NATIONAL TIMES	2020	1.792	1.088	0.957	0.278	1.219	15.83	57164	169.68	6.32	0.067
709	TRANS NATIONAL TIMES	2017	1.862	1.128	0.976	0.29	1.326	15.83	63916	183.23	8.02	0.067
710	TRANS NATIONAL TIMES	2018	1.51	0.9	0.85	0.26	0.05	16.78	71091	191.83	4.7	0.102
711	TRANS NATIONAL TIMES	2019	1.6	1.02	0.91	0.26	0.11	15.69	77713	201.81	5.2	0.095
712	TRANS NATIONAL TIMES	2020	1.92	1.15	1.01	0.26	0.14	16.7	76944	108.69	5.2	0.086
713	TRANS NATIONAL TIMES	2021	2.07	1.24	1.04	0.32	0.2	16.69	82823	115.33	6.11	0.103
714	TRANS NATIONAL TIMES	2022	2.21	1.33	1.07	0.35	0.26	16.62	86627	124.16	7.65	0.109
715	UKRISTO NA UFANISI	2020	1.775	1.39	1.366	0.205	0.024	13.59	57164	169.68	6.32	0.065
716	UKRISTO NA UFANISI	2017	1.774	1.392	1.36	0.204	0.028	13.58	63916	183.23	8.02	0.065
717	UKRISTO NA UFANISI	2018	1.83	1.36	1.67	0.22	0.31	13.46	71091	191.83	4.7	0.044
718	UKRISTO NA UFANISI	2019	1.84	1.41	1.31	0.21	0.1	13.05	77713	201.81	5.2	0.053
719	UKRISTO NA UFANISI	2020	1.69	1.4	1.23	0.2	0.17	12.07	76944	108.69	5.2	0.054
720	UKRISTO NA	2021	1.74	1.39	1.26	0.19	0.13	12.52	82823	115.33	6.11	0.05

NO	SACCO	YE R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
	UFANISI											
721	UKRISTO NA UFANISI	2022	1.77	1.4	1.33	0.2	0.07	12.64	86627	124.16	7.65	0.05
722	UKULIMA	2020	12.495	8.856	10.225	1.579	1.37	14.11	57164	169.68	6.32	0.051
723	UKULIMA	2017	12.856	9.088	10.536	1.634	1.448	14.15	63916	183.23	8.02	0.052
724	UKULIMA	2018	11.18	7.89	9	1.43	1.11	14.17	71091	191.83	4.7	0.053
725	UKULIMA	2019	11.91	8.42	9.64	1.47	1.22	14.14	77713	201.81	5.2	0.051
726	UKULIMA	2020	12.74	9.12	10.49	1.56	1.37	13.97	76944	108.69	5.2	0.05
727	UKULIMA	2021	13.79	9.76	11.46	1.8	1.7	14.13	82823	115.33	6.11	0.052
728	UKULIMA	2022	14.66	10.25	12.09	1.91	1.84	14.3	86627	124.16	7.65	0.053
729	UNAITAS	2020	15.775	8.742	12.551	2.375	3.809	18.04	57164	169.68	6.32	0.063
730	UNAITAS	2017	16.546	9.122	13.186	2.524	4.064	18.14	63916	183.23	8.02	0.064
731	UNAITAS	2018	12.88	7.48	9.43	1.94	1.95	17.22	71091	191.83	4.7	0.069
732	UNAITAS	2019	14.23	8.05	11.45	2.23	3.4	17.68	77713	201.81	5.2	0.065
733	UNAITAS	2020	16.57	8.92	14.13	2.52	5.21	18.58	76944	108.69	5.2	0.059
734	UNAITAS	2021	18.65	10.14	14.56	2.66	4.42	18.39	82823	115.33	6.11	0.061
735	UNAITAS	2022	20.4	11.02	16.36	3.27	5.34	18.51	86627	124.16	7.65	0.067
736	UNISON	2020	4.347	3.096	3.564	0.634	0.468	14.04	57164	169.68	6.32	0.059
737	UNISON	2017	4.754	3.378	3.95	0.692	0.572	14.07	63916	183.23	8.02	0.058
738	UNISON	2018	3.13	2.16	2.6	0.48	0.44	14.49	71091	191.83	4.7	0.062
739	UNISON	2019	3.81	2.72	3.35	0.57	0.63	14.01	77713	201.81	5.2	0.057
740	UNISON	2020	4.33	3.08	3.77	0.62	0.69	14.06	76944	108.69	5.2	0.055
741	UNISON	2021	5.71	4.14	4.15	0.81	0.01	13.79	82823	115.33	6.11	0.065
742	UNISON	2022	6.79	4.79	5.88	0.98	1.09	14.18	86627	124.16	7.65	0.056

NO	SACCO	YE A R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
743	UNITED NATIONS DT	2020	13.7	10.381	8.604	1.575	1.776	13.2	57164	169.68	6.32	0.061
744	UNITED NATIONS DT	2017	14.2	10.744	8.882	1.636	1.862	13.22	63916	183.23	8.02	0.061
745	UNITED NATIONS DT	2018	12.2	9.31	8.32	1.38	0.99	13.1	71091	191.83	4.7	0.055
746	UNITED NATIONS DT	2019	12.87	9.7	8.55	1.52	1.15	13.27	77713	201.81	5.2	0.059
747	UNITED NATIONS DT	2020	14.08	10.71	8.42	1.61	2.29	13.15	76944	108.69	5.2	0.064
748	UNITED NATIONS DT	2021	15.15	11.44	8.85	1.73	2.59	13.24	82823	115.33	6.11	0.065
749	UNITED NATIONS DT	2022	16.7	12.56	10.27	1.94	2.29	13.3	86627	124.16	7.65	0.063
750	UNIVERSAL TRADERS	2020	1.229	0.718	1.062	0.204	0.344	10.1	57164	169.68	6.32	0.064
751	UNIVERSAL TRADERS	2017	1.274	0.738	1.1	0.21	0.362	12.2	63916	183.23	8.02	0.064
752	UNIVERSAL TRADERS	2018	0.97	0.62	0.86	0.16	0.24	12	71091	191.83	4.7	0.062
753	UNIVERSAL TRADERS	2019	1.2	0.7	1.04	0.2	0.34	11.1	77713	201.81	5.2	0.064
754	UNIVERSAL TRADERS	2020	1.3	0.74	1.1	0.22	0.36	12	76944	108.69	5.2	0.067
755	UNIVERSAL TRADERS	2021	1.4	0.79	1.21	0.23	0.42	12.5	82823	115.33	6.11	0.063
756	UNIVERSAL TRADERS	2022	1.5	0.84	1.29	0.24	0.45	12.8	86627	124.16	7.65	0.062
757	VIKTAS	2020	0.283	0.199	0.226	0.046	0.027	14.25	57164	169.68	6.32	0.068
758	VIKTAS	2017	0.306	0.214	0.248	0.05	0.034	14.3	63916	183.23	8.02	0.067
759	VIKTAS	2018	0.2	0.14	0.14	0.03	0.004	14.29	71091	191.83	4.7	0.071

NO	SACCO	YEA R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
760	VIKTAS	2019	0.25	0.18	0.19	0.04	0.01	13.89	77713	201.81	5.2	0.07
761	VIKTAS	2020	0.3	0.21	0.24	0.05	0.03	14.29	76944	108.69	5.2	0.069
762	VIKTAS	2021	0.36	0.25	0.31	0.06	0.06	14.4	82823	115.33	6.11	0.065
763	VIKTAS	2022	0.42	0.29	0.36	0.07	0.07	14.48	86627	124.16	7.65	0.065
764	VISION AFRIKA	2020	0.396	0.284	0.343	0.062	0.059	13.94	57164	169.68	6.32	0.06
765	VISION AFRIKA	2017	0.442	0.312	0.386	0.07	0.074	14.17	63916	183.23	8.02	0.06
766	VISION AFRIKA	2018	0.26	0.2	0.22	0.04	0.02	13	71091	191.83	4.7	0.061
767	VISION AFRIKA	2019	0.32	0.23	0.26	0.05	0.03	13.91	77713	201.81	5.2	0.064
768	VISION AFRIKA	2020	0.43	0.3	0.37	0.06	0.07	14.33	76944	108.69	5.2	0.054
769	VISION AFRIKA	2021	0.53	0.38	0.48	0.09	0.1	13.95	82823	115.33	6.11	0.063
770	VISION AFRIKA	2022	0.67	0.45	0.6	0.11	0.15	14.89	86627	124.16	7.65	0.061
771	VISION POINT	2020	0.554	0.389	0.285	0.124	0.104	14.26	57164	169.68	6.32	0.145
772	VISION POINT	2017	0.562	0.394	0.294	0.128	0.1	14.26	63916	183.23	8.02	0.145
773	VISION POINT	2018	0.54	0.37	0.25	0.11	0.12	14.59	71091	191.83	4.7	0.147
774	VISION POINT	2019	0.54	0.37	0.28	0.12	0.09	14.59	77713	201.81	5.2	0.143
775	VISION POINT	2020	0.57	0.41	0.26	0.13	0.15	13.9	76944	108.69	5.2	0.167
776	VISION POINT	2021	0.56	0.4	0.34	0.13	0.06	14	82823	115.33	6.11	0.127
777	VISION POINT	2022	0.6	0.42	0.34	0.15	0.08	14.29	86627	124.16	7.65	0.147
778	WAKENYA PAMOJA	2020	1.551	0.788	0.808	0.389	0.02	19.68	57164	169.68	6.32	0.16
779	WAKENYA PAMOJA	2017	1.566	0.792	0.822	0.386	0.03	19.77	63916	183.23	8.02	0.157
780	WAKENYA PAMOJA	2018	1.52	0.76	0.76	0.39	0.001	20	71091	191.83	4.7	0.171
781	WAKENYA	2019	1.57	0.78	0.82	0.43	0.04	20.13	77713	201.81	5.2	0.175

NO	SACCO	YE R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
	PAMOJA											
782	WAKENYA PAMOJA	2020	1.51	0.8	0.79	0.38	0.01	18.88	76944	108.69	5.2	0.16
783	WAKENYA PAMOJA	2021	1.59	0.81	0.85	0.36	0.04	19.63	82823	115.33	6.11	0.141
784	WAKENYA PAMOJA	2022	1.64	0.81	0.89	0.37	0.08	20.25	86627	124.16	7.65	0.139
785	WAKULIMA COMMERCIAL	2020	0.586	0.413	0.473	0.084	0.06	14.17	57164	169.68	6.32	0.06
786	WAKULIMA COMMERCIAL	2017	0.628	0.446	0.514	0.092	0.068	14.08	63916	183.23	8.02	0.06
787	WAKULIMA COMMERCIAL	2018	0.43	0.3	0.3	0.06	0.034	14.33	71091	191.83	4.7	0.067
788	WAKULIMA COMMERCIAL	2019	0.55	0.38	0.46	0.08	0.08	14.47	77713	201.81	5.2	0.058
789	WAKULIMA COMMERCIAL	2020	0.61	0.43	0.48	0.09	0.05	14.19	76944	108.69	5.2	0.063
790	WAKULIMA COMMERCIAL	2021	0.71	0.51	0.61	0.1	0.1	13.92	82823	115.33	6.11	0.055
791	WAKULIMA COMMERCIAL	2022	0.84	0.61	0.72	0.13	0.11	13.77	86627	124.16	7.65	0.06
792	WANAANGA	2020	1.265	1.012	0.955	0.183	0.057	12.5	57164	169.68	6.32	0.064
793	WANAANGA	2017	1.266	1.01	0.956	0.184	0.054	12.53	63916	183.23	8.02	0.064
794	WANAANGA	2018	1.2	0.96	0.94	0.18	0.02	12.5	71091	191.83	4.7	0.064
795	WANAANGA	2019	1.24	1	0.94	0.18	0.06	12.4	77713	201.81	5.2	0.064
796	WANAANGA	2020	1.3	1.04	0.96	0.18	0.08	12.5	76944	108.69	5.2	0.063
797	WANAANGA	2021	1.32	1.05	0.98	0.19	0.07	12.57	82823	115.33	6.11	0.065
798	WANAANGA	2022	1.27	1	0.96	0.19	0.04	12.7	86627	124.16	7.65	0.066
799	WANANCHI	2020	1.331	0.93	0.796	0.221	0.135	14.31	57164	169.68	6.32	0.093

NO	SACCO	YEA R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
800	WANANCHI	2017	1.346	0.932	0.798	0.226	0.134	14.44	63916	183.23	8.02	0.094
801	WANANCHI	2018	1.27	0.93	0.79	0.21	0.14	13.66	71091	191.83	4.7	0.089
802	WANANCHI	2019	1.29	0.91	0.82	0.22	0.09	14.18	77713	201.81	5.2	0.089
803	WANANCHI	2020	1.37	0.95	0.81	0.22	0.14	14.42	76944	108.69	5.2	0.091
804	WANANCHI	2021	1.38	0.93	0.76	0.23	0.17	14.84	82823	115.33	6.11	0.101
805	WANANCHI	2022	1.42	0.94	0.81	0.25	0.13	15.11	86627	124.16	7.65	0.103
806	WANANDEGE	2020	1.434	1.117	0.998	0.204	0.119	12.84	57164	169.68	6.32	0.068
807	WANANDEGE	2017	1.472	1.134	1.04	0.21	0.094	12.98	63916	183.23	8.02	0.067
808	WANANDEGE	2018	1.4	1.11	0.91	0.2	0.2	12.61	71091	191.83	4.7	0.073
809	WANANDEGE	2019	1.52	1.19	1.05	0.23	0.14	12.77	77713	201.81	5.2	0.073
810	WANANDEGE	2020	1.38	1.1	0.96	0.18	0.14	12.55	76944	108.69	5.2	0.063
811	WANANDEGE	2021	1.4	1.05	1.03	0.2	0.02	13.33	82823	115.33	6.11	0.065
812	WANANDEGE	2022	1.66	1.22	1.25	0.24	0.03	13.61	86627	124.16	7.65	0.064
813	WASHA	2020	0.244	0.193	0.199	0.036	0.006	12.65	57164	169.68	6.32	0.06
814	WASHA	2017	0.262	0.206	0.214	0.04	0.008	12.72	63916	183.23	8.02	0.062
815	WASHA	2018	0.19	0.16	0.14	0.02	0.02	11.88	71091	191.83	4.7	0.048
816	WASHA	2019	0.22	0.17	0.18	0.03	0.01	12.94	77713	201.81	5.2	0.056
817	WASHA	2020	0.25	0.2	0.21	0.04	0.01	12.5	76944	108.69	5.2	0.063
818	WASHA	2021	0.3	0.23	0.25	0.05	0.02	13.04	82823	115.33	6.11	0.067
819	WASHA	2022	0.35	0.27	0.29	0.06	0.02	12.96	86627	124.16	7.65	0.069
820	WAUMINI	2020	5.128	3.97	4.275	0.624	0.304	12.92	57164	169.68	6.32	0.049
821	WAUMINI	2017	5.33	4.112	4.414	0.642	0.302	12.96	63916	183.23	8.02	0.048
822	WAUMINI	2018	4.44	3.46	3.99	0.55	0.53	12.83	71091	191.83	4.7	0.046

NO	SACCO	YEA R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
823	WAUMINI	2019	4.85	3.77	4.21	0.61	0.44	12.86	77713	201.81	5.2	0.048
824	WAUMINI	2020	5.26	4.11	4.26	0.66	0.15	12.8	76944	108.69	5.2	0.052
825	WAUMINI	2021	5.76	4.4	4.5	0.66	0.1	13.09	82823	115.33	6.11	0.049
826	WAUMINI	2022	6.34	4.82	5.11	0.73	0.29	13.15	86627	124.16	7.65	0.048
827	WEVARSITY	2020	0.414	0.269	0.331	0.068	0.062	15.39	57164	169.68	6.32	0.069
828	WEVARSITY	2017	0.418	0.274	0.334	0.07	0.06	15.26	63916	183.23	8.02	0.07
829	WEVARSITY	2018	0.39	0.26	0.33	0.06	0.07	15	71091	191.83	4.7	0.061
830	WEVARSITY	2019	0.4	0.22	0.32	0.07	0.1	18.18	77713	201.81	5.2	0.073
831	WEVARSITY	2020	0.44	0.3	0.35	0.07	0.05	14.67	76944	108.69	5.2	0.067
832	WEVARSITY	2021	0.42	0.29	0.32	0.07	0.03	14.48	82823	115.33	6.11	0.073
833	WEVARSITY	2022	0.44	0.3	0.35	0.08	0.05	14.67	86627	124.16	7.65	0.076
834	WINAS	2020	6.848	4.181	6.754	1.229	2.573	16.38	57164	169.68	6.32	0.061
835	WINAS	2017	7.338	4.446	7.25	1.314	2.804	16.5	63916	183.23	8.02	0.06
836	WINAS	2018	5.23	3.3	5.29	0.92	1.99	15.85	71091	191.83	4.7	0.058
837	WINAS	2019	6.2	3.81	5.98	1.1	2.17	16.27	77713	201.81	5.2	0.061
838	WINAS	2020	7.13	4.35	7.05	1.29	2.7	16.39	76944	108.69	5.2	0.061
839	WINAS	2021	8.34	5	8.2	1.52	3.2	16.68	82823	115.33	6.11	0.062
840	WINAS	2022	9.79	5.77	9.73	1.74	3.96	16.97	86627	124.16	7.65	0.06
841	YETU	2020	4.033	2.501	2.836	0.598	0.335	16.13	57164	169.68	6.32	0.07
842	YETU	2017	4.256	2.624	2.988	0.63	0.364	16.22	63916	183.23	8.02	0.07
843	YETU	2018	3.31	2.08	2.13	0.48	0.05	15.91	71091	191.83	4.7	0.075
844	YETU	2019	3.7	2.35	2.7	0.58	0.35	15.74	77713	201.81	5.2	0.072
845	YETU	2020	4.19	2.6	2.98	0.61	0.38	16.12	76944	108.69	5.2	0.068

NO	SACCO	YEA R	TOTAL ASSET S Billion	TOTAL DEPOSIT S Billion	TOTAL LOANS Billion	TOTAL INCOM E Billion	DEBT Billion	CAR	Personal Consumptio n Expenditure	Price Index	Inflation Rate	NPL
846	YETU	2021	4.71	2.85	3.38	0.69	0.53	16.53	82823	115.33	6.11	0.068
847	YETU	2022	5.37	3.24	3.75	0.79	0.51	16.57	86627	124.16	7.65	0.07

APPENDIX V: RESEARCH PERMIT

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