

**EFFECTS OF INFLATION ON THE FINANCIAL PERFORMANCE OF
COMMERCIAL BANKS IN SOUTH SUDAN**

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**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT
OF REQUIREMENTS FOR THE AWARD OF DEGREE OF THE MASTER OF
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SCIENCE, UNIVERSITY OF NAIROBI**

NOVEMBER, 2022

DECLARATION

I declare that this **research proposal** is my primary work and has never been used anywhere or in other college.

Signature.....

Date.....22nd / 11 / 2022

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This **research proposal** is based on my approval as the college **student supervisor**.

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Signed.....

Date.....

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DEDICATION

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ABSTRACT

This research's objective was to assess how inflation affects the financial health of South Sudan's commercial banks. The resource-based theory and the currency conversion theory served as the research's guiding theories. The design adopted was descriptive in nature. The researcher collected information from different banks in South Sudan. Data was based on primary and non-field data. It was a census-based study and all the banks in the region were involved. Analytical models in quantitative data were used in the data analysis. The study found that inflation. The inquiry confirmed the view that inflation is a negative change on banks success and profitability. The regression model and p-values confirmed that banks do not do well in times of inflation. The analysis also reveals that banks lack customers during inflation and there is need for proper planning and management of inflation challenges to manage investment conditions in the banks. It is recommended that top managers within banks find different ways of managing the negative effects of inflation in their operations and promote their output. Without effective measures, the negative value that inflation has on banks will reduce their success and profitability in the long run. It is also imperative that banks invest in times when there is low inflation since there is high consumer purchasing power and high demand on bank services and programs at the time. Importantly, the inquiry suggests the need for firms to adopt effective cash management in their major operations as it is important in enhancing their success in the long run. With effective cash management, it is possible to make investment even in conditions of inflation in the country.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Since inflation is a worldwide economic trend that has been happening naturally, it is wise to factor it into any organization's financial strategy. When the cost of stocks and depreciation consumed over a period of time are calculated using their original cost rather than their replacement cost, the profitability of a firm is overestimated without taking inflation into account (Slawson, 2015). Commercial banks are immensely successful both in South Sudan and across the world because of the fees they charge for their services to people, corporations, and other organizations as well as the interest they make on securities and assets. Commercial banks act as financial middlemen. The recent returns and investments on assets have significantly improved their financial performance. Nevertheless, the market's inflation rate has had a significant impact on the performance of commercial banks' through changes in the Consumer Price Index (Ball 2008). Since the private sector credit ratio declines in response to the loan amount, nations with low equity and banking markets are associated with high inflation (Boyd & Champ, 2006). In the banking industry, there is an inverse connection between these two factors. Due to the importance of commercial banks in the economy, research on their financial performance is crucial. Banks offer banking and credit facilities, and they enhance their market share by expanding their client base, which in turn affects their financial performance overall.

The cash conversion theory and the Resources-based theory serve as the study's foundation. The resources-based idea asserts that businesses may use their resources to advance and raise standards of performance. Therefore, businesses with non-imitable, uncommon, and distinctive resources may succeed and thrive at a high level across all areas of their operations. However, the cash conversion theory indicates that companies need to find ways to convert their resources and other inputs into cash to promote their cash management and performance. According to Oseifuah (2016), cash conversion theory can help organization to manage their working capital and promote their accounts receivable, especially by selling their products and services on credit. This is common among several financial institutions and commercial banks across the globe as it improves their financial performance (Richards & Laughlin, 1980).

In South Sudan, Commercial Banks are slowly adopting cash management practices to promote their performance (Karanja, 2015). The study will help to analyze how commercial banks in

South Sudan are adopting various practices to help increase their financial performance levels (Musyimi, 2016). This is important with the current business environment which is becoming more competitive each day and only dynamic organizations who can adopt different practices can achieve their goals and objectives as well as enjoy high financial performance.

1.1.1 The concept of Inflation

Inflation, as defined by Ramady (2009), is an increase in prices that, over time, causes a decrease in the ability to purchase goods. A reasonable measure of the rate at which purchasing power is diminishing over time would be the average price increase of a selection of carefully picked goods and services in the country (Lipsey, 2009). Due to inflation, which is typically expressed as a percentage of the increase in prices, a unit of money now has less purchasing power than it had previously. Price changes for products and services usually occur during periods of inflation, and these price increases are usually widespread.

Over decades, The Central Bank of Kenya has reportedly employed monetary policy over the years to stabilize both production and inflation utilizing two mechanisms at once; reserve money and interest rates (Gichuki et al., 2012). This shows that there is a close relationship and correlation between inflation and interest rates. Gavin et al. (2005) looked at how different monetary policy rules affected real variables, the informational value of monetary data, and the persistence of inflation. The research concluded that the Central Bank's control over the money supply affected both the variability of inflation and the persistence. In their analysis on "the choice of optimal monetary policy tool for Kenya," Oduor et al. (2012) discovered that when inflation was high, interest rates rose and when it was low, they dropped. Changing interest rates in response to output and inflation in this situation is one way to stabilize the inflation rate. One effect of inflation is a rise in manufacturing costs, thus, businesses then raise the prices of their finished products (Keeley, 2001). This occurs when raw material prices rise and businesses are compelled to raise prices in order to maintain or meet their profit margins. National debts and International loans can also cause inflation. In this situation, Stiglitz, (2004) posits that governments that have borrowed money must raise their interest rates in order to maintain the debt commitment.

1.1.2 Financial Performance

The concept of financial performance refers to the extent to which an organization succeeds in meeting its work mission in terms of return on assets, sales volume, profitability and other financial ratios. Ittner and Larcker (2012) posit that organization performance is a larger concept characterized by measures such as the following: quality, efficiency, productivity, efficiency, and consistency. The conceptualization of financial performance is also based on net income, revenue, and financial sustainability (Kotter, 2012). According to Richard (2013), financial performance can also be evaluated based on the following indicators: return on assets, sales volume, shareholder's return, profits, and return on investment, among others.

The abbreviation for the five aspects of a bank's condition that are evaluated liquidity, management quality, asset quality, capital adequacy, and profitable is known as CAMEL. This is the second metric used to analyze financial performance of an organization. Capital adequacy, profitability, and Liquidity are the three key factors used to gauge performance in commercial banks in a country. Ratings are provided for each component of a bank's financial performance in addition to the overall grade, while the rating scale is from 1(best) to 5(Worst) (Jose, 1999).

1.1.3 Commercial Banks in South Sudan

According to Kamau (2013), many financial and regulatory reforms have characterized the financial industry in which commercial banks operate in South Sudan. Consequently, many structural changes in the financial sector have emerged. It is as a result of such reforms that foreign banks have been allowed to operate in South Sudan (Hassan & Hilles, 2014).

In South Sudan, commercial banks dominate the financial industry (Ngugi, 2014). The South Sudanese economy is significantly influenced by commercial banks. Despite this, some banks have failed to achieve their goals due to failure to withstand the temptation to engage in effective cash management practices. Widespread financial mismanagement has also been reported in the financial sector in the many commercial banks in South Sudan. As a result, the majority of commercial banks have experienced poor performance. Indeed, some banks caught up in various financial mismanagement scandals have had to be placed under receivership, while others have been closed (Kitur & Kinyua, 2020). Even though some studies report that commercial banks are gaining their lost momentum in the financial market, there is a need for more efforts to make these institutions more competitive and profitable in South Sudan.

In South Sudan, the Central Bank of Sudan (CBOS) is the organization that control financial activities in the country (Hassan & Hilles, 2014). It determines the conventional banking system and support the financial sector in different capacity (Salih et al., 2018). It also provides rules and policies guiding the banking activities in the region. This means that the Central Bank of Sudan (CBOS) helps manage the financial sector in South Sudan and it provide policies based on the global banking standards. Effective management of bank operations promotes performance and success of banks.

1.2 Research Problem

A nation's economy can be impacted by inflation in both good and bad ways. Negative impacts include shortages of items on the market as a result of hoarding, uncertainty around investments and savings, and loss of value of money. While positive benefits include the reduction of economic recessions and debt relief (Ball, 2008). The results of analysis also show that commercial banks' investment choices are influenced by their financial performance rates and forecasts of profitability. Additionally, as the performance and production of many economies are impacted by changes in the inflation rate; this is also affects the success of commercial banks. Hence, the stability of the inflation rate affects the financial success of a company.

The impact of inflation on the financial performance of commercial banks across the world has been the subject of several studies. Based on short-term increases associated to the pricing of commodities leading to a fall in living standards, Comley (2015) believes that inflation is a significant factor impacting profitability. Government policies regulate price levels through enacting taxing measures that have a direct impact on the economy's inflation rates. Slawson (2015), however, argued that reducing the competitive advantage enjoyed by monopolies that drive up prices for products and services should be taken into account in order to limit inflation in the market. Companies have been pushed to boost earnings to make up for decreased depreciation in order to offset these consequences. Companies enhance this by passing the expense of inflation on to customers in order to keep the cash flowing (Gillman, 2013). Additionally, Gillman (2013), indicated that inflation had a negative impact on the profitability of a corporation by seriously impairing the economic worth of its financial records, its value in terms of money, and its capacity to continue operating.

According to a research by Ball & Pitchford (1964), a rise in import prices would disrupt equilibrium and lead to an oversupply of goods in the market. This would negatively impact the balance of payments and cause a decline in local prices and profit margins. A research on inflation and bank profitability in China was done, where, according Tan & Floros (2012), the Chinese banking industry's ROA profitability was positively correlated with inflation. Rising revenues outpaced rising expenses as a result of anticipating inflation rates thereby adjusting interest rates effectively.

According to Wamucii (2010), there is a connection between financial viability and inflation in Kenya's commercial banks; this is shown by cash flows, assets, earnings. The results of the study demonstrated an inverse link between the variables, with profits rising as inflation dropped. The three-variable constraint prevented a thorough examination of the additional financial performance metrics that influence the correlation between profitability and inflation. The profitability of commercial banks may have been impacted by Kenya's rising inflation rate, however this has not been shown conclusively. Okoth (2013) investigated how inflation and interest rates affect currency exchange rates. Although he demonstrated that rising interest rates and inflation had a significant impact on income, currency values, and exchange rate from foreign exchange trading, he omitted to demonstrate how these factors affected profitability. This demonstrated that research conducted in Kenya has not adequately demonstrated how market inflation affects commercial banks' financial performance or how this affects investors' attempts to maximize their wealth.

The analysis carried out so far reveals that few research has made an effort to investigate and ascertain the impact of inflation on the Financial Performance of South Sudan's Commercial Banks. Furthermore, the research shows that a significant portion of the studies concentrating on the region issue were carried out outside of South Sudan. There is a shortage of information about how inflation affects the financial performance of commercial banks in the country. By looking through the literature for evidence of the impact of inflation on the financial performance of commercial banks in South Sudan, the current study intends to close this gap. The goal of the study is to ascertain and identify how South Sudan's commercial banks' financial performance is impacted by inflation. The study will answer the research Question-What impact does inflation has on South Sudan's commercial banks' financial performance?

1.3 Objective of the Study

The purpose of this research was to ascertain how inflation affects the financial performance of South Sudan's commercial banks.

1.4 Value of the Study

This research will be important to various stakeholders in South Sudan and beyond. It would help the top management of banks to understand the effects of Inflation on the Financial Performance of Commercial Banks in South Sudan. This would aid in adopting best practices to promote their organization performance. This would improve the bank's organization performance and success in the long run, especially after adoption of effective financial management practices based on inflation level.

The study would also benefit various government agencies and policy makers in the country. This is because the policy makers and government agencies dealing with inflation management and use the study results to formulate and help implement policies associated with organizational financial performance and financial management in the banking industry. This would be imperative towards the organization performance and promotion of success within the banking industry in South Sudan.

The study would also benefit future researchers, scholars and academicians. This is because the future academicians and scholars will use study results and findings to conduct further studies dealing with the determination of the effects of Inflation on the Financial Performance of Commercial Banks in South Sudan. The study would provide and advance more knowledge on the topic area.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter provides effective analysis of theoretical foundations as well as literature review on issues associated with the effects of effective cash dealing on productivity of Banks in South Sudan. It also covers empirical review on past studies that has been done on the topic of the study. The chapter will also include knowledge gaps related to the topic and also cover the analysis of the theories guiding the study. This study is guided by resource based theory and cash conversion theory.

2.2 Theoretical Foundations

The inquiry is supported by the cash conversion theory and the RBV-resource based theory. Cash management theory indicates how effective cash models and controls can improve performance of firms, especially during inflation. On the other hand, the RBV indicates how resources and assets can help promote success and growth of firms.

2.2.1 Resource Based Theory

This theory was founded by Barney in 1991 and Penrose in 1959 (Barney, 1996). The theory indicates that companies can use their resources to achieve high performance and success in the long run. However, the resources must be unique, rare and non-available to other firms. According to this theory, firms' growth relies more on their internal resources than their managerial resources and companies can use their rare, unique and non-imitable resources to improve their performance as well as in improving the competitive advantage of organizations (Grant, 1991).

According to Alvarez and Busenitz (2001), resource-based theory assumes and classifies organizational resources into four broad categories that include the following: information or knowledge controlled by an organization, firm's assets, and the firm's attributes. As stated in the resource-based theory, not all resources fit the definition of strategic resources (Acedo et al.,

2006) The theory postulates that an organization that possesses strategic resources has more chances of realizing sustained competitive advantage than the organizations that do not have possession of strategic resources (Grant, 1991). Strategic resources refer to resources that meet the following attributes: Are rare, difficult to imitate, cannot be substituted, and are valuable (Alvarez & Busenitz, 2001).

Resource based theory is highly suitable to the present study since it provides the framework for understanding the perspectives of organization performance as well as how organizations can design their cash management to promote their performance during inflation in the country (Grant, 1991). The theory can guide organizations on how to use their resources and promote their performance and general success in all their operations (Barney, 1996).

2.2.2 Cash Conversion Theory

This theory was founded by Blinder and Maccini (2001). The theory indicates that companies need to find ways to convert their resources and other inputs into cash to promote their cash management and performance. According to Oseifuah, E. K. (2016), cash conversion theory can help organization to manage their working capital and promote their accounts receivable, especially by selling their products and services on credit. This is common among commercial banks and other financial institutions across the globe (Richards & Laughlin, 1980). The proponents of the theory argue that cash enhance the operations and performance of organizations. This means that companies should find ways of converting their assets and other resources into cash. With increased capital flow, the company top management can invest into various portfolios (Obradovich, Gill & Biger, 2014).

The theory assumes that companies can sell their services and products on credit to increase their cash levels. This is the basis of cash conversion and it is important in promoting cash flow and cash recovery in organizations. However, in the process of cash conversion, the company top management must consider time, especially the numbers of days it takes to convert the investment in to cash (Pavlis, Moschuris & Laios, 2018). This is important in promoting cash flows and ensuring the inputs available are converted to cash through effective sale and production process. When the company is able to convert their resources to cash, the company is enjoying high sales volume and this leads to high profitability (Obradovich, Gill & Biger, 2014). With cash at hand, the company can pay bills, collect various receivables and ensures that all its

inventory and assets are in order. This is important towards the promotion of efficiency and operations in a company (Moss & Stine, 1993).

In this study, the theory is suitable and timely since it outlines some of the cash management ways that commercial banks can adopt to promote and increase their performance levels during inflation (Pavlis, Moschuris & Laios, 2018). In their major operations and activities, it is imperative that commercial banks consider adoption of effective time to manage their inventories (Obradovich, Gill & Biger, 2014). They should also consider the days of sales, the sales volume and the various ways to convert their resources into cash. This is the basis of the theory. Companies should have enough working capital and manage their working capital effectively to achieve high financial performance in the long run (Richards & Laughlin, 1980).

2.2.3 Monetary Theory of Inflation

The monetary theory of inflation holds that an increase in the money supply increases inflation rate in a country. Hence, a quicker money supply growth causes faster inflation; for every additional 1% in money supply growth, the inflation rate rises by 1%. When all other variables are maintained constant, there is an inverse relationship between the price level and money supply. According to the monetarists, inflation will occur if the money supply grows more quickly than the pace at which a country's income is increasing. As a result, inflation is a universal monetary phenomenon that only occurs when the amount of money increases more quickly than the rate of growth of the economy.

The short-term velocity (V), according to monetarists, is fixed; this is due to institutional issues, including how frequently workers are paid, influence the pace at which money flows. It could change a bit, but Milton Friedman acknowledged that it would not vary much; therefore it might be considered fixed. The output Y is fixed, according to monetarists. Inflation will rise as a result of an increase in the money supply, according to their argument that it may change in the short term but not over the long term.

Because it describes how market supply and monetary policies may cause inflation, this theory is applicable to the study. Businesses raise prices to reflect the rise in the money supply during an inflationary period when customers have more money to spend on the same amount of goods.

This means that in order to lower the rate of inflation in the market, the government establishes policies to control the money supply.

2.3 Determinants of Financial Performance

Some of the major determinants of financial success and output among banks and other firms are shown below.

2.3.1 Capital Adequacy Capital

One of the characteristics unique to banks that affect how profitable a bank is is capital efficient. Capital serves as a safety net in the event of adversity; it is the amount of cash on hand that helps sustain a bank's operations (Athanasoglou et al. 2005). Furthermore, increased bank capital lessens the likelihood of hardship (Diamond, 2000).

However, it has limitations, including low demand for liability, and it is also one of the least expensive forms of funding. The amount of capital that banks must have in order to be able to resist risks including operational, market and credit risks they are exposed to in order to safeguard the bank's debtors and absorb possible losses; this is known as capital adequacy. Dang (2011) claims that the capital adequacy ratio is the basis for determining whether or not capital is enough. The bank's ability to sustain losses during a crisis is shown by its capital adequacy ratio. The bank's resistance to catastrophes is closely correlated with its capital adequacy ratio. It also directly affects banks' profitability by deciding their development into lucrative but riskier sectors or enterprises (Sangmi & Nazir, 2010).

2.3.2 Asset Quality

Another factor that specifically impacts banks and their profitability is their asset base. Fixed asset, credit portfolio, and current asset are some examples of bank assets. Most frequently, a bank's loan is its most valuable asset and accounts for the biggest share of its revenue (Sangmi and Nazir, 2010). The primary asset from which financial institutions derive their revenue is the loan.

The loan portfolio's quality has improved and it has an immediate impact on bank earnings. Dang (2011) indicates that banks are most at risk from losses brought on by past-due loans. Therefore, nonperforming loan ratios are the best measures of asset quality in an organization. The goal of all commercial banks is to maintain the proportion of nonperforming loans at a minimum. This is significant since a bank's profitability is impacted by large nonperforming loans. An outstanding state of a bank's portfolio is indicated by a low ratio of non-performing to total loans (Sangmi and Nazir, 2010).

2.3.3 Effectiveness of Management

Management effectiveness is one of the most significant internal factors that influence bank profitability in the country. As indicators, many financial metrics including the the rate of total asset growth, the rate of loan growth, and rate of profit growth are used to measure banks' profitability. However, it is one of the complicated situations that financial ratios may be used to measure. Additionally, another aspect of management quality is operational effectiveness in controlling operating costs. Qualitative evaluation of management practices, such as staff quality, organizational discipline, and control system is a common way to communicate how well management is performing (Rahman et al., 2009). The management is more effective in terms of revenue generation and operational efficiency when there is a higher operating profit as a percentage of total income. The expenditure to asset ratio, which measures the quality of proxy management, is another crucial quantity. Profitability is predicted to be adversely correlated with the operating expenditure ratio to total asset. In this sense, the effectiveness of management influences profitability by determining the amount of operational expenditures (Athanasoglou et al. 2005).

2.3.4 Liquidity Management

Another element that affects how well a bank performs is liquidity. In commercial banks, liquidity can be described by the ability of the bank to fulfill obligations, primarily to depositors. The profitability of banks is favorably correlated with an acceptable amount of liquidity (Dang, 2011). Moreover, according to Dang, 2011), the two financial ratios that are most typically used to gauge a bank's liquidity situation are client deposit to total total loan and assets.

To evaluate liquidity, other researchers employ other financial ratios, for instance, Ilhomovich (2009) utilized the cash to deposit ratio to gauge the Malaysian banks' level of liquidity. Nevertheless, a research done in China and Malaysia discovered no connection between liquidity levels and bank performance (Said and Tumin, 2011).

2.4 Empirical Studies

In 2018, Zhang, H., & Chan, K.C. (2018) carried out study to determine the effect of bank shareholding on China banks' corporate management during inflation. The study was done in China through causal research design and the focus was state-owned enterprises that had shares owned by the banks. It was identified from the study findings that for these SOEs, the market value of cash holding is low while the overinvestment of free cash flow remains higher than for SOEs with no bank shareholding during inflation. The conclusion of the study was that corporate cash management in Chinese commercial banks increases the performance of these banks and that shareholding is essential for improving financial performance in Chinese commercial banks during inflation. However, the study focused on Chinese banks and the findings may not apply to South Sudan commercial banks due to changes in the environment of operation.

Berger and colleagues conducted a study in 2012 on effect of focus versus diversification on the performance of banks during inflation. The study was carried out in china using the Chinese banks data during the period between 1996 and 2006. Diversification was addressed in four scopes including the geography, assets, deposit and the loans. It was found that the four scopes of diversification are related to profit reduction and the higher costs. It was observed that banks that have foreign ownership and those with multinational affiliation are related with scarcer diseconomies of diversification. This suggests that the aspect of multinational affiliation and the foreign proprietorship play significant qualifying roles. The study was conducted in china and may not apply to south Sudan context due to geographical and operational differences.

A study was conducted by Helhel (2015) to evaluating the performance of the commercial banks in Georgia in times of inflation. The study was done in Georgia with the aim of the effect of macroeconomics and bank-specific determinants on the cost-effectiveness of the commercial banks and market systems in Georgia during inflation. Fourteen commercial and private banks

were investigated. Data analysis methods that were employed included the net interest margin, the return on equity and the return on asset. According to the results, the credit and size of the asset in relation to deposit ratio have no significant effect on bank profitability statistically. Also supply of money has significant effect while the rate of inflation has no important influence on the banks productivity performance level. The study focused on banks in Georgia and the findings may not be applicable in the banks in South Sudan.

In 2020, Peter et al. (2020), conducted a study to examine the implications and effects of inflation on performance on DMBS in Nigeria. The method used in the study was explanatory and secondary data for the study was obtained from accounts and annual reports of the chosen DMBs for the years 2014 to 2018. The findings of this study were that inflation had a significant positive impact on the performance of DMBs. The conclusion was that cash positions leading to liquidity risk should be managed to avoid compounding of other risks during inflation. The study recommended use of optimum cash management for effectiveness and efficiency in Nigerian banks during inflation. The study focused on Nigerian DMBs and the variables involved may not apply to South Sudan commercial banks.

In order to determine how inflation affects the financial performance of Somalia's commercial banks, researchers Abdi and Kavale (2016) performed a study. The study was carried out in Mogadishu, and its research approach was a descriptive survey. 112 personnel of Mogadishu's commercial banks were the target group. Questionnaires were used to gather the data, and SPSS was used to analyze it. According to the study, the financial performance of the commercial banks in Mogadishu is positively impacted by factors that affect cash management, such as inflation. The findings showed a favorable correlation between the financial performance of the commercial banks in Mogadishu and the accounts payable, accounts receivable, and management of cash. The recommendation of the study is that management should select the best driver suiting their banks for maximum performance achievement. The study focused only on commercial banks in Somalia and may vary from the context of south Sudan hence not applicable.

Locally, in 2014, Makur (2014) carried out a study to determine how inflation affected the financial performance of South Sudan's commercial banks in a five-year period. The study was done in South Sudan and according to its findings; the financial system of South Sudan has had

various transformations due to advanced technology of foreign commercial banks. The conclusion was that use of financial creativity and modern innovation for cash management in the commercial banks of South Sudan leads to strong financial performance of the banks during inflation. However, the gap is that the study was done in 2014 and technological advancements over the last several years may have changed the performance of the commercial banks over the years.

Mogga and colleagues carried out research in 2018 to evaluate the effects of credit risk management on the success of banks in Juba City, South Sudan in time of inflation. The study targeted the population of 80 employees of banks working in credit departments. Using SPSS and linear regression, the results concluded that identification of risk was considered by numerous banks as a management method of credit risk that impacted the performance. Performance of banks financially is not affected by risk identification and appraisal and analysis of risk according to the study. Factors that affect the performance of the banks financially were found to be monitoring of risk and approval of credit. In the study, it is recommended that banks should adopt policies on risk identification that are clearly defined. The managers should create a committee that manages credit risk.

Kitere and colleagues also conducted a study on the effects of liquidity management on performance of banks in Kenya. The study was grounded on the portfolio theory cash management of the theory of the pecking order, theory of free cash flow, theory of transaction cost and theory of management of cash. Mixed research design was used in this study. This design involved data collection and analysis for quantitative and qualitative data. Unstructured and structured questionnaires were used to collect data. Also, secondary data was used for the study. The population targeted by researchers was 6913 employees in bank's supervisory and management sectors. The analysis of data was done through SPSS and ANOVA. The study found that the practices of liquidity management are carried out by Kenyan commercial banks during inflation. The study results indication state that all the variables in the study that were independent have a positive impact on the Kenyan commercial banks' performance. It was also found that in Kenyan commercial banks, the rates of interest are influenced by the rate of inflation. Practices of liquidity management are linked to the banks' performance in Kenya. The study recommends the enhancement of banks in Kenya should be carried out via audits which

help to curb the rates of interest. Additionally, it is recommended that liquidity requirement should be maintained at minimum because excess liquidity and illiquidity can erode the base of profit easily. Finally, the study recommends that the levels of liquidity should be put into consideration when pursuing high profit because it can lead to high illiquidity which in turn lowers the loyalty and patronage of the customers.

2.5 Conceptual Framework

A conceptual framework is a foundation created from a group of generic models and concepts, according to Smyth (2004); these help researchers to effectively identify the issue, organize their inquiries, and locate relevant material. The research conceptualizes a connection where inflation is the dependent variable and financial success is the independent variable based on empirical literature and a hypothetical framework.

Independent Variables

Inflation

Purchasing power

Food Price Index

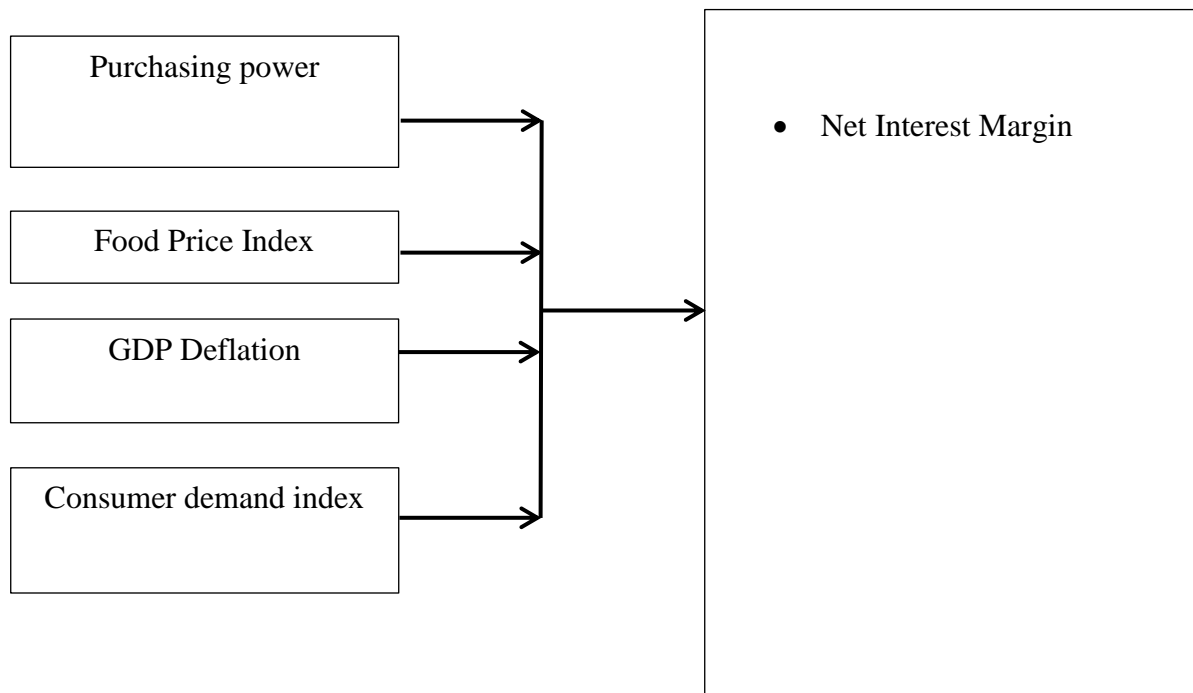
GDP Deflation

Consumer demand index

Dependent Variables

Financial Performance

- Net Interest Margin



Source: Author, (2022)

2.6 Chapter Summary and Research Gaps

In summary, various studies done on the topic indicates that inflation influence financial performance negatively. It is evident in a study done by Zhang and Chan (2018) as well as a study by Berger and colleagues which confirmed that inflation negatively affects the performance of banks during inflation. A study conducted by Helhel (2015) to evaluating the performance of the commercial banks in Georgia in times of inflation also noted that supply of money has significant effect while the rate of inflation has no important influence on the banks productivity performance level.

Studies done by Peter et al. (2020) in Nigeria and Abdi and Kavale (2016) in Somalia also noted that the performance of banks and inflation are positively correlated. However, these studies were done outside Kenya. In Kenya, Makur (2014) and colleagues also carried out research and confirm that elements that affect the banks performance financially include credit risks systems and inflation. However, this study was done outside banking industry.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This section exhibits the procedures as well as plans that will be adopted in the study. The segment covers data collection plans, the research roadmap or design and the data analysis techniques that will be adopted during the study. The section generally covers the methods that will pilot the study. All the procedures in this part are backed by the aim of the study.

3.2 Research Design

There are various research designs. However, the study will focus on cross-sectional research design and this will be descriptive in nature. Copper (2000) opines that cross-sectional research design exhibits greater reliability and convenience. This design is also appropriate in cases where time and resources available for a research process are not adequate for longitudinal designs. This is the case with the present study. In the present study, there is a need to use a design that allows the analysis of data gathered across a whole population to enable an in-depth analysis and view of the population. This design stands to allow for the gathering of insights on the variables in the study.

With the population-based research, the study employed a cross-sectional methodology (Levin, 2006). When working with numerous data throughout a certain period of time, Sedgwick (2014) emphasized that cross-sectional study design is crucial for a researcher. Given that South Sudan has a variety of commercial banks, the study included distinct categories of organizations and individuals with unique features and traits.

3.3 Target Population

The population target of the research study shall consist of banks in South Sudan. According to Musyimi (2016), there are 29 registered commercial banks in South Sudan. The survey comprised of the analysis of each of these companies, and therefore this study was a census study of all the banks in South Sudan.

3.4 Data Collection

The study involved both field and non-field data. The field data were collected from the senior managers of the banks in South Sudan while the secondary data were collected from different internet-based sources of data. The secondary data included some published data associated with the current research concepts.

Accordingly, the researcher used a survey method to collect data from the finance managers within banks in South Sudan. The researcher designed a questionnaire with different sections. Under Section A, the background information covered while section B-consist of the inflation effects. Section C covered the financial Performance among the banks South Sudan. The researcher adopted drop and pick method of questionnaire delivery, especially among the finance managers among Commercial Banks in South Sudan.

3.5 Diagnostic Tests

In this study, the researcher conducted diagnostic tests on data to determine the presence of any abnormalities. Normality tests was carried out to determine whether the data is well-modelled by the normal distribution and to calculate how probable it is that the random variable underpinning the data naturally distributed.

The study included multi-co linearity tests. This test helped to determine if, with a significant degree of precision, the predictor variables can be predicted linearly from the others. Autocorrelation tests checked where error terms are transferred from one time to another in a time series. However, the homoscedasticity tests checked for homogeneity of variance. The study conducted significance tests which included T-tests and F-tests. F-tests of overall significance indicating whether the linear regression model is better suited to data than a model that does not contain any independent variables.

3.6 Data Analysis

For data analysis, the researcher employed quantitative method since the goal of the study was to examine how inflation would impact banks in South Sudan. Descriptive statistics was applied. Variables in the study helped in gathering data, where the researcher used SPSS software to analyze it.

The descriptive statistics covered mean, medium range and standard deviation. This helped to show how inflation productivity of banks. Data were presented in tables, figures and pie-charts.

3.6.1 Analytical Model

Analytical model were adopted in the data analysis since it depicted the findings in a direct and clear manner. Using the multiple linear regression model of analysis, the study used the Social Science Statistical Software Analytical Package-SPSS Statistics 28 to analyze the data collected. The regression analysis helped to provide estimates of the value of the study parameters based on the model shown below:

$$Y=a+\beta_1X_1+\beta_2X_2+\beta_3X_3+\mathcal{E}$$

Where:

Y = Financial Performance

X₁ = Purchasing power

X₂ = Prices index

X₃ = GDP Deflation

X₄=Consumer Demand

a = constant term

β₁, β₂, β₃ = Beta coefficients

ε = Error term

3.6.2 Diagnostic Tests

To determine the presence of any abnormalities, diagnostic tests were performed on raw data. Normality tests were carried out to determine whether the data is well-modelled by the normal distribution and to calculate how probable it is that the random variable underpinning the data is naturally is distributed. Multicollinearity tests were performed to determine if, with a significant degree of precision, the predictor variables can be predicted linearly from the others. Autocorrelation tests were used to review where error terms are transferred from one time period to another in a time series. Homoscedasticity on the other hand checked for homogeneity of variance i.e., if all its random variables have the same finite variance. Linearity tests evaluate whether a change in the independent variables causes the dependent variable to change proportionately.

3.6.2 Tests of Significance

The study included significance tests which includes T-tests and F-tests. F-tests providing overall significance on linear regression model and how it is better suited to data than a model that does not contain any independent variables. T-tests are statistical hypotheses and were used to analyse one or two means of sampling.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

The research's chapter defines the analysis adopted and results generated. It covers participants and how they responded. It also includes discussion on the main findings.

4.2 The Participant Response Rate

A census inquiry was adopted. Out of all the 29 banks involved, more than 24 of the banks managers responded. This confirms that the study achieved a response rate of 83%. Thus, it is considered a good response rate based on Mugenda and Mugenda (2006) findings. The response rate is shown in the table below.

Item Scale	Frequency	%
Responded Group	24	83
Non-Response Group	5	17
Total	29	100%

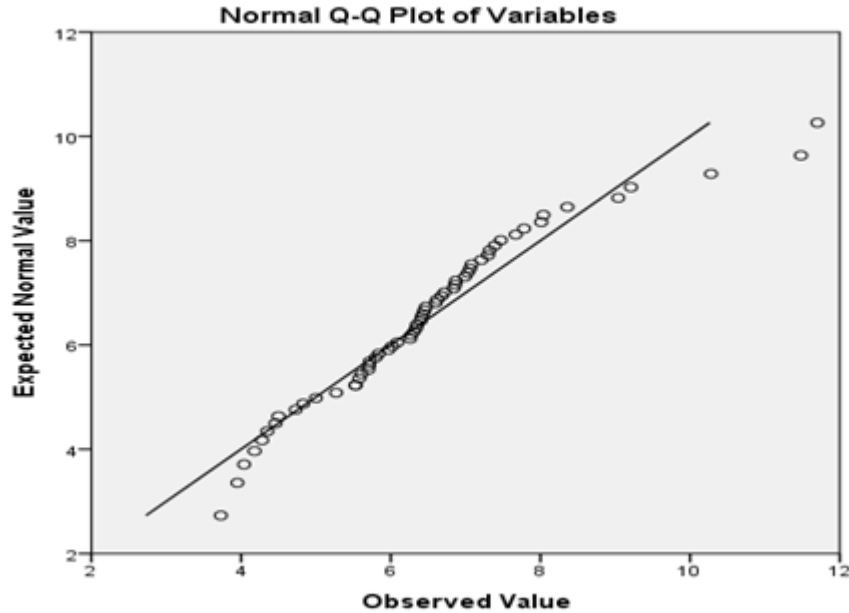
Source: (Author, 2022)

4.3 Diagnostics Test for Data Validity Tests

Diagnostic tests were done in this study. These were done based on the data gathered. The tests included the normality test as well as multi-collinearity test and autocorrelation. The homoscedasticity review and evaluation was also done.

4.3.1 Normality Tests

Normality tests are important because they assess if a sample is drawn from a normal distribution. The study tested for normality using the Q-Q plot. In a Q-Q plot data is assumed to be normally distributed if it clustered around the horizontal curve. The test results are shown in the figure below.



Source: (Author, 2022)

The figure above confirms the normality was achieved from the data. In addition, the data meets the line of best and lie within the range. This is a confirmation of normal distribution value.

4.3.2 Multicollinearity Test

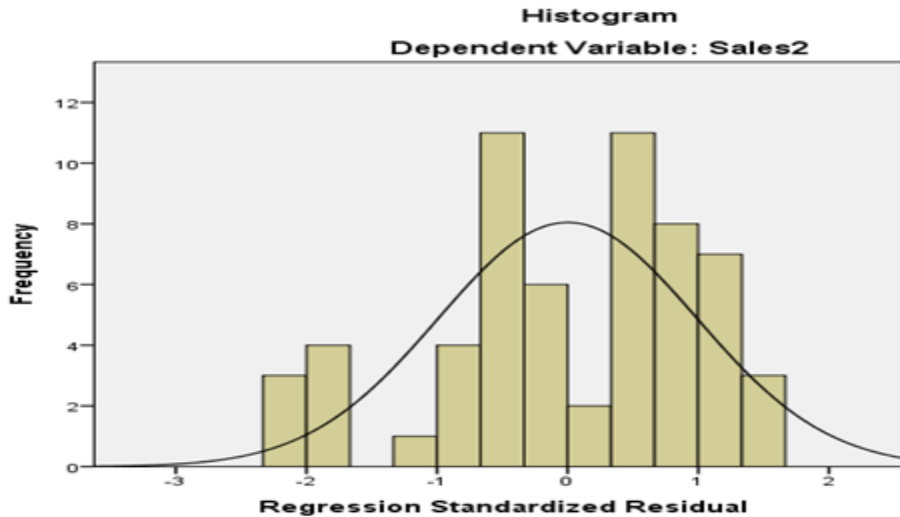
The analysis also adopted multicollinearity test. This was done to help evaluate the correlation levels. Using VIF models and it was noted that the values were less than four. This means there is no problem in the data sets. This is shown below.

Collinearity Statistics		
	Tolerance	VIF
Performance	0.954	1.0119
Consumer Demand	0.576	1.651
GDP Deflation	0.424	1.871
`Purchasing power	0.915	1.003
Price Index	0.997	1.022

Source: (Author, 2022)

4.3.3 Homoscedasticity

Homoscedasticity was done to confirm any of the variance on the data. The results confirmed non-variance. There was no problem on the data set and there was high normality. This is well depicted in the figure below.



Source: (Author,

2022)

4.3.4 Linearity and Auto-Correlation Tests

The inquiry used Durbin Watson statistic to test for the correlation. The analysis confirmed a value of 1.006 and this means auto-correlation was not a challenge. This is shown in the figure below.

Auto Correlation

Durbin Watson statistic	1.006
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Source: (Author, 2022)

4.4 Descriptive Statistics

Descriptive statistics was used to summarize the study values. This was done to get the data understanding in a simpler way. The mean and SD were used in summarizing the data and this

was done with the inflation and financial output as the main variables. A summary of the observations is shown below.

Table 4.4 Descriptive Statistics

	Mean	Std. Deviation
Performance	4.21	0.647
GDP deflation	4.15	0.911
Purchasing Power	15.40	1.971
Consumer Demand	8.01	1.801

Source: (Author, 2022)

From the table, it is evident that performance output had a mean of 4.21 and a low SD of 0.65. However, GDP inflation had a mean of 4.15 and SD of 0.91, while the purchasing power had a mean of 15.40 and SD of 1.97. However, the consumer demand and price fluctuations had mean of 8.01 and SD of 1.80. This means that low output in the banks is associated with high inflation in the country. The banks should devise ways of promoting their success during inflation.

4.5 Regression Analysis

This model was used to show the power linking the topic concepts. Findings show a positive value and a model summary is provided based on the ANOVA and other co-efficient of variation values. This is depicted in the table below.

Table 4.5 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.601 ^a	.361	.539	.300127	.701

a. Predictors: (Constant), purchasing power, consumer demand, price index, GDP deflation%

b. Dependent Variable: ROA

Source: (Author, 2022)

The above analysis confirmed that R was 0.601 and R square was 0.361 which is 36%. This means that the success in terms of ROA and other output measures in the banks is due to inflation conditions in terms of GDP deflation, purchasing power, demand and price index. This is also summarized in the ANOVA table.

Table 4.6 ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.841	4	3.190	24.817	.000 ^b
	Residual	6.840	57	.127		
	Total	18.562	61			

a. Predictors: (Constant), purchasing power, consumer demand, price index, GDP deflation%

b. Dependent Variable: ROA

Source: (Author, 2022)

With an F-value of 24.817, it can be argued that there was a high level of significance in the data. The model fit with the concepts and it is statistically important to argue that inflation affects the output of the banks. Banks should find ways of managing issues such as purchase rate, and invest in times when inflation is low to promote their success.

Table 4.7 Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.883	.702		1.212	.222
GDP Deflation	.507	.099	.503	3.351	.001
Consumer Demand	.044	.057	.228	1.925	.210
Price Index	.230	.047	.632	7.056	.000

Source: (Secondary Data, 2021)

From the coefficient table above, it was noted that various factors influence the bank success and performance.

$$Y = 0.883 + 0.507X_1 + 0.044X_2 + 0.230X_3$$

Where:

Y = the financial output and performance of the banks

X₁ = GDP deflation

X₂ = Consumer Demand

X₃ = Price Index

4.6 Discussion of the Findings

This study confirms the view that inflation affects the operations of the banks. The values indicate that when there are inflation the bank experience low purchasing power form clients. There is also high price index that discourages clients from buying from the banks. With low mean on GDP deflation, banks cannot promote their operations during inflation levels.

Moreover the regression factors confirmed that purchasing power of the clients is low during inflation as people do not have money to spend. The little money available are used in managing family operations in terms of food and basic needs and no money to invest in banks in terms of deposits. This lowers the banks success and general outlook.

It is imperative that banks find different ways of promoting their output in times of inflation. The study findings support Businge (2017) analysis which indicated banks experience low profits during inflation. He noted that banks should diversify their operations and look for alternative sources of income in times of crisis such as inflation.

The study also concur with the views of Makur (2014) who noted financial success of the banks should be based on innovation of new ways and avoiding risky investments in times of crisis. Banks that operate across borders should also consider consumer demand and the GDP value in all their areas of operations. This is important in reducing and controlling losses in the long run.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

In this part, the overview of the study's results, the research's conclusions, its recommendations, its limitations, and recommendations for future studies are all presented.

5.2 Summary of the Findings

This research's objective is to ascertain how inflation affects the financial stability of South Sudan's commercial banks. The registered and operating banks were studied using a descriptive study approach. F-tests and T-tests were used in the study's significance analysis. After adjusting for business size, market size, liquidity, and leverage, secondary data was examined using linear regression to evaluate profitability using inflation rate as the predictor variable and ROA as the outcome variable.

According to the survey, most commercial banks have high leverage rates, which indicate that they are carrying a significant amount of debt. It was discovered that the liquidity was below average, which implies that the majority of commercial banks had limited capacity for expenditure and investment. Due to South Sudan's commercial banks' weak market power, there is clearly strong competition in the market. These results can be attributed to the mean high inflation rate observed in the research. Profitability is a challenge for the majority of commercial banks.

The inflation rates and profitability of commercial banks are significantly positively associated; this is according to regression analysis. As a result of this sort of connection, South Sudan's commercial banks find it challenging to make sizable profits because of the country's constant high rates of inflation. Banks should stay away from riskier investments while inflation is high.

According to this analysis, there is a statistically significant positive correlation between inflation rates and bank profitability. Thus, the low liquidity rates for many commercial banks have been noted in this study. As a result, the profitability of South Sudan's banks cannot be significantly impacted by this, which explains their low profits. A positive significant association between business size and profitability has been discovered by this study.

5.3 Conclusion

The analysis comes to the conclusion that South Sudan's commercial banks are making very minimal profits, and losses due to inflation. South Sudan consistently has high inflation rates relative to profitability. The low amounts of profits for commercial banks are explained by the considerable negative correlation between bank profitability and inflation. The profitability and liquidity of commercial banks in South Sudan are significantly positively correlated; this is according to correlation analysis.

The association between inflation and profitability has also been proven by regression analysis to be a strong one. The South Sudanese commercial banks' observed liquidity rates to be low, hence, the positive significant association that links high liquidity values to high profitability is consequently unimportant, and as a result, profits are consistently low. Since the values for company size are low, they cannot have an impact on the profitability of commercial banks; hence, low profits are seen. The size of the business has been shown to have a substantial positive link between inflation and profitability. Since profitability and inflation rates are inversely related, the analysis finds that profit for the same time decreases as inflation increases.

5.4 Recommendations

The decision-makers and management of commercial banks in South Sudan should develop better strategies to combat the effects of inflation in order to draw investors, and allow sustained profits. This is based on the consistently high inflation rate that has been observed and its impact on the profitability of commercial banks. The outcomes of this research should also assist the Central Bank of South Sudan in developing policies to stabilize inflation rates to a level that has a minimal impact on the financial market and the profitability of commercial banks in the country.

5.5 Limitations of the Study

The South Sudanese commercial banks and the Central Bank of South Sudan's secondary data collection and the financial statements served as the study's foundation. The researcher relied entirely on the accuracy of the data as it was supplied and was strictly prohibited from making any alterations to the financial accounts from which the data were taken. Therefore, the accuracy

of the reported financial accounts of commercial banks affects the study's findings and outcomes. The study's conclusions were based only on return on assets (ROA), which is a gauge of a bank's profitability. This was due to the fact that, in contrast to other financial performance measurement criteria, this information was more readily available to the researcher. Only commercial banks that are registered and operating in South Sudan were included in this analysis.

Since all businesses are impacted by inflation rates, the results of the study are restricted to commercial banks and cannot be applicable to any economic sectors or other financial institutions in South Sudan. The researcher was unable to inquire some of the information on the financial statements of several commercial banks due to the short period of time.

5.6 Suggestions for Further Research

The results of this study show that only inflation rate has been a meaningful predictor of ROA, with all other control variables failing the test. Consequently, further study on the same subject is required, but this time it should take into account factors like how the general public views each commercial bank and the lifetime of banks in South Sudan. Further study is required to comprehend how different indicators of financial success are impacted by inflation rates. This may apply to returns on equity (ROE), returns on capital employed (ROCE), returns on investments (ROI), or returns on deposits (ROD).

However, this study is only applicable to commercial banks, it has produced several solid findings. Thus, a thorough investigation that includes both financial institution and commercial banks registered and functioning during the same study period is required to ensure the accuracy and dependability of the data and allow for generalization of the findings. It is important to do research on this subject that includes both qualitative and quantitative data in order to better understand why some institutions are consistently losing money.

REFERENCES

- Acedo, F. J., Barroso, C., & Galan, J. L. (2006). The resource-based theory: dissemination and main trends. *Strategic management journal*, 27(7), 621-636.
- Alvarez, S. A., & Busenitz, L. W. (2001). The entrepreneurship of resource-based theory. *Journal of management*, 27(6), 755-775.
- Barney, J. B. (1996). The resource-based theory of the firm. *Organization science*, 7(5), 469-469.
- Berger, A. N., Hasan, I., & Zhou, M. (2010). The effects of focus versus diversification on bank performance: Evidence from Chinese banks. *Journal of Banking & Finance*, 34(7), 1417-1435.
- Businge, H. (2017). *Effect of Liquidity Management on the Performance of Commercial Banks: A Case of Stanbic Bank Uganda Limited* (Doctoral dissertation, Makerere University).
- Grant, R. M. (1991). The resource-based theory of competitive advantage: implications for strategy formulation. *California management review*, 33(3), 114-135.
- Helhel, Y. (2015). Evaluating the performance of the commercial banks in Georgia. *Research Journal of Finance and Accounting*, 5, 146-156.
- Kitere, W. A. O., Namusonge, G. S., & Makokha, E. N. (2019). Effect of Liquidity Management on Performance of Commercial Banks in Kenya. *European Journal of Business and Management*, 11(17), 30-41.
- Levin, K. A. (2006). Study design III: Cross-sectional studies. *Evidence-based dentistry*, 7(1), 24-25.
- Makur, P. M. (2014). *The effects of financial innovation on the financial performance of commercial banks in South Sudan* (Doctoral dissertation, University of Nairobi).
- Messner, W. (2003). Creating Value for Multinational Customers through Cash Management. *TREASURY MANAGEMENT INTERNATIONAL*, 16-22.

- Mimano, S. M. (2014). *Outsourcing of cash management services and performance of commercial banks in Kenya* (Doctoral dissertation, University of Nairobi).
- Mogga, J. P., Mwambia, F., & Kithinji, M. M. (2018). Effect of credit risk management on the financial performance of commercial banks in Juba city, South Sudan. *International Academic Journal of Economics and Finance*, 3(2), 93-116.
- Moss, J. D., & Stine, B. (1993). Cash conversion cycle and firm size: a study of retail firms. *Managerial Finance*.
- Moyo, D., & Tursoy, T. (2020). Impact of Inflation and Exchange Rate on the Financial Performance of Commercial Banks in South Africa. *Journal of Applied Economic Sciences*, 15(3).
- Muthama, R. A. (2016). *Effects of cash management practices on operational performance of selected public hospitals in Kisii County, Kenya* (Doctoral dissertation, COHRED, JKUAT).
- Obradovich, J., Gill, A., & Biger, N. (2014). The impact of independent directors on the cash conversion cycle of American manufacturing firms.
- Olsen, C., & St George, D. M. M. (2004). Cross-sectional study design and data analysis. *College entrance examination board*, 26(03), 2006.
- Oseifuah, E. K. (2016). Cash Conversion Cycle theory and corporate profitability.
- Pavlis, N., Moschuris, S., & Laios, L. (2018). Supply management performance and cash conversion cycle. *International Journal of Supply and Operations Management*, 5(2), 107-121.
- Peter, A. I., Njoku, P. N., Ugoani, J., Nwaorgu, O. C., & Ukeje, O. S. (2020). Cash Management and Bank's Financial Performance: Evidence from selected Deposit Money Banks in Nigeria. *AFRE Accounting and Financial Review*, 3(2), 180-189.
- Richards, V. D., & Laughlin, E. J. (1980). A cash conversion cycle approach to liquidity analysis. *Financial management*, 32-38.

- Salih, F. I., Abas, H. B., Azizan, A., & Daud, S. M. (2018). Enhancement of Physical Security Control for Data Centre and Perimeter in Banking: A Case Study of Central Bank of Sudan (CBOS). *Open International Journal of Informatics (OIJI)*, 67-84.
- Sedgwick, P. (2014). Cross sectional studies: advantages and disadvantages. *Bmj*, 348.
- Solem, R. C. (2015). Limitation of a cross-sectional study. *American Journal of Orthodontics and Dentofacial Orthopedics*, 148(2), 205.
- Zhang, H., & Chan, K. C. (2018). Bank shareholding and corporate cash management: Evidence from China. *The North American Journal of Economics and Finance*, 44, 235-253.

APPENDICES

APPENDIX I: DATA COLLECTION SHEET

APPENDIX I: LIST OF COMMERCIAL BANKS

1. Agricultural Bank of Sudan.
2. African National Bank
3. Afriland First Bank South Sudan
4. Agricultural Bank of South Sudan
5. Buffalo Commercial Bank
6. Charter One Bank South Sudan
7. Commercial Bank of Ethiopia (South Sudan)
8. Cooperative Bank of South Sudan
9. Ecobank South Sudan
10. Eden Commercial Bank
11. Equity Bank South Sudan Limited
12. International Commercial Bank
13. Ivory Bank
14. KCB Bank South Sudan Limited
15. Kush Bank Plc
16. Liberty Commercial Bank
17. National Bank of Egypt Juba
18. Mountain Trade and Development Bank
19. National Credit Bank
20. Nile Commercial Bank
21. Opportunity Bank South Sudan
22. Southern Rock Bank
23. People's Bank Plc

24. Phoenix Commercial Bank
25. Qatar National Bank
26. Regent African Bank
27. Royal Express Bank
28. South Sudan Commercial Bank
29. Stanbic Bank South Sudan Limited
30. Alpha Commercial Bank
31. Ebony National Bank
32. St. Theresa Rural Development Bank

APENDIX II: QUESTIONNAIRE

BANKS NET INTEREST MARGIN

Bank/Year	2017	2018	2019	2020	2021
1. Agricultural Bank of Sudan.					
2. African National Bank					
3. Afriland First Bank South Sudan					
4. Agricultural Bank of South Sudan					
5. Buffalo Commercial Bank					
6. Charter One Bank South Sudan					
7. Commercial Bank of Ethiopia (South Sudan)					
8. Cooperative Bank of South Sudan					

9. Ecobank South Sudan					
10. Eden Commercial Bank					
11. Equity Bank South Sudan Limited					
12. International Commercial Bank					
13. Ivory Bank					
14. KCB Bank South Sudan Limited					
15. Kush Bank Plc					
16. Liberty Commercial Bank					
17. National Bank of Egypt Juba					
18. Mountain Trade and Development Bank					
19. National Credit Bank					
20. Nile Commercial Bank					
21. Opportunity Bank South Sudan					
22. Southern Rock Bank					
23. People's Bank Plc					
24. Phoenix Commercial Bank					
25. Qatar National Bank					

26. Regent African Bank					
27. Royal Express Bank					
28. South Sudan Commercial Bank					
29. Stanbic Bank South Sudan Limited					
30. Alpha Commercial Bank					
31. Ebony National Bank					
32. St. Theresa Rural Development Bank					

ANNUAL DATA ON INFLATION RATE

Item/Year	2017	2018	2019	2020	2021
Inflation Rate					

APPENDIX 3: DATA GATHERED

n	BANK	INFLATION RATE	GDP DEFLATION	CONSUMER DEMAND	PRICE INDEX	PURCHASING POWER IN %
1	Agricultural Bank of Sudan.	5.72	0.7	0.7	2.9	80.99
2	African National Bank	5.72	1.9	1.77	2	69.74
3	Afriland First	5.72	1.9	1.93	4.8	80.5

	Bank South Sudan					
4	Agricultural Bank of South Sudan	5.72	1.1	1.15	4.1	74.14
5	Buffalo Commercial Bank	5.72	7.7	7.65	5.8	73
6	Charter One Bank South Sudan	5.72	6.3	5.43	4.1	56.06
7	Commercial Bank of Ethiopia (South Sudan)	5.72	2.6	2.83	7	61.43
8	Cooperative Bank of South Sudan	5.72	4.6	4.4	3.6	72.86
9	Consolidated Bank	5.72	0.6	0.5	-0.8	69.8
10	Ecobank South Sudan	5.72	8.5	8.61	4.7	76.36
11	Eden Commercial Bank	5.72	0.3	0.28	1	75.41
12	Equity Bank South Sudan Limited	5.72	0.6	0.47	1.8	54.03

13	International Commercial Bank	5.72	4.2	4.26	4.9	74.19
14	Ivory Bank	5.72	1.4	1.15	-3.3	68.69
15	KCB Bank South Sudan Limited	5.72	8.8	9.79	7.7	66.55
16	Family Bank	5.72	1.6	1.62	4	79.57
17	First Community Bank	5.72	28.7	0.4	0.4	1.8
18	GTB Bank	5.72	65	0.95	1.09	1.6
19	Guardian Bank	5.72	33.4	0.5	0.46	3
20	Gulf African Bank	5.72	34	0.6	0.62	2.7
21	Habib Bank A.G Zurich	5.72	137	0.4	0.42	4.3
22	Royal Express Bank	5.72	33.12	1.7	1.46	2.6
23	South Sudan Commercial Bank	5.72	34.02	4.1	4.19	5.5
24	Stanbic Bank South Sudan Limited	5.72	42	0.3	0.32	1.3
25	Alpha Commercial Bank	5.72	33.3	12	12.83	5.5
26	Ebony National Bank	5.72	0	0.2	0.22	1.4

27	St. Theresa Rural Development Bank	5.72	44	0.3	0.29	2.5
28	Royal Express Bank	5.72	42	3.4	3.39	1.9
29	South Sudan Commercial Bank	5.72	28.54	4.2	4.17	4.6
30	National Credit Bank	5.72	67	0.3	0.3	1.2
31	Nile Commercial Bank	5.72	42.4	1.8	1.74	3.8
32	Opportunity Bank South Sudan	5.72	31.1	0.5	0.47	4.2