EFFECTS OF EXCHANGE RATE FLUCTUATIONS ON FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN SOUTH SUDAN

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NOVEMBER 2016
DECLARATION

I declare that this project is my original work and has not been presented in any other institution for academic accreditation.

Signature: ………………………………..… Date…………………………..
Manyok Andrew John
D61/75359/2014

This research project has been submitted for examination with my approval as the University of Nairobi supervisor

Signature……………………………….. Date………………………………...

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DEDICATION

I dedicate this paper work to my loving family for their love, understanding, and support. They have been inspirational to me without them this research projects would have been impossible to carry out.
ACKNOWLEDGEMENTS

Firstly, I thank the almighty God for the gift of life, knowledge and wisdom and for his provision of good health during undertaking the project.

Secondly, I acknowledge my supervisor Dr. Kennedy Okiro for his support, advice and guidance.

Lastly, I acknowledge my friends, colleagues and my father Ajak Magok for his moral and financial support for my education and also my brother Mayom Ajak Magok my sister Mary Anok ajak magok for all the encouragement and moral support.
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ABSTRACT

In an international trade involve different currencies; the variability of foreign exchange rates is a potentially interesting factor that drives the level of profitability of commercial banks as it affects their financial intermediation process. Fluctuations in exchange rate may be a source of risk to an organization. Huge losses in foreign exchanges may result to organizations failures in addition to instigating enormous burdens on profitability of an organization. Exchange rate variations in South Sudan have been characterized with periods of rapid depreciation of the domestic currency Sudanese pounds. The study aimed at investigating the effects of exchange rate fluctuations on financial performance of financial institutions in South Sudan. The study reviewed theoretical and empirical studies on exchange rate and financial performance. The study adopted a descriptive survey. Target focused on all financial institutions operating in South Sudan. Secondary data was collected from the banks’ consolidated financial statements as well as Central Bank of South Sudan. The study carried out the measures of central tendency as descriptive statistics to describe the data. The study adopted correlation analysis to explain the association between ROA, inflation rates, interest rates spread, bank size and exchange rates. A multiple linear regression model was employed. Return on assets was the dependent variables and exchange fluctuations variables as the independent variables. The study found that exchange rate fluctuations and financial performance had a weak negative association. Additionally, the South Sudan Pounds exchange rate against the United States Dollar was observed to be really high. The study concluded that the inflation rates have been increasing yearly over the entire study period. The relationship however between inflation and returns on assets was negative and hence it negatively impacted performance. The study concluded that interest rates especially lending rates have been increasing over time whereas the same observation was not eminent in deposit rates by banks. The study therefore concludes that the interest rates spread has been increasing in the recent years since borrowing had become expensive thus profitable whereas deposits rates were very small. The study recommended relevant authorities for instance. The Central Bank of South Sudan should adequately put measures to safeguard the value of the domestic currency. This would ensure that the value on the same does not fluctuate much day in day out.
**ABBREVIATIONS AND ACRONYMS**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOSS</td>
<td>Bank of Southern Sudan</td>
</tr>
<tr>
<td>CBK</td>
<td>Central Bank of Kenya</td>
</tr>
<tr>
<td>CBOS</td>
<td>Central Bank of Sudan</td>
</tr>
<tr>
<td>CPA</td>
<td>Comprehensive Peace Agreement</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GoS</td>
<td>Government of Sudan</td>
</tr>
<tr>
<td>GoSS</td>
<td>Government of Southern Sudan</td>
</tr>
<tr>
<td>NSE</td>
<td>Nairobi Securities Exchange</td>
</tr>
<tr>
<td>PPP</td>
<td>Purchasing Power Parity</td>
</tr>
<tr>
<td>ROA</td>
<td>Return on Assets</td>
</tr>
<tr>
<td>ROE</td>
<td>Return on Equity</td>
</tr>
<tr>
<td>SPSS</td>
<td>Statistical Package for Social Sciences</td>
</tr>
<tr>
<td>SSP</td>
<td>South Sudan Pounds</td>
</tr>
<tr>
<td>USD</td>
<td>United States Dollar</td>
</tr>
</tbody>
</table>
CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

In an international trade involve different currencies; the variability of foreign exchange rates is a potentially interesting factor that drives the level of profitability of commercial banks as it affects their financial intermediation process (Chiira, 2009). Because there is no country that is self-reliant but instead they all transact business with one another, foreign exchange rates become handy. Adetayo, Dionco and Oladejo (2004) explain that exchange rate variation is significant in determining a country’s balance of trade. Berger and Bouwman (2010) establish that exchange rates like any other commodity have demand side and supply side. Supply of currencies is explained by changes in fiscal policies whereas currency demand in influenced by a wide range of factors such as inflation rates and interest rates (Brunnermeier & Lasse, 2009).

This study was anchored on purchasing power parity theory and international Fishers effect theory. Purchasing power parity (PPP) theory explains that the value of homogenous goods is similar in different countries based on the currency of each country. This theory is based on the assumptions that there are no transactional costs, no barriers to trade and the commodities being traded are homogeneous. Ross (2008) posits that a country’s currency may be incorrectly valued whereby money has no purchasing power against the country’s commodities level. The international fisher effect theory explains that differences in returns equal inflation rate differences between to give countries. The theory holds that a strategy to borrow from one country and invest in another country should not provide positive returns as exchange rates adjust to offset differences in interest rate (Ubindi, 2006).
Levels of exchange rate fluctuations in South Sudan have gone high thus forcing Central Bank of Sudan (CBOS) to intervene to ensure stability. From year 2014-2015 the country’s exchange rate against the United States Dollar (USD) has depreciated from Sudanese Pound SDG 2.83 to a low of SDG 6.10 making it difficult for the banks to predict the future rate with precision. This has greatly affected the performance of financial institutions as they seek to provide adequate currency to promote international business.

1.1.1 Exchange Rate Fluctuation

Bradley and Moles (2002) defined exchange rate as the price of a unit of foreign currency against domestic currency. According to Reid and Joshua (2004), exchange rate is the value of the one unit of foreign currency against local currency. Omagwa (2005) posit that exchange rates like any other commodity are explained by the law of demand and supply. Supply of currency is explained by changes in fiscal policies whereas currency demand in influenced by a wide range of factors such as inflation rates and interest rates. Murthy and Sree (2003) argued that exchange rate enables comparison of prices of commodities quoted in diverse currencies.

Adetayo, Dionco and Oladejo (2004) explain that exchange rate variation is significant in determining a country’s balance of trade. According to Omagwa (2005), fluctuations in exchange rates impacts on prices of imports directly thus inversely affecting a country’s external sector. Murthy and Sree (2003) postulated that country’s foreign debt is significantly affected by the fluctuations in exchange rates. The central bank typically under a fixed exchange rate system will set a par value between foreign and domestic currencies (Reid and Joshua, 2004).
1.1.2 Financial Performance

Murthy and Sree (2003) define financial performance as the ability to leverage operational and investment decisions and strategies to achieve a business’ financial stability. According to Adetayo, Dionco and Oladejo (2004), financial performance comprises of achievement measurements of an organization. Financial performances measure an organizations benchmarks and financial objectives. A wide range of measures are used in measuring firm’s financial performance including; profitability measures, liquidity measures and debt measures (Reid and Joshua, 2004).

Bradley and Moles (2002) show that the ultimate goal of any organization is profit maximization therefore, profitability measures are widely used as compared to other measures. Profitability measures comprises of return on equity (ROE), return on asset (ROA) and net interest margin. Khrawish (2011) explain that ROA is significant in explaining bank’s profitability; ratio typically gives an insight on the efficient of a management based on its use of assets. Net Interest Margin explains interest income generated and interest paid by banks. Return on equity explains shareholders equity against banks’ profitability.

1.1.3 Exchange Rates Fluctuations and Financial Performance of Banks

Exchange rate fluctuations influences a country’s prices through import prices of consumption and intermediate goods (Watkins, 2014). According to Gatobu (2013), the main function of commercial banks is to mediate between supply side and the demand side of the foreign currency, any restrictions on how commercial banks go about their business would affect their financial performance. Exchange rate fluctuation impacts on a country’s prices directly and significantly influences production cost of domestically produced goods.
Watkins (2014) establishes that exchange rates fluctuations typically generate significant gains/losses. Jamal and Khalil (2011) documented that the more a company is involved in international trade, the more its accounting exposure and unless a company hedges this risk then it faces financial gains and/or losses from transaction and translation of foreign activities. Another unique dimension of exchange rate exposure is that of projects funded by foreign donors as Kinyuma (2013) investigated. According to Gatobu (2013), multinational companies’ net income is greatly affected by unrealized foreign exchange gains/losses.

1.1.4 Financial Institutions in Southern Sudan

Southern Sudan gained her independence in year 2011 after 20 years of civil war. Sudan operated under a dual banking system that conventional and Islamic banking. The dual banking was the basis on which institutional framework currently supports the financial sector in Southern Sudan. The Central bank of South Sudan (COBS) was established to cater for both Islamic and conventional windows.

Five commercial banks currently operate in Southern Sudan including one state owned agricultural bank, three locally incorporated banks and one foreign subsidiary. The main products consists of foreign exchange, transfer and remittance services while only a few commercial banks currently provide loans, trade finance or saving products. New entrants are expected to capitalize on these market gaps in 2009: Kenyan based Equity Bank and the Ethiopian Commercial Bank have already been issued licenses by BOSS, and Exim Bank of Tanzania is intending to apply for such a license shortly. The Bankers’ Association of Southern Sudan meets on a monthly basis to confer with regulatory/ government authorities and seek solutions to the issues that limit their operations. Various microfinance institutions (MFIs) and small cooperatives savings and credit associations also operate in Southern Sudan.
1.2 Research Problem

Fluctuations in exchange rate may be a source of risk to an organization. Huge losses in foreign exchanges may result to organizations failures in addition to instigating enormous burdens on profitability of an organization (Kinyuma, 2013). Jamal and Khalil (2011) explained that exposure to exchange rates risk due its fluctuations can be discerned basically from an organization’s accounting data,

Exchange rate variations in South Sudan are characterized with periods of Sudanese pounds depreciation, which has negatively affected the South Sudanese economy. This has seen the exchange rate against the USD to get to as high as SDG 6.10 making it difficult for the financial institutions to predict the future rate with precision. This has greatly affected the performance of financial institutions as they seek to provide adequate currency to promote international business.

Wong and Leung (2008) examined Exposure of foreign exchange of Chinese banks. The study revealed that bank size and foreign exchange exposure positively correlates. The study found that appreciation of foreign exchange minimizes equity values thus hampering bank’s performance. Opaluwa, Umeh and Ameh (2010) investigated effects of exchange rate fluctuations on the Nigerian manufacturing sector. The study found that exchange rate fluctuations and performance have a statistically significant association. The study concluded that exchange rate fluctuations negatively affect output of the manufacturing sector. Owoeye and Ogunmakin (2013) investigated effects of exchange rate volatility on performance of commercial banks in Nigeria. The study concluded that fluctuations in exchange rates positively influence lenders ability in management of loans. The study found an insignificant relationship between exchange rate and capital deposit ratio. Pitia and Lado (2015) investigated the relationship between exchange rate
and inflation in South Sudan. The study concluded that depreciation currency negatively influences economic growth. Ebaidalla (2014) examined impacts of real exchange rate misalignment on economic performance in Sudan. The study revealed that economic policy significantly affects equilibrium exchange rate.

Cherop (2010) investigated effects of exchange rate fluctuations on tea export earnings among smallholders’ tea factories in Kenya. The study established that fluctuations in exchange rate to a large extent affected the earnings of smallholders at tea factories. During the time of depreciating local currency, the export earnings were higher even with low export quantities while export earnings reduced when the currency was appreciating. Maina (2010) examined impact of exchange rate variability on investment in the electric power sub-sector in Kenya. Mania’s findings show that the investments were high in the power subsector when the exchange rates were stable as compared to times of high fluctuations. Mwaniki (2012) examined the sensitivity of Kenya banks' stock returns to interest rate and exchange rate changes. This study measured performance using stock returns in Kenya. The findings show that 73.2 % changes stock price of commercial banks listed in the NSE could be accounted for by changes in foreign exchange. Njenga (2014) examined the impact of real exchange rate volatility on economic growth in Kenya and established that exchange rate volatility positively impacts on GDP growth but is not significant in affecting GDP growth rate.

From the above it is clearly that there has been no study done on the effects of exchange rate fluctuations on financial performance of financial institutions in South Sudan. Studies done in other countries may not be applicable for in financial institutions in South Sudan due to different macro-economic variables. This study therefore sought to fill this gap by answering the
following research questions: what are the effects of exchange rate fluctuations on financial performance of financial institutions in South Sudan?

1.3 Research Objective
The study aimed at investigating the effects of exchange rate fluctuations on financial performance of financial institutions in South Sudan.

1.4 Value of the Study
To the managers of commercial banks in South Sudan, the findings of this study would provide information to guide their management decisions following the changes in the exchange rate in South Sudan for a strong banking industry.

For the Government of South Sudan, the findings of this study would inform the formulation of policies and regulations for a strong and resilient banking industry. The findings of this study would inform the fragile foreign currency reserves making it difficult for the banking industry to transact freely.

The study will provide information on effects of exchange rate fluctuations on financial performance that will benefit academicians and researchers who intend to carry out further research on exchange rate fluctuations and financial performance.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction
This chapter presents literature reviewed in order to provide a basis for the study and the concepts. In addition, the chapter highlights theories guiding the study, determinants of financial performance, empirical studies thereby illustrating the research gap after which it presents the summary of empirical literature.

2.2 Theoretical Review
The study was based on Purchasing Power Parity Theory and the International Fischer Theory.

2.2.1 The Purchasing Power Parity (PPP) Theory
Advanced by Menon and Viswanathan (2005) PPP theory explains that the value of homogenous goods is similar in different countries based on the currency of each country. According to them, when purchasing power is similar in different countries then the exchange rates between the country’s currencies will be at equilibrium. Reid and Joshua (2004) postulated that ratio of commodities price levels should equal the country’s currency. According Ross (2008), a country’s currency may be incorrectly valued whereby money has no purchasing power against the country’s commodities level.

This theory is based on the assumptions that there are no transactional costs, no barriers to trade and the commodities being traded are homogeneous. If the trading currency is exchanged at the spot exchange rate, the price of a homogenous commodity should be identical across borders.
The theory suggested use of price indexes to determine the exact price of a homogenous commodity between countries. The main challenge of this belief is in measuring Purchasing Power Parity constructed from price indexes given that different countries use different goods to determine their price level (Reid, 2005).

Menon and Viswanathan (2005) showed two classification of PPP; relative and absolute. According to them, absolute PPP implies that regardless of the currency similar commodities should cost the same thus emergence of the Law of One Price. Due to limitations in the absolute PPP, another form of PPP has evolved, the relative PPP. Relative PPP recognizes imperfections of the markets; it indicates what exchange rate changes rather than absolute exchange rates over time (Ross, 2008). This theory is relevant for this study as it explains a country’s currency value over another country’s currency. This theory argues that in the equilibrium exchange rate is one that ensures that the value exchanged can purchase the same basket of goods and services from either of the countries involved.

2.2.2 The International Fisher Effect

Proponents of the international fisher effect Shapiro (2007) explains that differences in returns equal inflation rate differences between to give countries. According to the theory, nominal risk-free interest rates comprises of anticipated inflation and real rate of return. Ubindi (2006) asserts that differences in interest rates amongst countries are as consequences of expected inflation diverge because investors require the same real return. Staikouras and Wood (2004) show that foreign currencies normally will depreciate if they have relatively higher interest rates.
The theory holds that a strategy to borrow from one country and invest in another country should not provide positive returns as exchange rates adjust to offset differences in interest rate (Ubindi, 2006). This theory is limited by the sense that other factors besides inflation influences exchange rate. This theory is relevant for this study as it explains the purchasing power of each currency which captures the inflation across countries to ensure that at equilibrium exchange rates, the basket of goods and services purchased by one unit of a country’s currency equals to those purchased in the second country.

2.3 Determinants of Financial Performance

Both internal and external factors significantly influence organizational performances. The study focused on four factors as influencing the financial performance of banks.

2.3.1 Bank Liquidity

Liquidity is a key determinant the affects commercial banks financial performance. In order for the commercial banks to smoothly mediate between the deficit and surplus households, they need to have adequate liquidity. Ubindi (2006) asserts that a tradeoff between return and risk must be established in order to determine optimal balance of holding liquid assets. According to Waheed (2009), a commercial bank might be forced to borrow punitive rates if they hold too little liquidity. High liquidity ratio on the other hand may lead to unprofitable investment activities. Inadequate liquidity may result to bankruptcy. Wamukhoma (2014) found that liquidity positively influences firm’s profitability.
2.3.2 Capital Adequacy


2.3.3 The size of the Bank

The size of the bank is another factor that determines an Organization’s financial performance. Bank size influences its performance in various ways. Ahmed, Ahmed and Ahmed (2010) explain that large banks tend to be more efficient than small banks because they are capable of exploiting more economies of scale and scope. Size can be determined by net premium which is the premium earned by a bank after deducting the reinsurance ceded. The premium base of insurers dictates the quantum of policy liabilities to be borne by them (Teece, 2009).

2.3.4 Credit Risk Management

Credit risk plays a significant role in determining a bank’s profitability. Tabari, Ahmadi and Emami (2013) assert high levels of non-performing loans in a bank hinder the institution in attaining its objectives and sometime may lead to bankruptcy. Kargi (2011 revealed that credit risk management significantly influences financial performance.
2.4 Empirical Review

Both international and local studies have been established on exchange rate fluctuations and financial performance. Wong, Wong and Leung (2008) examined Exposure of foreign exchange of Chinese banks. The study used a sample of 14 banks. The study revealed that bank size and foreign exchange exposure positively correlates. The study found that appreciation of foreign exchange minimizes equity values thus hampering bank’s performance.

Opaluwa, Umeh and Ameh (2010) investigated effects of exchange rate fluctuations on the Nigerian manufacturing sector. The study was carried for a period from 1986 – 2005. The study adopted econometric tool of regression. The study found that exchange rate fluctuations and performance have a statistically significant association. The study concluded that exchange rate fluctuations negatively affect output of the manufacturing sector.

Owoeye and Ogunmakin (2013) investigated effects of exchange rate volatility on performance of commercial banks in Nigeria. The study concluded that fluctuations in exchange rates positively influence lenders ability in management of loans. The study found an insignificant relationship between exchange rate and capital deposit ratio.

Adetayo (2013) investigated impacts of foreign exchange risks on commercial banks in Nigeria. Population for the study comprised of all commercial banks situated in Lagos. Primary data was collected through structured questionnaires. The study found that spot transaction was an effective in minimizing foreign exchange risk.
Pitia and Lado (2015) investigated the relationship between exchange rate and inflation in South Sudan. The study revealed that exchange rates did not cause CPI. The study concluded that depreciation currency negatively influences economic growth.

Ebaidalla (2014) examined impacts of real exchange rate misalignment on economic performance in Sudan. The study covered a period from 1979–2009. The study revealed that economic policy significantly affects equilibrium exchange rate.

Cherop (2010) investigated effects of exchange rate fluctuation on tea export earnings among smallholders’ tea factories in Kenya where she established that the exchange rate fluctuations greatly affected the earnings of smallholders at tea factories. During the time of depreciating local currency, the export earnings were higher even with low export quantities while export earnings reduced when the currency was appreciating. This study centered on the tea export earnings and ignored the other larger part of firms quoted on the NSE.

Maina (2010) examined impact of exchange rate variability on investment in the electric power sub-sector in Kenya. The study found that the investments were high in the power subsector when the exchange rates were stable as compared to times of high fluctuations.

Ambunya (2012) investigated relationship between exchange rate fluctuations and stock market returns volatility at the NSE. Population for the study comprised of 56 listed firms. Secondary data was collected from period 2007 to 2011. The study concluded that exchange rate fluctuations and stock market returns volatility strongly relates. The study found that exchange rate fluctuations positively influence stock market performance.
Gachua (2011) investigated influence of foreign exchange exposure on a firm’s financial performance. A sample size of 38 was used. The study found that exchange rate significantly influences exports and imports. The study concluded that unrealized foreign exchange gains/losses negatively influences Net Income.

Rutto and Ondiek (2014) examined the impact of exchange rate volatility on Kenya’s tea exports. The study was carried for a period from 1970-2008. The study employed time series analysis. The study used Multivariate co-integration technique. The study concluded that exchange rate volatility negatively influences performance of tea exports.

2.5 Summary of Literature Review
This chapter has reviewed literature relevant for the study. It specifically reviewed the theories guiding the study including: the purchasing power parity, the international Fischer effect and the unbiased forward rates which all explain how foreign exchange rates affect organizations engaged in international trade. The study further reviewed empirical studies done both from international and local perspectives. The empirical studies (Wong, Wong and Leung, 2008; Opaluwa, Umeh and Ameh, 2010; Gachua, 2011; Owoeye and Ogunmakin, 2013; Adetayo, 2013) were done on international setting in countries whose findings may not apply to Kenyan firms. The ones done in Kenya (Cherop, 2010; Maina, 2010; Ambunya, 2012; Gachua, 2011; Musyoki, Pokhariyal and Pundo, 2012; Wanjau, 2014; and Rutto and Ondiek, 2014) focused on other aspects of foreign exchange rate fluctuations and not performance of commercial banks. This study therefore sought to fill this gap by investigating the effects of exchange rate fluctuations on financial performance of commercial banks in Kenya.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction
This chapter outlines the methods that were used by the study to achieve the study objectives. It presents the research design, population and sample, data and data collection, data reliability and validity and data analysis where the model is discussed.

3.2 Research Design
The study adopted a descriptive survey. A descriptive survey examines a phenomenon’s profile by establishing it what, where and how (Mugenda & Mugenda, 2003). The descriptive survey was appropriate for this study as it intended to investigate at investigating the effects of exchange rate fluctuations on financial performance of financial institutions in South Sudan.

3.3 Population
Target population for the study comprised of all financial institutions operating in South Sudan as at December 2015. For this study, all the financial institutions were included because the target population was small.

3.4 Data and Data Collection
The study used secondary data was used for this data. Data was collected from the banks’ consolidated financial statements as well as Central Bank of South Sudan. Secondary data collected included Return on Assets for ten years starting from 2006 -2015 when the Exchange
rate started fluctuating. Data on the foreign exchange rate fluctuations was collected for the period 2006 to 2015. Semiannual data used.

3.5 Data Analysis

The study carried out the measures of central tendency as descriptive statistics to describe the data. The study adopted correlation analysis to explain the association between ROA, inflation rates, interest rates spread, bank size and exchange rates. A multiple linear regression model was employed. Return on assets was the dependent variables and exchange fluctuations variables as the independent variables.

3.5.1 Analytical Model

The multiple regression model is expressed as:

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon \]

Where:

- \( Y \) = bank’s profitability (Return on Assets)
- \( \beta_0 \) = Constant (y-intercept)
- \( X_1 \) = Foreign exchange Rate fluctuations (Standard deviation of the changes against the United States Dollar)
- \( X_2 \) = Interest Rate Spread (Lending Rates - Interest rate on deposits)
- \( X_3 \) = Inflation (Consumer Price Index)
- \( X_4 \) = Size of the Financial Institutions (Natural log of Total Assets)
- \( \epsilon \) = Error term
CHAPTER FOUR
DATA ANALYSIS PRESENTATION AND FINDING

4.1 Introduction
This chapter discusses the data analysis done, results and discussion. The chapter explores the effects of inflation rates, interest rate spread, foreign exchange rate fluctuations and size of the banks on the performance of commercial banks in South Sudan for period 2006 to 2015.

4.2 Correlation Analysis

Table 4.1: Correlation Analysis

<table>
<thead>
<tr>
<th></th>
<th>ROA</th>
<th>Inflation rates</th>
<th>Interest rates spread</th>
<th>Exchange rate</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>Pearson Correlation</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation rates</td>
<td>Pearson Correlation</td>
<td>-.031</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.843</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest rates spread</td>
<td>Pearson Correlation</td>
<td>-.026</td>
<td>-.177</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.868</td>
<td>.250</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exchange rate</td>
<td>Pearson Correlation</td>
<td>-.201</td>
<td>-.036</td>
<td>-.047</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.009</td>
<td>.818</td>
<td>.761</td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>Pearson Correlation</td>
<td>.004</td>
<td>.032</td>
<td>.408</td>
<td>-.339</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.799</td>
<td>.835</td>
<td>.006</td>
<td>.025</td>
</tr>
</tbody>
</table>

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

The inflation rates and the Returns on assets had a negative co relation with a co-efficient of -0.031. The co relation was also negative between the returns on assets and the interest rates spread as indicated by a co-efficient of -0.026. The interest rate spread also had a negative co relation with the inflation rates with a co-efficient of -0.177. The exchange rates had a weak negative co relation with returns on assets as shown by the -0.201 co relation co-efficient. This
rate also had a weak negative correlation with the inflation rates as shown by a co-efficient of 0.036.

However, co-relation between exchange rates and interest rates spread was negative as shown by the value of -0.047. Co-relations between size and the returns on assets was a weak one due to the small co-efficient of 0.004. The relationship between size and inflation rates was also weak since the co-efficient of co-relation was 0.32. Co-relation between size and interest rates spread was moderately strong indicated by the co-efficient of 0.408. The exchange rates and size however had a negative co-relation as indicated by a co-efficient of -0.339. The co-relation findings revealed a weak association between exchange rates fluctuations and returns of banks in the study period. The exchange rates fluctuations were also found to be negatively related to changes in inflation rates. These findings disagree with study conclusions by Kipchirchir (2011) who established a strong positive correlation between financial performance and exchange rates volatility. This was attributed to the differences between trading currency and financial reporting currency. Results from co-relation analysis revealed that fluctuations in the value of the domestic currency effected on financial performance of the banks.

4.3 Descriptive Statistics

Table 4. 2: Descriptive Statistics

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>.01</td>
<td>.05</td>
<td>.0330</td>
<td>.01181</td>
</tr>
<tr>
<td>Inflation Rates</td>
<td>2.63</td>
<td>19.17</td>
<td>8.5013</td>
<td>4.76605</td>
</tr>
<tr>
<td>Interest Rate Spread</td>
<td>8.54</td>
<td>14.42</td>
<td>10.3468</td>
<td>1.42985</td>
</tr>
<tr>
<td>Exchange Rate</td>
<td>.01</td>
<td>.10</td>
<td>.0181</td>
<td>.02271</td>
</tr>
<tr>
<td>Size of Banks</td>
<td>8.61</td>
<td>18.47</td>
<td>12.9788</td>
<td>3.26806</td>
</tr>
</tbody>
</table>
During the study period, ROA had a minimum of 0.01 and a maximum of 0.05. The mean for the returns was 0.0330 with a standard deviation of 0.01181. The inflation rates had a minimum of 2.63 with 19.17 as the maximum, mean for the rate was 8.5013. The high standard deviation value of 4.76605 revealed that the inflation rates in Kenya have really increased and varied over the years. The interest rate spread had a minimum of 8.54 with a maximum of 14.42. This revealed that the margin in the difference between deposit and lending rates was getting big with time. Exchange rate fluctuations had a 0 as the minimum value whereas the maximum fluctuation difference was 0.10. The mean was 0.0181 with a meager standard deviation of 0.02271. Bank size had a minimum of 8.61 and a maximum of 18.47. The mean was 12.9788 with a standard deviation of 3.26806. The Kenyan USD exchange rate was observed to have really increased over time hence the high fluctuations. The study therefore over the period of study was unstable thus implying that the currency over time was depreciating in value.

4.4 Discussions of findings

The study found a negative correlation between exchange rate fluctuations and financial performance as measured by the returns on assets ratio. The research findings further revealed that the strength of association between the fluctuations and the returns was a weak one. To a small extent this finding slightly agreed with findings by Kipchirchir (2011) who established a strong positive correlation between financial performance and exchange rates volatility. This was attributed to the differences between trading currency and financial reporting currency.

However the research findings as under the banking sector concurred with research findings from other sectors, for instance. Ambunya (2012) investigated relationship between exchange rate fluctuations and stock market returns volatility at the NSE. Population for the study
comprised of 56 listed firms. Secondary data was collected from period 2007 to 2011. The study concluded that exchange rate fluctuations and stock market returns volatility strongly relates. The study found that exchange rate fluctuations positively influence stock market performance. Gachua (2011) investigated influence of foreign exchange exposure on a firm’s financial performance. A sample size of 38 was used. The study found that exchange rate significantly influences exports and imports. The study concluded that unrealized foreign exchange gains/losses negatively influences Net Income.

The study established that over the period studies exchange rate was unstable thus implying that the currency over time was depreciating in value. The South Sudan currency has simply been losing to the US dollar over the entire study period. This has negatively influenced the South Sudan by making the cost of living expensive since the country heavily relies on imports. The findings however agree with Owoeye, and Ogunmakin (2013) who concluded that fluctuations in exchange rates positively influence lenders ability in management of loans and exchange rate and capital deposit ratio insignificant relate. Therefore, commercial banks in South Sudan are exposed to foreign exchange risks that negatively affect their performance.
CHAPTER FIVE
SUMMARY CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary
The research findings indicated that foreign exchange fluctuations had an influence on bank’s performance in the study period. The co-relation findings revealed a weak negative association between exchange rates fluctuations and ROA. The exchange rates fluctuations were also found to be related to changes in inflation rates. The South Sudan USD exchange rate was observed to have really increased over time hence the high fluctuations.

The study found a weak negative correlation between exchange rate fluctuations (SSP/USD) and financial performance. This therefore meant that as the South Sudan currency reduced in value, the returns by banks were also decreasing. However, the co-relation between foreign exchange rate fluctuations and inflation rate was also a weak positive one. This translates to positive movements in exchange rates as a result of increments in inflation. From the research findings, banks total assets and inflation rates had increased over the research period. The exchange rates were observed to be volatile and reached the lowest levels in 2011 and 2012.

5.2 Conclusions
The study found a weak negative association between exchange rate fluctuations and financial performance. Additionally, the South Sudan Pounds exchange rate against the US Dollar was found to be high during the study period. In essence, the South Sudan currency has been depreciating in values against the dollar over the recent years and this depreciation has negative
effects on returns. The researcher also concludes that total assets owned by commercial banks and the inflation rates were increasing over the years.

With regards to the inflation rate, the conclusions are that the inflation rates have been increasing yearly over the entire study period. The relationship however between inflation and returns on assets was negative and hence it negatively impacted performance. Interest rate spread negatively affects returns on assets. The study concludes that interest rates especially lending rates have been increasing over time whereas the same observation was not eminent in deposit rates by banks. The study therefore concludes that the interest rates spread has been increasing in the recent years since borrowing had become expensive thus profitable whereas deposits rates were very small. This therefore translated to higher returns by banks since customers pay more and earn less when they make deposits in banks.

This study concludes that the government should deploy adequate measures to safeguard the domestic currency. It should promote foreign direct investments so as to spur economic growth and consequently cause the local currency to appreciate. This would translate to a more stable currency against international currencies. This would consequently lower borrowing costs thus making loans even more affordable.

5.3 Recommendations to policy and practice

The relevant authorities for instance The Central Bank of South Sudan should adequately put measures to safeguard the value of the domestic currency. This would ensure that the value on the same does not fluctuate much day in day out.
The South Sudan government should streamline the immediate economic environment whereby all commercial banks operate in this country. This measure would curb variances in the deposit and lending rates. Market stabilization of the banking sector would regulate lending and deposit rates thus ensuring that the rates are almost uniform across all banks.

The Central Bank of South Sudan ought to implement efficient monetary and fiscal policies so as to help curb significant deficits in balance of payments. The government at large should deploy measures that are aimed at increasing the national income of the country based on investments funded locally. International funding should be limited to small extent so that the domestic currency can be strong in the international money markets. Banks were observed to be profitable at a time when the economy was bad whereby other sectors were experiencing difficulties in remaining afloat. The banking industry benefits in such times since the interest rate spread and inflation are high. However, the government should put measure to curb the rising of inflation in double digits. Banks Management in South Sudan should adopt hedging strategies so as to mitigate against foreign exchange risks since it affects the performance of the banks in South Sudan.

5.4 Limitations of the study

The research concentrated on ten year (2006 to 2015). The study period was therefore not entirely exhaustive in investigating exchange rate fluctuations effects on the financial performance of South Sudanese bank. Research with a wider time span would be imperative in assessing the independent variables against the dependent variables.
The research used four independent variables (the inflation rate, interest rate spread, exchange rate fluctuation and the banks total assets) in assessing their effects on banks financial performance. Therefore effects of the other economic variables were not analyzed in this research. Effects of non-financial paradigms on performance were not studied by this research; therefore the study did not address the effects of non-economic variables on performance. The study used secondary data that had been primarily collected for other objectives. Data on some variables for instance quarterly inflation data in the earlier years of the study was a problem. The research findings are therefore entirely dependent on the accuracy and validity of the data obtained from the secondary sources.

5.5 Suggestions for further research

Further assessment should be done to address the challenges that are faced by commercial banks in their attempts to mitigate against foreign exchange risks. This researcher used the US dollar fluctuation to measure the foreign exchange fluctuations. Future studies ought to be done using other international currencies for instance the Sterling pound or the Euro with reference to the South Sudan Dollar. This would ensure that comparisons in fluctuations with other currencies can be done and the effects of such changes studied against firm performance. Further studies can be done on other sectors and not entirely the banking sector for instance firms in energy, manufacturing, agriculture, tourism and other sectors. This would provide a wide pool of research findings that can be compared across the business fraternity for optimal policy formulation. Future researchers can also undertake to ascertain the effectiveness of hedging strategies for instance usage of forwards contracts in reducing foreign exchange risks.
REFERENCES


Prindl, A. R. (1976), *Foreign Exchange Risk*, John and Willy Sons


APPENDIX

Appendix I: List of Commercial Banks in South Sudan

<table>
<thead>
<tr>
<th>No</th>
<th>COMMERCIAL BANKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AGRICULTURAL BANK OF SUDAN</td>
</tr>
<tr>
<td>2</td>
<td>BUFFALO COMMERCIAL BANK</td>
</tr>
<tr>
<td>3</td>
<td>EQUITY BANK</td>
</tr>
<tr>
<td>4</td>
<td>IVORY BANK</td>
</tr>
<tr>
<td>5</td>
<td>KENYA COMMERCIAL BANK</td>
</tr>
<tr>
<td>6</td>
<td>MOUNTAIN TRADE AND DEVELOPMENT BANK</td>
</tr>
<tr>
<td>7</td>
<td>NILE COMMERCIAL BANK</td>
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</tbody>
</table>