EFFECT OF CREDIT RISK MANAGEMENT ON THE FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN JUBA CITY, SOUTH SUDAN

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ABSTRACT

The purpose of this study was to analyze the effect of credit risk management procedures adopted by commercial banks on their performance in South Sudan. Specifically, the study sought to determine the extent to which risk identification, risks monitoring procedures, and risk analysis and assessment procedures are applied in credit risk management by commercial banks in South Sudan and their overall effect on the performance of the commercial banks. The study was carried out in Juba city in South Sudan with six commercial banks namely; KCB, Equity, Cooperative, ECO bank, agricultural bank, and Eden commercial banks being the target institutions. The information was obtained from employees of these commercial banks who had various levels of experience in the banking sector. The study mainly analyzed the effects that are associated with credit risk mitigation to the performance of commercial banks. The target population of study was 80 bank employees in the credit department of commercial banks found in Juba city in South Sudan. The researcher used questionnaires in data collection. It consisted of structured questions. Before the research tool was administered to participants, pre-testing was carried out to ensure that the questions were relevant and, clearly understandable. Data that was collected was analyzed quantitatively using the Statistical Package for Social Science (SPSS). The computed data was analyzed using descriptive statistics including frequencies, means, and percentages. Interpretation of the data was done within the frame of reference of the research problem. Linear regression analysis was used to analyze the data and it expressed the analysis as well as determined the relationship between the dependent and independent variables. The study established that respondents of the study agreed that risk identification was well coordinated in their Bank (mean 4.26, standard deviation 0.44), all employees in the bank had been trained on risk identification (mean 3.76, standard deviation 0.89), well defined procedures on classifications of risk (mean 4.23, standard deviation 0.72), had well set out procedures for appraising risk (mean 4.16, standard deviation=0.83), had formulated appropriate risk monitoring practices (mean 4.23, standard deviation 1.10), had employed adequate managers to monitor the Bank's exposure to risk (mean 4.00, standard deviation 0.52), the bank had put in place written guidelines on the credit approval process (mean 4.13, standard deviation 0.73), persons empowered with the credit approval authority did not have customer relationship responsibility in the bank (mean 3.83, standard deviation 0.64). The study concludes that most of the banks considered risk identification as a process in credit risk management which affected performance, risk identification has insignificant effect on financial performance of banks, risk analysis and appraisal insignificantly affected financial performance of commercial banks, risk monitoring significantly affected financial performance, credit approval was a significant factor affecting financial performance of commercial banks. The study recommends that all banks operating across east Africa should have in place clearly defined policies on risk identification, the top management of all commercial banks should strive to improve efficiency with which staffs are able to analyze risks, the management of banks

should set up a risk management committees report any incidences of risk exposure in a timely manner, banks should put in place credit approval authorities and all approvals made should be sanctioned by the board of directors.

Key Words: *credit risk management, financial performance, commercial banks, Juba city, South Sudan*

INTRODUCTION

Commercial banks play a significant role with regard to economic growth of any country. Commercial banks acts as intermediaries through collection of excess money and lending to investors to establish projects. Commercial banks contribute towards growth of the economy by making sure credit is availed to the public (Kallberg & Udell, 2015). Commercial banks generate most revenue through issuing of loans to customers. In actual terms, loans are key assets of commercial banks representing 50-75% of the total amount of assets in the banks. Loans have significant contributions to towards economic growth of any country. Thus, efficient management of loans not only affects the lending institution but also the borrowers and the country in totality (Mac Donald & Koch, 2016). Inability to effectively manage loans would lead to accumulation of Non-performing loans that adversely affect performance of commercial banks (Jimenez & Saurina, 2016).

Credit risk is one of the most critical risks across the world among lending institutions. In England, a study on bank failures indicated that out of the sixty-two banks that existed before 1984, there were cases of untimely repayment of loans and advances (Sabrani, 2015). Developed counties like Japan, United States and Sweden and the developing states like South East Asia and Latin America have undergone a number of crisis linked with non-performing loans (Campbell, 2007).

Efficient credit management requires lending institutions to efficiently and intelligently manage the credit lines of their customers. Most lending institutions have partnered with credit reference bureaus that share among other things, the credit histories of customers that facilitate the process of appraisal of credit to customers. This helps lending institutions to reduce exposure to bad debts in the event that customers fail to repay the advanced amount. Just like a sale, credit management starts after selling the product all extents all through to a point when payment is finally made and recorded. Technically, something is not regarded as a sale until money is collected.

Establishing maximum credit policy as a composition of credit policy variables is hard to get. Firms will be required to change one or more of its variables at a time and note the influence. Studies have confirmed that the prevailing economic conditions have an influence on the credit policy that a lending institution has in place (Pandey, (2008). A change in these economic conditions results into a change in the credit policy of the firm to meet the changing demands. Therefore, commercial banks need to come u with credit policies that guide their operations (Pandey, 2008). Since most of the revenues generated by commercial

banks come from credit facilities extended to customers (Central Bank Annual Report, 2010), repayment of the interest and the principal amount may be faced with uncertainties. Methodologies used in evaluation and appraisal of credit before extension to customers significantly determine the success of the credit facility lend out to customers (Ditcher, 2003). Thus, the credit decision should be done be after thorough evaluation and assessment has been done with regard to credit status and characteristics of customers.

Credit risks play an important as far as performance of commercial banks is concerned. Credit risk is part and parcel of the loan review process among commercial banks. Credit risk result into maximization of the risk of the bank and the adjusted risk rate of return that shield the bank from the adverse effect of inability to repay interest and the loan (Fofack & Hippolytem, 2015). Today, credit risk management models have been adopted among commercial banks to cushion themselves against that adverse effect of credit risk. Commercial banks should manage their inherent credit risk in the whole loan portfolio as well as individual transactions or credits. Commercial banks should also consider the interrelationship existing between other risks and credit risk. Sound risk management practices play an important role in long term success and profitability of a banking institution (Ferreti, 2017). Commercial banks can assess their credit risk exposures through analysis of their financial performance in order to reduce the negative effect of credit default. The future of commercial banks today lies in their ability to effectively manage their credit risk exposures and dynamics. As credit risk is a recurrent nd persistent challenge among commercial banks globally, the management of banks and regulatory bodies should use past experiences to make relevant decisions with regard to credit risk in their institutions (Douglas, 2014).

Commercial banks should increase their skills to of identification, measurement, monitoring and control of credit risk besides determining their capital adequacy requirements against their credit risks. It is also important for commercial banks to be sure that they receive adequate compensation for the risk incurred. The current guidelines and procedures of credit risk management among commercial banks are not sufficient to meet the already existing economic and financial challenges that commercial banks encounter. This thus raise a need for continuous analysis and studies issues with credit risk and how best to manage it (Collin-Dufresne & Goldstein, 2015).

Other than loans, commercial banks are also facing credit risk in other instruments like securities including shares, bonds, equities, interbank and trade financing transactions and the derivatives like swaps and options (Bikker & Hu, 2014). It is there important to carry out investigation on whether investing in credit risk management is viable opportunity for commercial banks. The study therefore sought to determine effect of credit risk management ion financial performance of commercial banks in South Sudan.

Commercial banks have undergone through various issues and challenges in the recent past due a number of reasons including the credit standards of counterparties and borrowers, poor strategies of managing portfolio by failing to establish the best mixture of assets in the portfolio and inability to respond to changes in economic conditions that adversely affect

credit. With these challenges, commercial banks have formulated various ways of managing credit risk that has affected performance in one way or the other (Barth et al., 2015).

Establishment of policies and strategies mean that commercial banks will have to leave other clients that their new strategies and policies would not accommodate. Furthermore, inputs will be required for commercial banks to put in place new structures and strategies of credit risk management (DemirgüçKunt & Detragiache, 2013). All commercial banks have done all these, it however remains a challenge for these commercial banks to strike a balance between these policies and the customer needs of credit. This transpires into negative or positive performance of commercial banks (Berger & De Young, 2016). Although a number of studies have been done on how credit risk affect performance, a gap however still exists on how to achieve effective credit risk management and control as the number of Non-performing loans has been on a rise. This study therefore examined how various techniques of managing credit risk that commercial banks have adopted have affected their performance (Gehrig & Stenbacka, 2016).

STATEMENT OF THE PROBLEM

Commercial banks play an intermediary role while at the same time ensuring that body corporates maximize the wealth of their shareholders. Commercial banks generate most revenue by lending credit to customers (Marcucci & Quagliariello, 2016). Although credit facilities are main sources of revenue among commercial banks, loans are however very risky in the banking industry. This also explains why management of credit risk is one of the crucial activity that commercial banks carry out. Of all risks that commercial banks face, credit risk is one of the most critical since it leads to bad debts that strongly impacts on profitability of commercial banks. Studies have established that credit risk results from uncertainties that some customers will not be able to meet the advanced amount as and when it falls due (Rajan & Sarat, 2013). Until recently in early 199s, credit risk was largely analyzed by reviewing individual loans that were kept by commercial banks. Additionally, most loans were kept by commercial banks in their books to maturity. Today however, credit risk management is a judicious mix of portfolio analysis and loan review (Sobehart et al., 2014). In addition to this, advancement in technologies facilitating people to buy and sell risks has implied that commercial banks shift from the traditional loan books and come up with lending practices of seek best mixture of assets in line with the current credit and market conditions (The World Bank, 2015). Unlike in the past, commercial banks today are in position to control and manage portfolio concentrations, loan size and their maturities besides elimination of problematic assets before creation of losses (International Monetary Fund, 2014). A number of studies have examined how management of credit risk affect financially performance but in different industries and countries around the globe. Some of these studies focused on all the banking institutions. In essence, there is no known researcher who assessed how credit risk management affected performance of commercial particularly in Southern Sudan, Juba. Additionally, the findings of studies on how the management f credit risk affect performance in developed nations have been used to justify and explain situations sub-Saharan nations, particularly in Kenya. It is paramount to determine whether determinants of

NPLs are country/economic specific or they are universal. Thus, the present study sought to address the problem that in spite of the fact that credit risk management significantly contribute performance as reported by international studies, no similar study has been conducted in South Sudan, as published literature on the same is scanty.

GENERAL OBJECTIVE

The broad objective of the study was to investigate the effect of credit risk management on the financial performance of commercial banks in South Sudan.

SPECIFIC OBJECTIVES

1. To evaluate the effect of credit risk identification on the performance of commercial banks in South Sudan.
2. To establish the effect of credit risk monitoring on the performance of commercial banks in South Sudan.
3. To assess the effect of credit approvals on the performance of commercial banks in South Sudan.
4. To establish the effect of credit risk analysis and appraisal on the performance of commercial banks in South Sudan.

THEORETICAL REVIEW

Portfolio Theory

According to Margrabe (2007), application of modern portfolio theory has been lagged in spite of the fact that credit risk is one of the critical risks that commercial banks face. Most companies have recognized the effect of credit concentration on their performance. Thus, several institutions are now relying on quantitative methods and techniques to manage risks (Kairu, 2009). Significant changes have also been made in the banking sector with regard to development of tools for measuring credit risks in their loan portfolios. Most lending institutions are also credit derivatives to efficiently transfer risks while strengthening customer relationships. Productivity and portfolio quality ratios have therefore been utilized. These combined efforts have strengthened progress of managing credit risks.

Traditionally, asset-by-asset framework has been utilized in mitigating credit risks. Although there are variations in the methods that each organization use, this method however generally entails periodic evaluation of credit exposure quality, use of credit rating system and aggregation of the analyzed results in order to identify the expected loss of a portfolio. Internal system of credit rating and proper credit review are foundations of this asset-to-asset framework. With this framework, managers are in position to note changes in credit of individuals or even trends in portfolios in a timely manner. Although this framework is crucial in management of credit risk, it however cannot offer clear view of portfolio credit risks. This, companies decided to complement this framework for gaining greater insights into their credit risks hence quantitative portfolio review using a credit model (Mason & Roger, 1998). The asset-by-asset framework is faced with several weakness one if it being

that identification and measurement of concentration risk. Concentration risk refers to additional portfolio risk resulting from increased exposure to credit extension, or to a group of correlated creditors (Richardson, 2002).

Arbitrage Pricing Theory (APT)

This theory was advanced by Ross (1976). It is an alternative to portfolio theory. Tis theory departed from the relationship between risk and returns associated with the Capital Pricing Model and exploited the idea of pricing through arbitrage. This theory suggests that for diversification to be effective, an investor should calculate covariance of returns between every pairs of securities. In the CAPM Model, one can get similar results when covariance of each asset is calculated with respect to the general market index (Morris, 2001). With the necessary calculating power reduced to computing these far fewer terms (betas), optimal portfolio selection became computationally feasible.

Information Theory

According to Derban, Binner and Mullineux (2005), commercial banks should actively screen loan applicants to assess their characteristics and credit worthiness. However, the process of appraising and assessing borrowers by commercial banks before issue of loans require reliable and timely information. This is supported in the symmetric information theory. Borrowers can be assessed using either qualitative or quantitative techniques. However, qualitative models are subjective and therefore not reliable. According to Derban et al. (2005), numbers with sum of values can be assigned to attributes of borrowers assessed using qualitative models while comparing the sum of values with an established threshold. This helps in reducing subjectivisms while at the same time reducing processing expenses. According to Bridge (1998), use of quantitative models help in numerical assessment of critical factors affecting credit risk.

EMPIRICAL REVIEW

According to Kithinji (2010), several decisions that are clearly examined have been approved by commercial banks. This has resulted into an increase in the level of nonperforming loans. Adding on this, Jonathan Batten and Peter (2015) noted that policies for minimization of the adverse effects have emphasized on mergers and acquisitions. Some of the other policies have focused on sound banking practices but strict lending practices. This according to Keeton and Morris (2016) has resulted into low performance of commercial banks has eaten into interest income of commercial banks thus reducing profitability. Additionally, commercial banks rely on securities and collaterals in order to grant credit to customers. Such securities at time act a measure of reducing credit risk. According to Mueller (2013), there is need for commercial banks to change the credit risk inherent to portfolios and the individual or transaction risks. Sound credit risk management is crucial in ensuring performance of the banking sector in general.

According to Nelson and Schwedt (2006), significant progress has been registered in the banking industry with regard to credit risk management. Unlike in the past when credit risk

was limited to review of individual loans, management of credit risk today include review of loans and analysis of portfolios. According to Rinaldi and Sanchis (2016), advancement in technology for transacting risks has given commercial banks opportunities to shift away from traditional books and come up with sound practices of managing credit risk. Makri et al. (2014) conducted a study to asses' factors affecting NPLs of the banking sector in Euro Zine. The study covered a period of 2000 to 2008. This period was characterized by financial crisis and depression. The variables used in the study were rate of unemployment, public debts, GDP growth rates, budget deficit and loan-deposit ratio, return on equity and capital adequacy. The study found out that budget deficit, rates of unemployment and capital adequacy affected NPLs. Similarly, Carlos (2012) on macroeconomic determinants of the non-performing loans in Spain and Italy found as inflation rate has insignificant effect on NPLs (Gadise, 2014).

Nasieku (2014) carried a study on determinants of NPLs. The study used a case of Commercial bank of Africa. The findings of the study indicated that the existing state of the economy significantly affects NPLs. The study noted that for banks to deal with NPLs, they must put in place proper risk management practices. Jerotich et al. (2014) examined how NPLs loans affected performance if commercial banks in Kenya. Relationship between the variables was established through use of correlation analysis. The variables used were GDP, inflation and interest rate spread. The study relied on secondary data collected over a period of 2000 to 2012. Martha (2017) examined factors that affect NPLs with reference to KCB Kenya. From the findings, interest rates by commercial banks had an influence on performance. However, the size of the bank and the size of credit did not have significant effect on performance. The reviewed literature indicated a need to examine factors affecting non-performing loans in KCB bank Kenya limited.

Risk Identification

Effective management of risk starts with identification. For proper management of credit risk, bank management team need to be aware of their inherent risks in the course of their operations. Risk identification is linked with threats that a business face on a daily basis. The threats may exist with various entities, most important with shareholders, customers and legislative bodies such as the government. The chosen method of identifying risks may depend on culture, industry practice and compliance. During risk identification, the most important thing is to make sure that an appropriate environment for credit risk is established (Kromschroder & Luck, 1998). This responsibility is taken up by the board of directors in any organization with regard to the review of strategies and policies of credit risk management.

A risk management strategy according to Shu (2014) should identify among other things, the risk tolerance level of the bank and the profitability level of the bank. Risk identification include among other things inspection of branch manners and the analysis of financial statements of the bank. The key techniques of managing risk include formulation standards, analyzing credit worthiness of customers, rating of risk and collateral requirements.

Sonali (2015) argues that the senior management team of commercial banks should actively implement credit risk management strategies that the board of directors will have approved. Implementation includes making sure that the credit activities of the bank are aligned with the established strategy, that the established procedures have been formulated and implemented and that loan review and approval responsibilities have been properly and clearly assigned. According to Valsamakis et al. (2015), systems used in identification and measurement if credit risk should be aligned with the complexities and the nature of operations in the bank. Such systems should offer information that bis accurate, timely and adequate for the bank to effectively identify and measure its credit risk exposure. Senior management team should also ensure that independent and period internal assessments are conducted with regard to credit granting.

Ensuring that adequate and timely risk identification is performed is the responsibility of the top management at the financial institution. The top management staffs are tasked by the directors of the organization to identify the potential risks that they may face while handling different operations in the firm (Tabak, Fazio & Cajueiro, 2012). The risk management strategy that is adopted by the bank should be one that reflects on the tolerance level set when handling risky operations. Acemoglu, Ozdaglar and Tahbaz-Salehi (2015) noted that top management team assigns the risks to specific set of teams to handle it and manage it. The risk management teams are clearly coordinated within the organization to ensure each identified risk is properly handled to prevent losses. In any case, the sooner risks are identified, the sooner plans can be made to mitigate or manage them.

Mwangi and Muriuki (2013) investigated risk management in the Kenya Oil industry. The study established that the Working Capital (WC) requirement had gone up because of rising crude prices and upfront taxes payments and secondly unit margins had shrunk overtime. As a survival strategy the industry was forced to diversify to other means and ways to stay afloat. From the foregoing, oil sector due to its nature had to engage in credit for market share and sales volume. The multiplier effect was credit risk coupled with high liquidity needs. According to Waemustafa and Sukri (2015), risk identification is the foundation of managing risk among lending institutions. This should be in a transparent manner.

Risk Analysis and Appraisal

Many studies have been done on analysis and assessment of risk in view of mitigation and measurement of risk. It is however that various risk is classified according on their possible and likely damage (Fuser et al, 1999). This helps management in classification of risks threatening business survival and existence. According to Waweru and Kalani (2014), an inverse relationship exists between the expected loss and its likelihood. Thus, there are some risks that would result into large affect to an organization including fire, earthquake while other risks like interest rates only results into relatively small challenges and losses. In United Arabs Emirates, Al-Tamimi and Al-Mazrooei (2007) noted that analysis and assessment of risk as risk management practices have significant effect on performance of commercial banks. In the UAE banks, they have a clearly written down procedures for appraising the risk, in terms of possible losses, severity and chances of it occurring.

Bhattacharya (2011) argues that risk analysis should be done in their correct contexts, for instance, credit risk should be analyzed in the context of cash flow projections and simulations. This will allow financial institutions like banks to implement the correct risk measures on risks and train well its staffs to handle the risks. Drzik (1995) also notes that larger banks in United States have improved and strengthened their risk management strategies that has positively affected their financial performance.

Traditionally, risk analysis was defined in terms of evaluation of the inherent risk. Today however, risk analysis goes beyond this as it entails decision making capabilities and process to improve risk management. Risk analysis can be done using intuitive techniques like brainstorming. According to Sorge (2014), although quick and simple, brainstorming has no wider approaches unlike other complex methods and techniques of risk assessment. According to Sundararajan (2007), the use of modern techniques to management risks especially with regard to credit and the whole banking risk is significant as afar as performance of commercial banks is concerned. Wanjira (2010) carried out a study on how NPLs affected bank performance. The study established that commercial banks need to put in place sound practices of managing the level of their NPLs. The study revealed that traditionally, risk identification involved identification of liquidity, credit, market and operational risks.

Risk Monitoring

According to Read and Gill (2015), the risk manager is responsible for among other things, monitoring, measurement and control of credit risks. The duties of a risk manager include making sure possible events or future changes that could adversely affect the ability of the banking institution to withstand changes. For effective and sound management of credit risk, commercial banks should put in place adequate review and reporting structures so as to property identify, asses and control the inherent risks. Risk monitoring ensures that the management used in managing risks are aligned with the overall objectives of an organization. This helps a financial institution to establish mistakes at an early stage (Al-Tamimi & Al Mazrooei, 2007). Risk monitoring according to Epure and Lafuente (2012) takes place at the last stages of risk management process.

According to Parrenas (2005), investors and other stakeholders of an organization can express their demands in judging efficiency and effectiveness of an organization because of their rights in an organization. Shareholders rely on director's report to determine how knowledgeable an organization is with regard to credit risk management practices and how they have affected organizational performance (Chen and Pan, 2012). Rajan (2014) indicated that many organizations have put in place sophisticated risk monitoring models. However, these models in most organization are at implementation stage.

According to Patersson and Isac (2014), credit risk monitoring is divided into three stages namely simple risk control, estimation default probability and linking economic capital and return. It is important that commercial banks set minimum rates of returns to be obtained from every portfolio. In an attempt to assess how banking regulation affected performance of

commercial banks, Ben-Naceur and Omran (2009) noted that bank capitalization and credit risk have positive and significant impact on banks' net interest margin, cost efficiency and profitability.

Ngare (2008) carried out a study on how credit risk management practices affected performance of commercial banks. Specifically, the study examined the specific inherit risks and possible solutions to these challenges. The study collected primary data using questionnaires. The analyzed findings indicated that qualitative loan assessment tools and methods were used by lending and other banking institutions. Felix and Claudine (2008) examined how credit risk affected performance of commercial banks. Performance was measured using both return on equity and return on assets. The study established that credit risk had an influence on performance of commercial banks. In Sweden, Juanjuann et al. (2009) examined how credit risk management affected profits of commercial banks. The findings indicated that credit risk had a significant and inverse relationship with profitability of commercial banks. This shows that a decrease in profitability of commercial is explained by an increase in credit risk.

Kithinji (2010) investigated the effect of management of credit risk on profitability of commercial banks. The study was done in Kenya using data collected over a period 2004-2008. The collected data was analyzed using SPSS software. From the findings, most performance of commercial banks is not explained by the level if their NPLs and the amount if credit. Chen and Pan (2012) examined carried out a study in Taiwan on how credit risk affected performance of commercial banks. Data was collected over a period of 2005 to 2008. Credit risk was assessed by financial ratios. From the findings, credit risk management practices affected performance of the banking sector. Bessis (2010) analyzed how risk management practices affected financial performance. This study was done in Malaysia. Both primary and secondary data was used in this study. From the findings, management of risk significantly contributed towards performance of commercial banks.

Using risk index, Al-Tamimi and Hassan (2010) measured risk exposure of several banks in Jordan. The data was collected over a period of 1995 to 2008. The variables used were GDP, interest rate an inflation. The study established that macroeconomic variables ha significant influence on performance of commercial banks. There were five bank-specific variables: NPL, loan concentration in risky sectors, loan growth, bank size and net interest margin in their study. These five variables had significant relationship with credit risk. Loan growth and loan concentration in risky sectors had positive effects as well. Bank size had a negative effect on credit risk.

Credit-approval or Sanctions

In order to effectively manage credit risk exposure, commercial banks need to establish clear process of approving and extension of new credits to customers. The banks must employ enough managers who are adequately trained and have sufficient experiences to monitor and manage the risks. This ensures that the created risk monitoring strategies are followed in an effort to increase the performance of the bank. This was echoed by Fredrick (2013) who

stated that managing credit risk is paramount as it affects the performance of any financial institution. This should be done with the help of managers and other staffs of the financial institution. According to Bessis (2011) lenders have to strike a balance between being cautious and business expansion. Therefore, prudence is a delicate balancing act. Various checklists are used in assessing borrowers and establishing their credit worthiness.

Additionally, effective monitoring and evaluation systems is critical in strengthening the credit management practices among lending institutions (Mwisho, 2001). Monitoring according to Derban et al. (2005) is a process that entails the bank frequently contacting its customers and this establish an environment where a lending institution is seen as a problem solver and partner. Approval of loans and other credit facilities among commercial banks should be done based on clearly established policies and regulations. Additionally, the approval should be suctioned by a relevant board or committee.

According to Marcucci and Quagliariello (2016), commercial banks should adopt prudent credit management with establishment of authorities of credit admiration and management. Such authorities hold several functions including approving credit applications, renewing existing credit facilities and changing the conditions and terms of these credit facilities. Such authorities should have clearly established roles and responsibilities as it regards credit risk management. Their expertise should also be in line with the risk management practices among commercial banks (Mwisho, 2001).

A study was done by Kargi (2011) to assess how credit risk affected performance of banks in Nigerian context. The study relied in secondary data that was collected from annual reports. The study covered a period of 2004 to 2008. From the findings, risk management significantly influenced performance of commercial banks. The study concluded that there exists an inverse relationship between credit risk management and performance of commercial banks. Al-Khouri (2011) investigated how bank specific risk features and the entire environment of the banking sector affected performance. The study was covered 43 banking institutions over a period of 1998 to 2008. Fixed effect regression analysis was used to analyze the findings. From the findings, capital risk, liquid risk and credit risk are key factors affecting performance of commercial banks. Hakim and Neamie (2001) conducted a study on how credit risk affected performance of commercial banks. The study was done in Lebanon and Egypt. The study covered a period of 1993 to 1999. From the findings, credit risk had direct and significant effect on performance, while liquid was insignificant. Capital adequacy significantly affected performance.

Performance of Commercial Banks

Literature has suggested that performance of commercial banks can broadly be divided into financial and non-financial measures (Harold & Darlene, 2004; Kaplan & Norton, 1992; Rajendar & Jun Ma, 2005). As a broad concept, performance entails both consistency, quality and productivity. Measures of performance on the other hand include relative, behavior, training and education concepts (Richard, 2002). Most academicians and practitioners are more concerned with financial performance because it directly affects organizational

sustainability. Some of the financial measures of performance include Return on Equity (ROE), Return on Assets (ROA) and the value of sales revenue (Onaolapo & Kajola, 2010).

Epure and Lafuente (2012) assessed how the banking sector was performing in Costa-Rica. The study covered a period of 1998 to 2007. From the findings, regulatory changes significantly affected performance of commercial banks in Costa-Rica. A study was done by William (2012) on how management of financial risk affected performance of commercial banks. The study adopted descriptive design. The study established that financial risk management affected performance. The findings indicated that majority of commercial banks have put in financial risk management practices for managing credit risks.

Washington (2014) analyzed the effect credit risk management on financial performance of Kenyan commercial banks. The study adopted a causal design. Data was collected from secondary sources. The study established that CAMEL components significantly affect performance of commercial banks. In an assessment of how credit risk management affected performance, Grace (2012) established that there is a significant relationship between performance in terms of profitability and credit risk management in terms of loan performance and capital adequacy.

Ongore and Kusa (2013) on their study on Determinants of Financial Performance of Commercial Banks in Kenya they assessed on the moderating effect of ownership structure on bank performance. The findings showed that bank specific factors significantly affect the performance of commercial banks in Kenya, except for liquidity variable. But the overall effect of macroeconomic variables was inconclusive at 5% significance level. Wanjohi (2013) examined how financial risk management affected financial performance of Kenyan Commercial banks. It was noted from this study that financial risk management practices mentioned herein have a positive correlation to the financial performance of commercial banks in Kenya.

RESEARCH METHODOLOGY

Research Design

A research design is an outline or structure that dictate's the methods used to collect and analyze data (Kothari, 2004). This study was based on descriptive research design primarily using questionnaires to determine the effects of Credit risk management on performance in commercial banks in South Sudan. A descriptive design was used because the research was interest in examining the current status of how risk management has affected performance of commercial banks in Juba, South Sudan. This research used a systematic inquiry where the researcher did not have direct control of the independent variables. This method was also flexible and gave the researcher an opportunity to try various sources and methods of data collection. Therefore, its outcome clearly defined a research problem, answered the research questions and sets of objectives thus it was appropriate

Location and Target Population

The study was carried out in Juba City in South Sudan. The target population comprised all elements with similar observable characteristics that a researcher wishes to examine. The target population of this study comprised all six commercial banks operating In Juba City as at July, 2017 which had 16 credit managers, 22 supervisors and 42 credit officers, hence the total target population was 80. These banks included: KCB, Equity, Cooperative, ECO bank, agricultural bank, and Eden commercial banks being the target institutions. The information was obtained from employees of these commercial banks who had various levels of experience in the banking sector. The study mainly analyzed the effects that are associated with credit risk mitigation to the performance of commercial banks. The target population of studywas80 bank employees in the credit department ranging from credit managers, supervisors and credit officers of the above mentioned commercial banks found in Juba city in South Sudan. Population is a group of elements or individuals that the researcher is interested to investigate. Elements within a population have common features (Kombo & Tromp, 2006).

Sampling Procedure

Schinder and Cooper (2003) noted that sampling is a process of selecting representative elements from the population. For this study, probability sampling was used. In this sampling methods, elements have equal chances of being selected. This sampling gave every member of the population equal chances of being included in the study. Advantage of probability sampling is that sampling error can be calculated. In this research, stratified random sampling was used. Stratified sampling is more effective that random sampling as sampling g error is reduced. Gay (1987) holds that a descriptive study should have a sample size of 10-20% of the elements, correlation studies should have thirty elements, causal comparative studies should have thirty subjects in every group and experimental studies should have fifteen subjects in every group. Proportionate sampling method was used where 50% of respondents were selected from each category, hence the sample size was 40.

Data Collection

The study collected primary data. Questionnaires were used to collect data. Questionnaires were useful because they contained fixed responses and saved on time They represented the first-hand source of information for the study. Questionnaires had structured questions. Before actual data collection, the instruments were pre-tested. This helped to assess how valid and reliable the instruments were. Those respondents who took part in the pre-test were not included in the final study. The researcher sough opinions of experts in the field if credit risk to assess each construct. This ensured that questionnaires measured what they were supposed to measure.

Data Analysis

The collected data was analyzed using descriptive and inferential statistics. Statistical Package for Social Science (SPSS) aided this analysis. Descriptive statistics entailed the use

of means and standard deviations. Inferential statistics on the other hand entailed the use of regression analysis. Linear regression analysis was used to analyze the data and the formulae too was used to express the analysis as well as to determine the relationship between the dependent and independent variables using the formulae defined or expressed as follows represented in the explanation with letters in terms of dependent and independent variables below:

$$\mathbf{Y = a_1+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\varepsilon}$$

Where: Y = Commercial Banks performance; A_1 = constant; β_1, β_2, β_3, β_4 = coefficients of the determinants of credit risk management; X_1 = Risk Identification; X_2 = Risk Analysis and Appraisal; X_3 = Risk Monitoring; X_4 = Credit-approval or Sanctions; ε = Error

RESEARCH RESULTS

The study sought to examine the effect of credit risk management on the financial performance of commercial banks in South Sudan. The study was guided by the following specific objectives; to evaluate the effect of credit risk identification on the performance of commercial banks in South Sudan, to establish the effect of credit risk monitoring on the performance of commercial banks in South Sudan, to assess the effect of credit approvals on the performance of commercial banks in South Sudan, to establish the effect of credit risk analysis and appraisal on the performance of commercial banks in South Sudan.

The study targeted 40 employees in the credit departments of Kenya Commercial Bank, Equity Bank, Cooperative Bank, ECO Bank, Agricultural Bank and Eden Commercial Banks from Juba City in South Sudan. Out of these respondents, 30 of them respondents representing a response rate of 75%. Most of the respondents of the study 53% were males. Majority of the respondents 40% were 45-54 years. Most of the respondents 56.7% had attained degrees as their highest education. Majority of the respondents 46% had worked in the banking industry for 6-10 years.

Risk Identification

Most of the respondents 90% agreed that their organizations consider risk identification as a process in credit risk management which affected performance by a great extent. Respondents of the study agreed that risk identification was well coordinated in their Bank (mean 4.26, standard deviation 0.44), all employees in the bank had been trained on risk identification (mean 3.76, standard deviation 0.89), there were regular inspections by branch managers improved the level of risk identification (mean 3.73 standard deviation 1.08) and the bank engaged internal auditors in the identification of risks (mean 3.66, standard deviation 1.06).

Respondents also agreed that the bank had a clearly defined process of risk reporting (mean 3.56, standard deviation of 0.50), and the risk management strategy reflected the bank's tolerance for risk (mean 3.56, standard deviation 0.89). The other portion of the respondents

however was not sure whether their bank had clearly defined policies on risk identification (mean 3.40, standard deviation 1.27). The findings of regression analysis however indicated that risk identification is not a significant factor affecting financial performance of commercial banks p=0.344>0.05.

Risk Analysis and Appraisal

Majority of the respondents agreed that their bank; well defined procedures on classifications of risk (mean 4.23, standard deviation 0.72), had well set out procedures for appraising risk (mean 4.16, standard deviation=0.83) and had well elaborated procedures on analysis of risk (mean 4.06, standard deviation 0.78). Respondents of the study also agreed that their bank strived to improve the efficiency with which staff were able to analyze risks (mean 4.00, standard deviation 0.78) and had trained staff on risk analysis and appraisal (mean 3.76, standard deviation 1.04). The findings of regression analysis indicated that risk analysis and appraisal insignificantly affected financial performance of commercial banks p=0.851>0.05.

Risk Monitoring

A great number of respondents were in agreement that their bank; had formulated appropriate risk monitoring practices (mean 4.23, standard deviation 1.10), had employed adequate managers to monitor the Bank's exposure to risk (mean 4.00, standard deviation 0.52) and had clear policies governing administration of credit (mean 3.86, standard deviation 1.13).

The study also established that in most banks, credit risk monitoring had improved the performance (mean 3.73, standard deviation 1.43) and managers used information on risk exposure to formulate better mechanism of managing risk (mean=3.66, standard deviation 1.37). There were other respondents who were not sure whether; managers reported any incidences of risk exposure in a timely manner (mean 3.40, standard deviation 0.77) or bank mechanisms of ensuring that risk management practices were being followed (mean 3.23, standard deviation 1.10). From regression analysis, the study established that risk monitoring significantly affected financial performance p=0.014<0.05.

Credit Approval

From the findings, most of the respondents agreed that; the bank had put in place written guidelines on the credit approval process (mean 4.13, standard deviation 0.73), persons empowered with the credit approval authority did not have customer relationship responsibility in the bank (mean 3.83, standard deviation 0.64) and that approval authorities of individuals are commensurate to their expertise in our bank (mean 3.73, standard deviation 1.25). The other portion of respondents was not sure whether approval authorities were sanctioned by the board of directors in the bank (mean 3.43, standard deviation 1.52). From the findings of regression analysis, the study documents that credit approval was a significant factor affecting financial performance of commercial banks p=0.009<0.05.

INFERENTIAL ANALYSIS

The researcher sought to establish how credit risk management affected financial performance. The Model Summary of the regression model is indicated in Table 1.

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.760[a]	.577	.509	1.91505

The Model Summary in Table 1 indicates coefficient of correlation, R of 0.760 signifying presence of strong positive correlation between the variables of the study. The coefficient of determination R square is 0.577 signifying that independent variables of the study contribute to 57.7% of growth in financial performance of commercial banks. There are other factors that cover the rest 42.3% of changes in financial performance of banks, which the current study did not cover. The Analysis of Variance at 5% level of significance is indicated in Table 2.

Table 2: ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	125.115	4	31.279	8.529	.000
Residual	91.685	25	3.667		
Total	216.800	29			

From the findings, F calculated is 8.529 while F critical $F_{(4, 25)}$ is 2.76. As the value of F calculated is greater than F critical (8.529>2.76), this clearly indicates that the overall regression model was a significant in predicting relationship between the variables of the study. This is further supported by p value 0.000<0.05. The regression Coefficients of the Model are indicated in Table 3.

Table 3: Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.981	6.699		.594	.558
Risk Identification	.232	.240	.212	.964	.344
Risk analysis and appraisal	.028	.149	.029	.190	.851
Risk monitoring	.307	.116	.590	2.658	.014
Credit Approval	.000	.205	.000	-.001	.009

From Table 3, risk identification did not significantly affect financial performance of commercial banks p=0.344>0.05. This finding seems to contradict Kromschroder and Luck (1998) who established that risk identification is vital for effective mitigation of credit risk. The study established that risk analysis and appraisal insignificantly affected financial performance of commercial banks p=0.0.851>0.05. According to Waweru and Kalani (2014),

corresponding likelihood and expected loss are inversely and significantly correlated. The study further documents that risk monitoring was significant in affecting financial performance of commercial banks $p=0.014<0.05$. Credit approval was also a significant factor affecting financial performance of commercial banks $p=0.009<0.05$. Heffernan (1996) revealed that putting in place sound strategies to approve and appraise loans is an important factor as far as performance of commercial banks is concerned.

CONCLUSIONS

Most of the banks considered risk identification as a process in credit risk management which affected performance. Risk identification has insignificant effect on financial performance of banks. In most of the banks, risk identification was well coordinated in their Bank, all employees had been trained on risk identification, there were regular inspections by branch managers improved the level of risk identification and internal auditors were engaged in the identification of risks.

Risk analysis and appraisal insignificantly affected financial performance of commercial banks. Most of the studied banks had well defined procedures on classifications of risk, well set out procedures for appraising risk and well elaborated procedures on analysis of risk. Most of these banks also strived to improve the efficiency with which staff were able to analyze risks) and had trained staff on risk analysis and appraisal.

Risk monitoring significantly affected financial performance. Most of the banks had formulated appropriate risk monitoring practices, had employed adequate managers to monitor the exposure to risk and had clear policies governing administration of credit. In most of the studied banks, credit risk monitoring had improved the performance and managers used information on risk exposure to formulate better mechanism of managing risk.

Credit approval was a significant factor affecting financial performance of commercial banks. Most of the studied banks the bank had put in place written guidelines on the credit approval process, persons empowered with the credit approval authority did not have customer relationship responsibility in the bank and approval authorities of individuals are commensurate to their expertise in our bank.

RECOMMENDATIONS

All banks operating across east Africa should have in place clearly defined policies on risk identification. Banks should strengthen and enhance their training methods put in place regarding risk management.

The top management of all commercial banks should strive to improve efficiency with which staffs are able to analyze risks. There is need to vary the methods of risk analysis and appraisal by benchmarking with other blue-chip institutions.

The management of banks should set up a risk management committee report any incidences of risk exposure in a timely manner. Banks should also set up mechanisms of ensuring that risk management practices and these mechanisms should be followed to the latter.

Banks should put in place credit approval authorities and all approvals made should be sanctioned by the board of directors. This calls for a sound board of directors with diverse skills, competencies and knowledge.

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