Risk management impact on non-performing loans and profitability in the namibian banking sector.

Bernardus Franco Maseke*, Eswual M Swartz

Department of Economics and Management Science, University of Namibia, Keetmanshoop, Namibia

Abstract

The Banking sector has a pivotal role in the development of an economy. It is the key driver of economic growth of the country. Various literature revealed that non-performing loans were one of the causes of the financial crisis. The rise in non-performing loans has been taken under consideration by many banks in the world, as banks look at different methods on how to reduce non-performing loans. The following study was carried out with the objective to analyze the impact of risk management on non-performing loans in the country and identifying different strategies used around the world that assists banks in battling non-performing loans. The study used the four major commercial banks in Namibia as samples. The study analyzed two theories Agency Theory and Credit default theory. The study used only secondary data to answer the research objectives. The limitations of the study were that the study only looked at non-performing loans of credit risks the banks face. The study was not able to use all the commercial banks as samples to gather data. The strategy of the study was an archival strategy and the study used a qualitative approach. The study found that the Namibian banks experienced an increase throughout the five years in both profits and non-performing loans. The non-performing loans of the banks the highest. The study concluded that even though banks have all the risk management systems in place non-performing loans are still increasing.

Key words: Risk management, Credit risk, Home equity loans, Non-performing loans.

Accepted on 05 April, 2021

Introduction

Banks are not like the other industrial organizations or companies, banks create value using their liabilities and assets for the shareholders. Banks are rapidly changing but the fundamental goal of banks remain the same and that is maximize the return on the risks the bank takes. According to banks manage different types of risks. This brings us to the term risk management, being smart about taking chances [1]. Banks are in a business of risk. They face different types of risks. E.g. market risk, credit risk, operation risk, technology risks, liquidity risk, insolvency risk, interest rate risk. Credit risk is the one risk the paper will be focusing on.

There are different types of loans, business loans, farming loans, mortgage loans, home equity loans and consumer loans [2]. With each of these loans there are risks associated with them. The Royal Society view risk as the probability that a particular adverse event occurs during a stated period of time, or results from a particular challenge. While defines it as “the probability and magnitude of a loss, disaster, or other undesirable event”, he also gives a shorter equivalent definition which is very easy to understand he explains it as “something bad could happen”. So, risk is the possibility that something bad could happen [3]. Banks have to manage these possible adverse or undesirable events this is called risk management. Risk management is “The identification, assessment, and prioritization of risks followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events” as defines it as the systematic use of organization-wide processes of identify, assess, manage, and monitor risks such that aggregated information can be used to protect, release, and create value.

A similar study was done in Pakistan in the year. It looked at different risk management procedures that could help banks in Pakistan avoid disastrous crisis and see what risk management procedures are already in place in Pakistan [4]. The study also aimed to identify the different strategies banks in Pakistan can use to have low non-performing loans. The study revealed that there was no proper tool for risk management to assist the banks in this objective. . Study concluded that non-performing loans are increasing and is becoming a threat to the profitability of banks.

Loans are the main source of income for banks and be the main source to generate loss. During the years of many banks have faced the biggest challenge called the global financial crises [5]. Even though many banks suffered severely, many say that banks in the Sub-Saharan Africa was not affected directly and severely as other banks. That does not mean that the banks did not suffer from the crises. Sub-Saharan African countries’ banking systems were indirectly affected by the crisis through trade linkages and exchange rate depreciations, which pushed up the people borrowing’s financial problems causing the increase of non-performing loans. The amount of loans taken out by Namibians that are not paid on time has massively increased from 1.3 billion to 2.3 billion as stated in the bank of Namibia annual report. The non-performing loans are increasing and this can lead to the possibility of bank failures as well as the increasing of the unemployment rate in the Economy [6].

The increase of non-performing loans can slow down the growth of the Namibian economy, this why banks have to maintain a low ratio of non-performing loans. The Banking sector has a pivotal role in the development of an economy. It is the key driver of economic growth of the country. This why banks do risk management to avoid probable failure the future but risk management is not a free of cost activity.

The paper is grounded on the following research objectives.

- To determine how risk management protects the banks from the effects of non-performing loans
- To assess how banks can anticipate non-performing loans
- To identifying different risk-management strategies that can help banks avoid non-performing loans.

Literature Review

Analyzing how risk management protects the banks from the effects of non-performing loans

It stated that risk is what makes it possible to make a profit. If there was no risk, there would be no return to the ability to successfully manage it. This is the reason why banks must take risks but they have to be considered of the types of risk they take because banks are a fragile institution and they are built on customer trust and brand reputation, "Risks and Risk Management in the Banking Sector" [7]. Risk management is there to help banks avoid any negative consequences that could harm the bank or its assets and liabilities. The global financial markets are constantly growing and changing, with these changes comes along a variety of risks. One of the risks banks face is credit risk. According to "one of the most common indicators that is used to identify credit risk is the ratio of non-performing loans ". The analysts expect the number of non-performing loans to increase in the years coming.

The effects of non-performing loans on banks: According to that most empirical researcher's supports confirm that most banking failure or banking crisis has been caused by non-performing loans [8]. Non-performing loans have direct impact on the banks and an indirect impact on the country at large. Bank failure causes crisis and has negative impact on the economy. To understand how non-performing loans can cause a bank to fail, the study has to look at how non-performing loans impacts the bank. Loans are banks main source of income and an increase in non-performing loans definitely decreases interest income of bank did a study in the USA to identify the impact non-performing loans have. The study found that the increase in non-performing loans shows credit supply constraints for banks and hinders a bank's ability to supply more loans. This means that banks with high non-performing loans will find it difficult to provide more loans for their customers and may end up losing customers. According to that when amounts of disposal non-performing loans exceed their profits it will reduce banks' net worth and lower their risk-taking capacity, making it difficult to invest funds in risky projects and to realize potentially productive businesses" [9].

The study done in Kenya found that non-performing has a negative effect on the profitability of banks. The study also found that bank may start to look at more risk-free investments to reduce risks. Non-performing loans also affect the operational efficiency of banks. Another study done on Kenyan commercial banks however this study focused on the KCB Group Limited. The study also found that non-performing loans impairs a bank's ability to lend loans because of the diminished core capital. The increase in provision for bad loans decreases the banks' profits and high levels of non-performing loans can lead to undercapitalization of the bank and can cause job losses.

There are quite a number of factors that causes non-performing loans, many literatures call them determinants of non-performing loans. "The academic literature provides evidence to suggest a strong connection between the NPL and many macroeconomic variables. Among factors cited by the literature as significant determinants, there are: the real interest rate, the annual GDP growth, the annual inflation rate, loans growth, the real exchange rate, the unemployment rate, money supply (M2) etc,". One study was done on 85 large banks from three countries (Italy, Greece & Spain). The study found a negative relationship between the growth rate of GDP and non-performing loans. The Positive relationship between the unemployment rate and non-performing loans shows that unemployed customers cannot repay their loans did a study in Romania to determine the determinants of non-performing loans. The results showed that construction and investment expenditure, unemployment, inflation rate and Romania's external debt to GDP as well as money supply broadly defined were the main determinants of non-performing loans in Romania. There was a study done in Nigeria that found the determinants of NPL have to be exchange rate, credit rate, and lending rate. These determinants tend to increase non-performing loans. The study also found that the stock market has a negative impact on NPLs. The study done in Ghana was to determine the causes of non-performing loans. The study found that larger banks were more exposed to macroeconomic factors [10].

The effects of risk management on banks: "Risk Management is the application of proactive strategy to plan, lead, organize, and control the wide variety of risks that are rushed into the fabric of an organizations daily and long-term functioning". The objective of risk management is to not to avoid taking risks but to make sure that risks are consciously taken with full knowledge to able to measure it and reduce it. According to risk management is to increase the value of profit and making sure the bank has a longer term in regards of solvency [11]. Risk management allows banks to take risks wittingly and to predict any changes accordingly. Risk management that is well implemented can give the bank a great advantage. According to these benefits are: better financial performance, better system for strategy setting, improved service delivery, competitive advantage, less time spent on dealing with problems and less unwanted surprises, increased likelihood of change initiative being achieved, closer internal focus on doing the right things properly, more efficient use of resources, reduced waste and fraud.

They used CAR and NPLR as proxies for risk management and ROA and ROE as proxies for profitability. Their study found a negative relationship between ROA and NPLR as well as a negative relationship between ROE and CAR. This shows that the higher non-performing loan ratio the less capital there will be available for investments did a study in South Africa and the study found that credit risk management can be used to increase the profitability of the banks. The study also concluded that controlled variables also affected profitability, these variables are: banks size operating expenses and economic growth.

Risk management is an important aspect as mentioned earlier. Risk management can help the bank in different aspects but the main aspect is that risk management can help banks improve profits. The different studies used proxies as indicators of risk management allowing them to see the relationship between profitability and risk management. One of the proxies used for risk management is non-performing loan ratio. The study will be looking at how risk management protects the banks from the effects of non-performing loans [12].

How risk management protects banks from the effects of non-performing loans: The non-performing loans are increasing because of the lack of risk management and that can be threat to the bank's profitability. The increase in non-performing loans causes the income and interest income of banks to decrease as loans are a bank's main source of income "credit risk is the most critical and the biggest challenge facing banks' management". The banks introduced risk management to be able to control and minimize the impact of risks. The risk management allows process banks to achieve its objectives. The risk estimate helps banks make credit decisions and if the bank is not able to determine the risk precisely could adversely affect the credit management. They also stated that poor risk evaluation of credit risk could lead to huge money loss did a study in Kenya and the study focused of credit risk management and the level of non-performing loans. The study found that the risk management process allowed banks to identify risks and control them. The study found that through risk monitoring the banks could follow up on borrowers and through risk monitoring the credit committee can give the management recommendations on where the loan performance is poor. The study agrees that by involving credit committees in making decision when it comes to loans helps reduce loan defaults [13].

Analyzing how banks anticipate non-performing loans: The need to identify early warning signs of non-performing loans has become an important activity for the managers and credit controllers. According to ranking customers according to predicted default probabilities, a bank will have a chance to minimize the expected default or misclassification rate subject to some exogenous acceptance rule.

Types of loans banks offer

Bank's offer different types of loans to their customers, when a bank offers a new loan this loan can be placed into one of four categories: Consumer loans, business loans, real estate loans and government-sponsored loans. Consumer loans are amortizing loans (loans which are paid over a period of time with equal installments), which services household needs under the assumption that the borrower is a natural entity. There different types of consumer loan products banks offer which is divided into secured loans and unsecured loans. They are: housing loans, student loans, personal loans , car loans , credit cards and pay day loans [14]. Business loan is a debt of which the organization is obligated to pay back. Real estate loans are also known as mortgage loans, it is commonly used to by homebuyers to finance real estate. The borrowers promises to pay back the loan plus interest over a specified period.

Identifying different risk-management strategies that can help banks avoid non performing loans: According to that "an action that managers take to achieve one or more organization goals." He also states that strategy is about combining organizational activities and utilizing the scarce resources to meet the objectives of the organization. The development group said that risk management strategy provides a structured and consistent approach to identifying, assessing and managing risk. It allows the business to build a process of continuous updates and reviewing actions taken from the assessment.

The importance of having an effective strategy: In today's business environment, the banking industry is under enormous pressure from many different parties to remain financially sound and exercise good judgment when making decisions that can affect the general well-being of our economy. Developed countries have shown that banks cannot just depend on collateral as the values of assets are getting harder to predict and to realize through liquidation and the more uncertain the values of assets are the riskier lending.

Identifying the differences between credit risk strategies and credit policies: Credit policies are defined as a set of principles on the basis of which it determines to whom the organization will give credit to explains that credit risk strategy is a process that follows after scorecard development is done and before its implementation and it tells us how to interpret the customer score. It determines what appropriate actionable treatment should be taken based on the score of the customer. According to each and every bank should develop a credit risk strategy that establishes the objectives guiding the bank's credit-granting activities and adopt policies and procedures on how to conduct these procedures. The credit risk strategy must include:

- The statement of the bank's willingness to grant credit based on the exposure type.
- The target market and characteristics the bank wants to achieve in its credit portfolio.
- It should provide a continuity approach and be viable in the long run.

Risk management strategies for reducing non-performing loans: Risk management strategies are decided by top level management because the importance of making risk management part of the high level strategies is because of the lessons taken by industry actors from the financial crisis. A study in done Montenegro looked at the overall mapping of the recovery of past due loans. The study looked at an approach introduced in the country called the Podgorica Approach. The aim of the approach is to achieve greater stability in the banking industry. The approach would allow banks to collect a significant portion of their debt. The state would be able to get more stable companies to settle their obligations. The approach's assumption is to allow companies to first settle their consolidation to help boost their revenues did a study to help organization choose the best approach on how to reduce non-performing loans through on balance sheet or off balance sheet method. The on-balance sheet approaches follow a gradual recovery of non-performing loans over a long period of time. This is done through liquidation/foreclosure activities. The on-balance sheet approach is divided into two distinctive styles: passive and dynamic [15]. The passive style has no clear definition of recovery targets and the process is run by legal officers. The activities involve executing standard procedures and the style is mostly suited for well secured assets and in economic upswings. Dynamic style has the aim of optimizing the returns of the bank. It sets explicit recovering targets for the bank. The off balance sheet approaches consists of cutting out and removing non-performing loans from the bank's balance sheet by transferring them to external audits.

Credit Default theory: Credit default means that an individual is late with his or her payment of debt obligation so that the bank can apply a penalty fee from the due date till the day of payment, it can also mean that individual is unable to pay off his her debt obligation. Credit default theory presents an understanding into what had caused the individual to default and the effects of this person defaulting. The Credit theory focuses in two models, the delinquency model and insolvency model. The delinquency is when the borrower is unable to meet the obligations of debt by the due date. Insolvency occurs when the borrower is unable to pay his or her debt obligation.

Agency Theory: The agency theory is one of the oldest theories in the world of economics. The agency theory addresses the problems that are associated with the separation of owners and managers and strive towards reducing of this problem Adam Smith was one of the first authors to suspect the agency theory in the year understood that agency conflicts could lead to negative economic impacts. The modern agency theory states that the principal-agent relationship should show an efficient organization of information and risk bearing costs. The theory looks at managers who are agents and may not look at the company's goal but rather their own goal. The study suggents that managers who are agents may be involved activities for their own personal gain at the expense of the company.

Methodology

The proposed study has adopted the qualitative research approach to analyse the impact of non-performing loans on the profitability on banks. The researcher also adopted the archival research strategy as the study made use of financial reports of the banks as the main source of data. While a positivism research philosophies was adopted for the researcher not to have any human interest in the study and to be independent from the study as a natural scientist.

Sampling

Sampling involves the selection of a number of study units from a define study population. Sampling is the process used to select the portion of the study that will be used in for the research project out of the population. The researcher has chosen the purposive sampling method for the study. The researcher used secondary data from which was carefully selected from online newspaper articles and financial reports of the different banks to answer the research questions.

The researcher used the financial reports of the following banks: First National Bank Namibia, Bank Windhoek Namibia, Nedbank Namibia and Standard Bank Namibia. This allowed the researcher to view the entire bank's performance and not just a certain branch.

Data analysis

The data analysis as the process of unscrambling of mass data which allows the researcher to bring order and structure to the data collected, it is creative and fascinating states that data analyses consist of the approaches of working with data collected to present the researcher's work (Figure 1). The data was qualitative. The researcher used graphs and charts to represent the data collected. The researcher used Excel as the Software to help develop the conclusion of the research. The data collected was used to analyze the impact of non-performing loans on the profitability of banks (Figure 2).

First National Bank of Namibia (FNB)

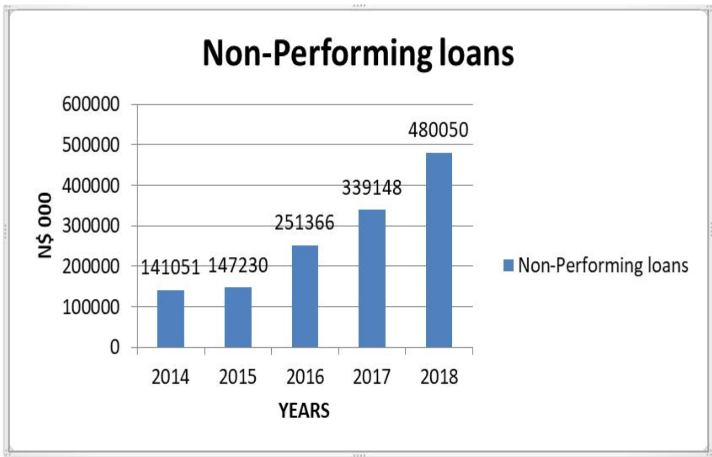

***Figure 1.** First National Bank of Namibia (FNB) non-performing loans.*

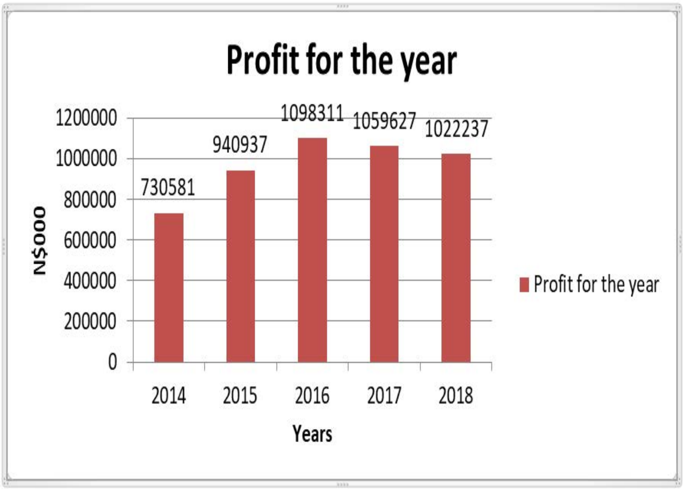

Figure 2. *First National Bank of Namibia (FNB) profit.*

According to the data collected during the year 2015 the non-performing loans had increased compared to the 2014 (Figure 3). The researcher identified that Profit of bank also had increase from the year 2014 to 2015. The non-performing loans had a gradual increase through all 5 years, where it is the highest in the year 2018. The profit of FNB started with an increase from year 2014 till year 2016, after year 2016 the profit of the bank had a decrease for last two years under observation (Figure 4).

Bank windhoek Namibia

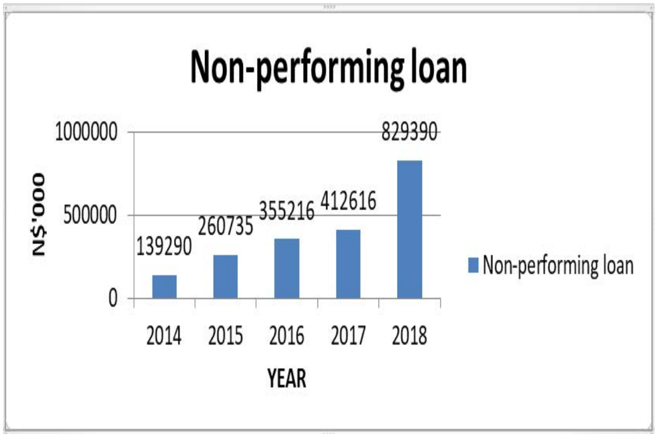

Figure 3. *Bank windhoek non-performing loans.*

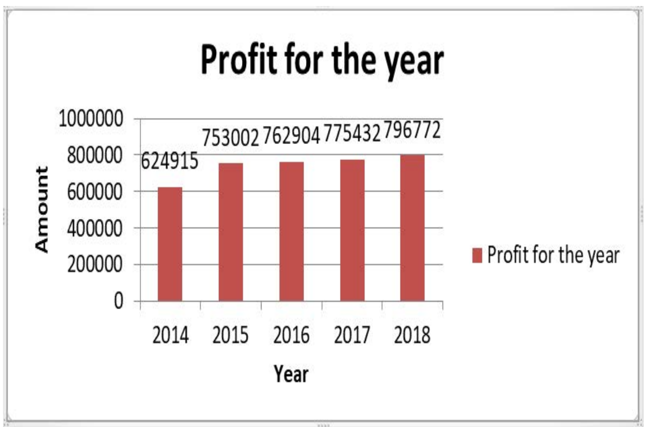

Figure 4. *Bank windhoek profit.*

Bank Windhoek had an increase in the non-performing loans from the year 2014 to the year 2018. In the year 2018 there is major increase in the non-performing loans for that year, from N$ 412616 to N$ 829390 and 2018 being the highest of all the years under observation. The profit for the bank has a steady increase in during the 5 years.

Discussion of Findings

Risk Management: The study looked at the different risk management reports of each bank in the 2018 annual reports. The research looked at who deals with the risk management and how credit risk in particular non-performing loans are dealt with. Bank Windhoek Namibia's board of directors ensures that all practices and procedures are in place to protect the reputation of the bank. One of their responsibilities is to oversee the system of risk management. The board executive committee is to guide and execute the risk management strategies approved by the board of directors. Board risk committee is responsible for risk management among other responsibilities. Managements approach to risk management is to make sure that all risks are identified and ensures that the risks that are taken measures up to the returns. The bank has implemented systems and day to day activities to detect and prevent risks. The bank has a board credit committee and board lending committee which ensures that credit exposure remains in acceptable standards. Exposure to credit risk is managed upfront when an application for apply for credit. The credit facility regulates the borrower's ability to repay the loan on a daily basis. Nedbank's credit department assesses all the exposures the bank faces regarding credit risk.

The bank has a proactive risk management and involves the clients through regular area management initiatives and these are clients with distressed assets. Report of the Group Risk and Capital Management Committee oversees the credit of the bank and are responsible for the credit impairment and going monitoring of the overall credit portfolio. The Bank currently applies the standardized approach for credit risk and this is for regulatory purposes under Basel II.

First National Bank of Namibia focus on assessing, managing and monitoring all known forms of risk the bank is faced with. The risk management framework assesses the impact of the cycle on the group's portfolio; understands and price appropriately for risk; and originates within cycle appropriate risk appetite and volatility parameters. The senior credit risk committee has the responsibility for managing the credit risk. The bank places appropriate limits and ensures accuracy of the credit risk reports. The bank has comprehensive policies and controls allowing them to have a strong credit risk management and has developed internal quantitative models to help assess probability of default, exposure at default and loss given default.

Standard Bank of Namibia's board uses reports from different committees within governance structure to evaluate the risk management of the organization. The risk management framework consists of risk governance committees at a board and management level management organization structure to support the three lines of defense model, risk governance standards and policies to support the risk governance standards. Board subcommittees that is responsible for effective risk management is made of the board audit committee, the board risk committee, board IT committee and board credit committee. The bank has a three line defense. Each defense line has a different responsibility. The first line measures and controls day to day risk according to governance framework. The second line of defence provides and independence oversight of the first line of defence and reports to different board governance committees and the last line of defence also provides an independent oversight over the second line of defence. The bank uses historical data to estimate future cash flow for credit applications with similar credit risk characteristics. The bank regularly monitors the timing and future cash flows to reduce the amount of estimate losses and actual loss.

Non-performing loans: The four Banks that were included in the study, the study found that the year 2014 the non-performing loans were the lowest in all four banks. The non-performing loans than increased consecutively for three of the banks but for one bank (Standard Bank Namibia) experienced a decrease in the year 2016 but it increased again in the year 2017. The year 2018 showed a major increase of non-performing loans across all four banks. This showed to be the year all four banks struggled with the non-performing loans. Study found that the profit of the banks were also the lowest during the year of 2014 for all four banks which is a good thing as you don’t want your previous year’s profit to be higher than the current year. Three out of four banks showed a positive increase in profit across all five years. Except for the one bank which had shown an increase in the profit till the year 2016 and experienced a decrease in profit from the year 2017 until 2018.

The graphs showed that both profit and non-performing loans increased from the year 2014 till 2018. During the worst period of all five years where the non-performing loans were the highest the profit of the banks still increased. This shows that non-performing loans does not have such a massive impact on the profit of the banks. It still does however have an impact as the profit could’ve been more because of outstanding interest on loans that are 90 days past due.

The banks has shown that risk management is an important activity as it is not left up to the lower level management to see if it is implemented. It is the responsibility of the board of directors to ensure that there are procedures in place to ensure a good credit standard. This protects the image of the different banks and shows that banks are protecting the investments they get. Although the banks have all these systems in place to help reduce non-performing loans the non-performing loans are still increasing.

Conclusion and Recommendations

The study discovered some important information regarding the impact of risk management on non-performing loans and profitability. The study found that there are internal and external factors that can increase non-performing loans and it seem to be that banks are mostly concerned with the internal factors dealing with the non-performing loans and has done a great job. The banks need to start focusing on external factors. One strategy mentioned in the chapter 2 study was that bank started sharing information on how clients should deal with distressed assets and informing clients on important information.

The aim of the study was to analyze the impact non-performing loans had on the profit of commercial banks in Namibia. The study also looked at the impact of risk management on non-performing loans. The study did not look at how banks can avoid the harsh impacts of external factors such as the economy factors, political factors to only name a few. The study would help banks build framework around the external factors if it is possible. The study also recommends future researchers to look into interest rate charges of the banks. The study also would recommend future researchers to look into how information technology is playing a role assisting banks when it comes to risk management.

References

1. Adom D, Hussein EK, Agyem JA, et al. Theoretical and conceptual framework: Mandatory ingredients of a quality research. Int J Sci Res. 2018;7:438-41.
2. Akinlo O, Emmanuel M. Determinants of non-performing loans in Nigeria. Accounting and taxation. 2014;6:21-8.
3. Amuakwa–Mensah F, Boakye–Adjei A. Determinants of non–performing loans in Ghana banking industry. Int J Comp Eco Econ. 2015;5:35-54.
4. Bekhet HA, Eletter SFK. Credit risk assessment model for Jordanian commercial banks: Neural scoring approach. Rev of Development Fin. 2014;4:20-8.
5. Bendickson J, Muldoon J, Liguori EW, et al. Agency theory: background and epistemology. J Mgmt History. 2016;22:437-49.
6. Bhatti I, Misman FN. Risks exposure in Islamic banks: A case study of Bank Islam Malaysia Berhad (BIMB). Australian Centre for Fina Stud-Finsia Banking and Fin Conf. 2010.
7. Cheng HG, Phillips MR. Secondary analysis of existing data: opportunities and implementation. Shanghai Arch Psyc. 2014;26:371-5.
8. Coughlan P, Coghlan D. Action research for operations management. Int J oper prod mgmt. 2002;22:220-40.
9. De Massis A, Kotlar J. The case study method in family business research: Guidelines for qualitative scholarship. J Family Busi Stra. 2014;5:15-29.
10. Etikan I. Comparison of convenience sampling and purposive sampling. American J Theor App Stat. 2016;5:1-4.
11. Ganopoulou M, Giapoutzi F, Kosmidou K, et al. Credit Scoring and Bank Lending Policy in Consumer Loans. Int J Fin engineering and Risk Management. 2013;1:90-110.
12. Jalil A, Azam F, Rahman MK, et al. Implementation mechanism of ethics in business organizations. Int Busi Res. 2010;3:145.

13. Kanchu T, Kumar MM. Risk management in banking sector–an empirical study. International Journal of Marketing, Financial Services and Management Research. 2013;2:145-53.
14. Koju L, Abbas G, Wang, et al. Do Macroeconomic Determinants of Non-Performing Loans Vary with the Income Levels of Countries?. J Syst Sci Info. 2018;6:512-31.
15. Makri V, Tsagkanos AG, Bellas A, et al. Determinants of non-performing loans: The case of Eurozone. Panoeconomicus. 2014;61:193-206.

***Correspondence to**

Bernardus Franco Maseke

Department of Economics and Management Science

University of Namibia

Keetmanshoop, Namibia

E-mail: fmaseke@gmail.com