Journal of Business and Management Studies

ISSN: 2709-0876 DOI: 10.32996/jbms

Journal Homepage: www.al-kindipublisher.com/index.php/jbms



| RESEARCH ARTICLE

Credit Risk Management Practices and Financial Performance of Selected Rural Commercial Banks in China

HU SHENGHUA¹

□ LIU CHAOGUANG², LIU JING³ and SHI CHAOMING⁴

1234La Consolacion University Phils, Philippines

Corresponding Author: HU SHENGHUA, E-mail: hushenghua6688@163.com

ABSTRACT

The researcher investigated the effect of credit risk management practices on the financial performance of rural banks. The researcher examined the suitable credit risk environment, credit giving procedures, credit administration, monitoring, and control, and evaluated the substantial influence of these practices on the banks' financial performance. Further, the researcher drew conclusions based on the study findings to which rural Banks has a comprehensive written credit risk management policy in place, and the board of directors is responsible for its execution. To ensure financial stability, credit risk management should be central to a bank's activities. Credit risk management refers to the systems, processes, and controls that a corporation has in place to ensure efficient consumer payment collection and reduce the risk of nonpayment. To attain the goal of wealth maximization, banks must properly manage their assets, liabilities, and capital. Credit policy should include the bank's lending philosophy, particular procedures, and methods for monitoring lending activities. The study found that credit risk management practices had no meaningful impact on rural bank financial performance.

KEYWORDS

Appropriate Credit Risk Environment, sound credit granting process, credit administration, measurement, and monitoring process, and appropriate credit control process

| ARTICLE INFORMATION

ACCEPTED: 01 July 2024 **PUBLISHED:** 21 August 2024 **DOI:** 10.32996/jbms.2024.6.4.18

1. Introduction

Different countries have issues with bank failure (Lall, 2014). A probability or threat of damage, injury, liability, loss, or any other negative occurrence caused by external or internal vulnerabilities that can be avoided through preemptive action is defined as risk (Bizuayehu, 2015). Creditrisks are thought to have far-reaching implications in addition to affecting loan financial performance (Kibor, 2015). Likewise, credit risk reigns supreme over all others (Asfaw & Veni, 2015). One of the most important risks that banks face is credit risk. Non-performance by a borrower is what causes credit risk. It can be caused by either an inability or a refusal to perform according to the pre-contractual agreement (Bizuayehu, 2015). Credit risk will always be a concern for banks.

Banking involves dealing with risk. Banks are central players in the financial system between borrowers and depositors. The banks' primary role is to make money by providing credit. One of the greatest challenges in this industry is their credit risk. The overall financial health of a bank can be gauged by examining the credit quality of the institution, according to a study by Boahene, et al (2012). Poor credit quality or loan quality leads to bank failures, as poor credit quality or loan quality is the main source of income for a bank. The Basel Committee on Banking Supervision (2000) found that banks face serious challenges because of the lack of stricter lending standards for borrowers and their creditors, as well as inadequate loan portfolio risk management.

The Chinese Banking system is comprised of commercial banks, universal banks, thrift banks, rural banks, and cooperative banks. The small towns and rural areas of China are reliant on rural banking. Credit risk management should be at the heart of bank

Copyright: © 2024 the Author(s). This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) 4.0 license (https://creativecommons.org/licenses/by/4.0/). Published by Al-Kindi Centre for Research and Development, London, United Kingdom.

operations in order to maintain financial stability. The definition of credit risk management based on Investopedia refers to the system process and controls that a company has in place to ensure the efficient collection of customer payments and the risk of non-payment.

Financial statements are the result of a model of the firm created by management, accountants, and tax authorities. Various companies used different models, which means they handle similar events differently. This is possible because generally accepted accounting principles (GAAP) allow for some flexibility in how events are recorded. Shortcut procedures are commonly used in practice. Many analysts are focused on reported accounting figures, which may or may not accurately describe true economic values. Simple measures are also frequently used to assess complex relationships. Some analysts, for example, use the ratio to estimate the likelihood that short-term creditors will be paid in full and on time (Oludhe, 2011).

Risk management is a systematic approach to identifying, analyzing, assessing, rating, monitoring, controlling, and communicating risks associated with any bank's activity, function, or process in order to prevent them from becoming chevaliers or reduce losses while increasing opportunities. It should methodically address all risks associated with the organization's past, present, and, in particular, future activities (Stavroula, 2009). Credit risk is assessed by examining commercial bank financial performance in an attempt to mitigate the effects of credit defaults. Commercial banks' financial health is dependent on their ability to manage credit risk effectively. Commercial banks may be particularly interested in awareness of the importance of identifying, measuring, monitoring, and controlling credit risk, as well as ensuring that they have adequate capital to cover these risks. (Bhattarai, 2016).

Internal weaknesses in financial institutions, such as management inefficiency, can also cause credit risk in banks. A lack of management affects liquidity, resulting in an increase in nonperforming loans (Mwaurah, 2013). Furthermore, the non-performing loan (NPL) on a financial institution's balance sheet represents the ratio of total non- performing loans to total gross loans. The credit risk performance of banks is influenced by a variety of internal and external factors.

Internal factors are bank-specific determinants, while external factors are determinants related to the economy (Naceur and Omran, 2011), as cited in (Mwaurah, 2013). Proper credit management is a precondition for any financial institution's stability and continued profitability, despite the fact that deteriorating credit quality is the most common cause of poor financial performance (Gatuhu, 2013).

According to Olawale Luqman (2015), loans and advances, as well as non- performing loans, are important factors in determining a bank's asset quality. Improper credit risk management lowers bank profits, lowers asset quality, and increases loan losses and non-performing loans, all of which can lead to financial distress.

On the website of the Bank International Settlements report, the primary objective of financial institutions is to gather deposits and extend loans to the public, business, and governments to fund spending in all three areas—consumer, investment, and capital expenditure. This sustains economic growth. Unfavorable economic conditions and related factors may result in customers failing to repay principal and/or interest on a loan facility, causing a credit risk for the lender. Loan loss provision estimates are a credit risk management tool used by banks to mitigate expected losses on bank loan portfolios.

Credit risk remains the leading cause of major banking problems, according to the Principles for the Management of Credit Risk. Poor portfolio risk management, insufficient attention to changes in economic or other circumstances, and lax credit standards for borrowers and counterparties are other major causes.

Also, due to the fact that the amount of loans banks has on their balance sheets raises the risk of loan default from deteriorating economic conditions, which therefore makes borrowers unable to repay, banks must maintain an abundance of Loan Loss Provisionings in order to prepare for possible loan losses (Laeven & Majnoni, 2003).

The findings of GDS Link Inc. (2015) indicate that implementing a credit risk management strategy can benefit lenders and provide borrowers with loans they can manage, resulting in a heightened level of financial security. Before devising a risk assessment solution, it is critical to comprehend the credit risk management process, best practices, and techniques.

In the research paper of Erika Spuchl'áková, et al (2015), Credit risk is the potential that a borrower or counterparty may default in accordance with terms established in a contract. Credit risk management is all about getting the best risk- adjusted return for a bank. In order to properly deal with the credit risk within the entire portfolio, as well as that within individual credits or transactions, banks must oversee the entire portfolio as well as individual credits or transactions. A primary consideration for banks when making credit decisions should be the interrelationship between credit risk and other risks. It is a critical component of a comprehensive risk management strategy and critical to a financial institution's long-term success. Borrower must demonstrate their ability to

repay future loan installments in order to obtain a loan. Most lenders will want to see the borrower's borrowing and payment history, as well as their current financial situation and income.

In paper of (Richard E. et. al 2008), it was referred to as a borrower's creditworthiness. It examines the borrower's past and current debt behavior to determine the likelihood of future repayment. Additionally, lenders will consider not only the personal information that a borrower provides but also the amount of money being requested and the duration of the agreement. When considered together, these factors form a clear picture of the borrower, making it easier for lenders to assess the risk level of a loan. In the past, credit risk management has been done in a way that doesn't consider other important factors.

Credit risk is the chance of losing money because a borrower fails to repay a loan or follow contractual obligations. The primary risk in lending is that the lender will not be able to receive the interest and principal that have been owed. This situation will impair cash flows and increase costs for collection. Possible cover for credit risk may be obtained by using excess cash flows. With increased credit risk, the lender can help reduce that risk by raising the coupon rate, which increases cash flows.

With respect to managing credit risk, one cannot forecast exactly who will go into default, but doing so can lessen the severity of the impact of that decision. When a lender or investor assumes credit risk, interest payments to the borrower or issuer are compensation for that risk. The Risk Management Association says that understanding the borrower is the first step to mitigating the likelihood of default. A typical strategy is to perform a credit analysis by analyzing the "Five Cs of Credit" in order to obtain a credit risk profile. Based on past payment history and current finances, it is assumed that borrowers will likely perform in the future.

While a permanent or temporary closure of the company is a risk, it is also possible that fraudulent actions by the human resources department or the resignation of an employee could put the company at risk. When it comes to protecting against corporate risk, having proper credit accreditation in place is a good start. Credit checks should always be conducted using the Credit Management Association of the Philippines (CMAP) and/or Negative File Information System (NFIS).

One factor used in credit risk management is the borrower's background. Non- financial risks should also be inspected thoroughly, according to the Risk Management Association. It is important for lenders to examine their own financial capabilities to help them understand the risk of lending. It is in the best interest of lenders to compensate themselves for the risk while also making sure to have reliable systems in place to keep track of the loan.

Additionally, the final credit risk best practice is to continuously manage your risk. Examining risk based on a single or a few factors (such as credit history and income) does not consider whether the lender can be trusted to meet the terms of a loan in the event of a default or the current state of the economy, which could negatively affect the borrower's ability to pay.

In general, the entire practice of credit risk management has not developed a robust feedback mechanism when it comes to financial success, as a result of the inimpactive procedures for loan appraisal in the financing institutions could lead to the financing of bad projects and consequent defaults. Quality of loan officers, their ability and knowledge in the field, and their capacity to judge borrowers as also the incentive packages available to them affect repayment performance. Fixing inappropriate repayment schedules and lack of flexibility often result in defaults. Similarly, when the procedure for repayment is cumbersome borrowers tend to delay repayments.

In this research, we helped secure a new set of policies that were flexible to meet potential loan clients and thereby put a good administrative setup that may improve credit lending and administration. These could be guided as practices by the rural banks. These would also be in compliance with the policy of the regulating body, all banks formulate their own credit policies and procedures which assist to provide different types of credit within each credit policy to their loan customers. Therefore, knowing the outlook of loan clients for each bank was very important in reshaping its credit policy and procedures.

2. Review of Related Studies

2.1 The Monetary

The Basel Committee on Banking Supervision (BCBS) (1999) published document entitled "Credit risk management principles". It encompasses four major activities of managing Credit risk: (1) Establishing an appropriate Credit risk environment; (2) Operating under sound Credit granting process; (3) maintain appropriate Credit administration, measurement, and monitoring process; and (4) adequate Control overall Credit risk.

Risk is an inherent part of a bank's business. impactive risk management is critical to any bank for achieving financial soundness. In view of this matter, aligning risk management to a bank's organizational structure and business strategy has become integral in the banking business. Credit risk is the bank's risk of loss arising from a borrower who does not make payments as promised, such an event is called default. Another term for credit risk is default risk. The risk of loss of principal or loss of a financial reward

stemming from a borrower's failure to repay a loan or otherwise to meet a contractual obligation is termed as credit risk. Credit risk arises whenever a borrower is expecting to use future cash flows to pay a current debt. According to Choppari, et al 2016) that banks are by way of interest payments from the borrower or issuer of a debt obligation.

2.2 Credit Risk Management Practices

According to Lando (2009), the credit risk model originated from the development of option-pricing techniques and their application in the analysis of corporate liabilities while Melton (1974) developed the credit risk theory. The credit risk theory was referred to as the event that causes default and thus serves as the foundation for efforts to measure and control credit risk exposure. According to the theory, default is an embedded put option offered to the borrower when the borrower's option to default is economically attractive.

Woolcock (2000) proposed that credit or loan markets are heavily impactd by lending institutions' strategies for screening prospective borrowers and addressing opportunistic behavior that may be encouraged by the nature of loan contracts. Lenders would therefore raise credit pricing to a point where they expect income to exceed the maximum. According to Mattius (2009), increasing the cost of a loan raises the lender's expected return but increases the likelihood that the borrower will default. This theory has an impact on the development of credit guidelines, that outline the extent of credit allocation as well as the manner in which credit portfolios are managed.

The part of the comprehensive management and also the part of the control system that relates to credit risk management was found by Spuchlakova, et al (2015). It is common for all industries to be associated with credit risk, so this can be considered one of the major risks. Most banks handle risk management strategy that incorporates risk identification, monitoring, and measurement into their risk management processes. The credit risk management objective is to ensure that business operations and the continuity of the business are efficient and consistent. Regulatory credit risk measures are quantified and monitored by utilizing credit risk management software, which is robust and flexible. Credit risk is the potential that a borrower or counterparty may default in accordance with terms established in a contract. Credit risk management is about increasing a bank's risk- adjusted return, with risks controlled so that the bank can receive an acceptable return. In order to properly deal with the credit risk within the entire portfolio, as well as that within individual credits or transactions, banks must oversee the entire portfolio as well as individual credits or transactions. A primary consideration for banks when making credit decisions should be the interrelationship between credit risk and other risks. impactive credit risk management is an important component of a risk management strategy and crucial to the health of any financial institution.

Although weak credit risk management practices and poor credit quality have persisted, the major cause of banking failures and banking crises is weak credit risk management practices and poor credit quality. Financial institutions' policies will be evaluated to see if they are following the bank's standards. Credit risk is defined as the risk that a borrower or counterparty will fail to meet their financial or other obligations to a credit institution. Credit risk management is used to maintain acceptable levels of credit risk exposure.

All lenders have to be concerned with managing the credit risk of borrowers and carrying out a quantitative assessment and analysis of the credit risk and rating of borrowers.

To ensure the impactive credit risk management in banks, lot of terms and conditions are needed to be established for the clients of banks who take out loans to attract potential borrowers while also ensuring repayment. While doing so would be appropriate, there are strong arguments against developing a separate set of terms and conditions for every borrower. The correct strategy would be to place current and potential bank clients into separate groups based on their similarities and differences.

Richard E., et al (2008) conducted research on the credit risk management system of Tanzanian commercial banks and discovered that a checklist with the help of the 5Cs (Character, Capacity, Condition, Credit history, and Collaterals) was used to assess the credit worthiness of borrowers. According to different researchers, due to poor record- keeping and a lack of an impactive database system in various sectors throughout the country, the quantitative credit scoring model was also not used. The researchers also mentioned the difficulty of using modern credit risk management models in developing countries due to a lack of information and other financial infrastructure.

2.3 Establishing an Appropriate Credit Risk Environment

In the journal article of the Bank for International Settlements on Credit Risk Management, the financial institution should have a clearly defined credit risk strategy and credit risk policies that adequately cover the risk. For this reason, the strategy and policies should take into consideration the level of risk the institution is willing to accept and the profits it anticipates to achieve by incurring various credit risks. In addition, it should define, measure, monitor, and control credit risk at both the individual and portfolio levels

in all the institution's activities. All employees who perform activities where the borrower or counterparty credit risk exists should have their strategy and policies outlined in writing. Policies and procedures must be implemented to hold employees accountable. Credit risk strategy and policies development and implementation rest on the shoulders of management. The board of directors is accountable for accepting and reviewing documents on a regular basis. To maintain capital adequacy, the board must take steps to make sure that the organization's capital level is adequate for the risks it is facing at all times. Additionally, it is important that senior management is sufficiently prepared to perform credit activities, and that such activities are performed in accordance with risk strategy, policies, and tolerances established by the board. Also, the board should authorize the bank to design its credit granting and management functions with an independent audit of the credit granting and management processes and the entire portfolio.

The Board has a duty to exercise adequate oversight of a comprehensive and impactive credit risk management system appropriate for the scale and complexity of Rural Banks and other financial institutions. The board shall ensure that the system delivers sufficient policies, procedures, and processes to identify, measure, monitor, and control all credit risks, both at the individual and portfolio levels, consistently and continuously. Furthermore, periodic independent assessments of the system are to be completed, with the results presented to a board-level committee for action.

In order to ensure that the credit risk-taking activities of a bank are in alignment with the credit risk strategy established by the board of directors, senior management must assume responsibility. The bank will be required to undertake the development and implementation of credit policies and procedures, as well as to ensure proper channels of communication in order to implement these policies.

According to the website of Central Bank van Aruba, to create an appropriate credit risk environment, the institution must have a clear credit risk strategy and sufficient credit risk policies in place. The strategy and policies should reflect the institution's risk tolerance and the level of profitability that it expects to achieve by taking various credit risks.

2.4 Sound Credit granting process

In financial institutions, sound lending procedures entail identifying high-risk loan applicants, modifying lending conditions such as security requirements, and monitoring repayments. Institution-specific criteria for the approval of new credits, as well as the amendment, renewal, and re-financing of existing credits, should be established and applied consistently. The credit approval process must be established in conjunction with the credit risk management structure and detailed in the approved written credit policy. Although several critical aspects of this process exist, including the need for account officers to thoroughly analyze the true risk profile of the borrower, several things are required in order to perform the assessment. Credit approvals should take into consideration the five Cs (Character, Collateral, Capacity, Condition, and Capital). Additionally, these factors should also be included and taken into consideration: the purpose of the credit and the source of payment; current risk profile of borrower and collateral, and how sensitive it is to changes in the economy and the markets; the current ability to repay and the borrower's repayment history, both with respect to past financial trends and projections of future cash flow, are factored into the analysis; to obtain commercial credits, the borrower's business expertise and the position of the borrower's sector in the economy, as well as the sector's overall market standing, must be considered; the credit agreement's proposed terms and conditions, as well as the various obligations designed to limit the risk profile of the borrower, will be included, and where applicable, the collateral or guarantee scheme's ability to support various credit scenarios will be described; the borrower's integrity and reputation as well as their ability to assume liability must be kept intact when extending credit; establishing a Credit Committee to ensure lending policies are adequate and followed; establishing overall credit limits for individual and related party transactions should be taken into consideration; determining an acceptable exposure limit for an industry, a geographic region, or a product; all forms of credit should be provided at arm's length, especially loans and credit to other corporations and individuals; and should have an adequate documentation, because collateral and guarantees can help to mitigate credit risks, the institution must keep in mind that when making credits available, the ability of the borrower to repay is far more important than the value of collateral or guarantees. It is necessary for the institution to develop policies covering various forms of collateral and ongoing valuation procedures. It is imperative that the credit risk officers have a comprehensive understanding of risk assessment, risk approval, and risk management. Accountability and authority for decisions should be established in the credit granting approval process, and the final authority to approve credit terms or changes should be designated.

2.5 Credit Administration, Measurement and Monitoring process

Banks, according to the Corporate Finance Institute, earn money by charging interest on loans and paying interest on customer deposits. The main function of credit checking, and credit selection is performed by the bank's credit department, and this department is tasked with making sure that the borrower is competent in financial matters, as well as capable of repaying the money and interest. Creditor administrators are tasked with performing credit-related functions and providing electronic solutions

for credit transactions. They must work hand-in-hand with other departments to achieve all credit objectives within a defined time frame.

Credit risk management activities include ongoing active monitoring and management of credit risk. Credit risk units, dedicated rating analysis teams, and portfolio management functions work closely with the business to perform monitoring tasks. Credit risk monitoring can be broken down into two distinct levels, Credit institutions must establish a system for managing their various credit loan portfolios on an ongoing basis. Back-office credit administration means supporting and controlling the maintenance and extension of credit. Credit administration functions, such as credit documentation, shall be ensured by banks. Procedures are implemented to ensure that all relevant documentation is complete and up to date in accordance with company policy, with a file documentation system. Distribution, approval, and full documentation must be obtained before disbursement, the schedule date and collection of payments. In order to meet bookkeeping requirements, all payments must be properly recorded. Late payments shall be tracked and collected so that they can be pursued. The efficient maintenance of a credit file borrowers shall have accurate and up to date credit files that are crucial in determining the financial status. The documents relating to loans and collateral must be stored in a secured area jointly held by lenders and borrowers. To help ensure that the bank maintains proper control of risk, it is expected that banks implement sound and appropriate risk measurement methods. These methods will serve as a framework to monitor and control the quality of the credit portfolio as well as the total loan portfolio. In order to help the board and senior management differentiate risks across the individual credits and groups, and to facilitate informed decision making, banks should utilize an internal risk rating system that rates risk for the specific nature, size, and complexity of the Banks' activities.

2.6 Appropriate Credit Control Process

Based on a research paper co-authored by Sekyi and Gené (2016), to ensure that senior management sets up and maintains an adequate and impactive internal control system and processes, the Basel Committee on Banking Supervision (2010) defined internal controls as being "solely responsible for establishing and maintaining an adequate and impactive internal control system and processes", to the maximum extent possible, design the systems and processes to deliver assurance in two broad areas: reporting (financial and operational) and compliance with laws, regulations, and company policies. After a lengthy study on the principles of internal controls (Lakis & Giriunas, 2012) established internal controls as the part of an enterprise management system that ensures the achievement of business goals, the profitable commercial performance of the enterprise, and control of work risks. As stated by the Basel Committee on Banking Supervision, impactive risk management is at the heart of their definition. To provide reasonable assurance of the fulfillment of the organizational objectives for credible financial reporting, efficiency, and efficacy of operations, the International Auditing Standards state that internal control must be drafted procedures implemented by people in governance, management, and other positions of authority to grant reasonable assurance that those objectives are being met (Briciu, Dănescu, Dănescu, & Prozan, 2014). The definition is limited to control of the individuals in the organization at the micro-level of viewing the organization. An integral managerial tool that serves as a method of watching, guarding, complying, and being transparent in all of the organization's daily activities at all levels toward achieving the long-term goals of the organization.

Internal controls minimize revenue loss, wasteful resource usage, and lost profit (Abbas & Iqbal, 2012). It is designed to control the transfer of information, foster practices of openness, and protect shareholders from those in power (Salhi & Boujelbene, 2012). To earn significant amounts of reputational capital, sound, and impactive internal controls are an important source of investor confidence. Banks without strong internal controls are more likely to fail in the near future, according to (Jin, Kanagoretnam, Lobo, & Mathieu, 2013). This reverses the well-known concept of the "going concern," which pertains to both banks and other organizations. Depositors, investors, and the externalities on other banks suffer a greater blow when banks fail.

In terms of the efficiency and impactiveness of activities, the reliability of the information, and compliance with laws and regulations, the impactiveness of internal controls has been studied along these dimensions (Jokipii, 2006). An internal control system's impactiveness means that it can reach its objectives. It can't be said to be impactive if internal controls are unable to ensure operational efficiencies, and instead, both internal and external stakeholders are made aware of and comply with regulatory demands. The Basel Committee on Banking Supervision established internal control systems to make sure the financial system remains stable and sound. The numerous bank failures in the past, as well as the more recent global financial crisis, provide support for the conclusion that credit is a significant contributing factor to bank failures (Doerig, 2003). Internal controls seek to minimize the human element of the credit-granting process. A significant incentive for optimal risk- benefit behavior is pursued via asset-liability transformation, but bank managers owe their owners a duty of care (fiduciary relationship). With regard to moral hazards and adverse selection, it is important for management to perform an additional level of scrutiny when performing the function of asset creation. The authors, Ellul and Yerramilli (2013), found that institutions with well-implemented internal risk controls were able to endure financial crises and refute the claims of some experts in finance that the crisis affected all institutions differently. Creating very risky assets (credit facilities) with expectations of a higher return is not uncommon in the banking

industry. While credit risk is affected by numerous factors, it is feasible to avoid many of the problems if there are well-constructed and religiously adhered to internal controls within the banks.

2.7 Financial Performance

Performance can be defined as the reflection of how a company's (Bank's) resources are used in a way that allows it to achieve its goals. Financial performance is the use of financial indicators to assess the extent to which objectives are met.

Contribution to the availability of financial resources and assistance from the Bank with investment opportunities (Heremans, 2007).

A company's financial performance is a measure of how much money it makes or loses over a given time period. Several measures have been used to assess banks' financial performance. Return on Equity (ROE), Return on Asset (ROA), and Net Interest Margin (NIM) are examples of these metrics (Murthy & Sree, 2003; Alexandru et al., 2008).

A bank's profitability is the most important indicator of its performance. Return on Assets is concerned with a bank's ability to profit from its operations through active capabilities. The greater the value of non-performing loans or bad loans, the greater the impact on a bank's profits/profits due to poor credit quality (Selling & Stickney, 1989; Burton, Lauridsen, & Obel, 2002). Return on Assets is a fundamental metric for determining a company's profitability (Yanikkaya, Gumus, & Pabuccu, 2018; Qayyum & Noreen, 2019; Muhammad, Rehman, & Waqas, 2016).

The ratio of Return on Assets is the most frequently highlighted element in the results of financial statement analysis because it shows a company's success in generating profits (Nguyen & Nguyen, 2020). Return on Assets can measure a bank's ability to generate profits, which can then be used to forecast future profit levels for the company's survival (Erasmus, 2010; Arquisola, Shella, & Hutabarat, 2018). The net income divided by the total assets ratio calculates the return on total assets after interest and taxes are deducted (McGowan & Stambaugh, 2012). Return on Assets assesses a company's overall efficiency in generating profits from its assets. Return on Assets can also be defined as the ability to obtain benefits or advantages from invested capital.

Banks or financial institutions do collect and distribute funds from and for people (Siklos, 2008). Because profitability is an important indicator of bank performance, the bank must establish a management system on various aspects and parties involved in order to maximize healthy credit conditions and maintain well-coordinated credit conditions. In general, the Capital Adequacy Ratio is defined as the ratio of capital adequacy to compensate for the risk of loss faced by banks (Allahrakha, Cetina, & Munyan, 2018). The Capital Adequacy Ratio is a ratio that shows all bank assets that contain risks that are financed with capital, in addition to funds from sources other than banks, such as public funds, loans, and others. Capital is an important factor in the development of a bank's business and its ability to bear losses (Allahrakha et al., 2018; Akinci & Olmstead-Rumsey, 2018).

According to Lukman (2014), there is a significant relationship between bank performance (profitability) and credit risk management (in terms of loan performance). Loans and advances, as well as non-performing loans, are important factors in determining a bank's asset quality. Some of the recommendations made in this study are: the management should be cautious in establishing a credit policy that will not have a negative impact on profitability; and the management should also understand how credit policy affects the operation of their banks in order to ensure judicious utilization of deposits and profit maximization. Improper credit risk management reduces bank profitability, lowers asset quality, and increases loan losses and non-performing loans, all of which can lead to financial distress.

The study of Mendoza and Rivera (2017) showed that credit risk has a negative and statistically significant relationship with profitability. But this result was contrary to Aruwa and Musa (2012) who found that the rate of capital to total weighted risk assets has a positive impact while interest rate risk affects negatively the banks' financial performance. While Kurawa and Garba (2014) presented in their findings that credit risk management as measured by capital adequacy variable has a significant positive impact on the financial performance, with consistency results of Ogboi and Unuafe (2013) that revealed that impactive credit risk management has a positive impact on bank's financial performance.

2.8 Significance of the Study

Rural Commercial Bank Administrators. The research will provide the foundation for the regulatory policy framework to mitigate the financial system's exposure to credit risk for regulators and policymakers.

Investors. this study will help them understand the factors that influence the returns on their investments.

Rural Commercial Banks. This study will provide insight into the credit risk attributes that may need to be incorporated into their investment decision processes. The study will broaden not only the researchers' understanding of risk management, but also the public's exposure to the banking industry.

Future Researchers. These findings will be used as reference material by future researchers interested in conducting additional research.

2.9 Theoretical Framework

The lesson of the 2007-2008 financial crisis has reminded regulators of the existence of moral hazard and forbearance in bank regulation (Feess & Hege, 2012, p.1043). Many banks failed during the crisis, while many others, including some of the world's largest, were only able to survive because of the substantive government "bailout" (Feess & Hege, 2012, p.1043).

Prior to the Basle Accord, large banks in major countries appeared to have insufficient capital in relation to the risks they were taking, particularly given the aggressive competition for market share in the international market (Federal Reserve Release, 2002). According to the Basel Regulations, the evolution has demonstrated the importance of credit risk management in the operations of banks.

The Basle Accord was founded on a credit risk measurement in most banks that specialize in commercial lending and related activities. As a result, one of the most important aspects that banks must consider is capital to absorb risks.

Capital ratios are introduced to demonstrate the strength of risk management in order to harmonize the different levels of capital approaches among countries. As a result of the inspiration provided by the critical role of capital ratio, they have begun to use indicators to assess the strength of financial institutions.

2.10 Conceptual Framework

Using the variables from the mentioned theories the researcher formulated an operational model that will be utilized for the objectives of this study. Based from the preceding framework, the proposed study presents its concept map as illustrated in Figure 1.

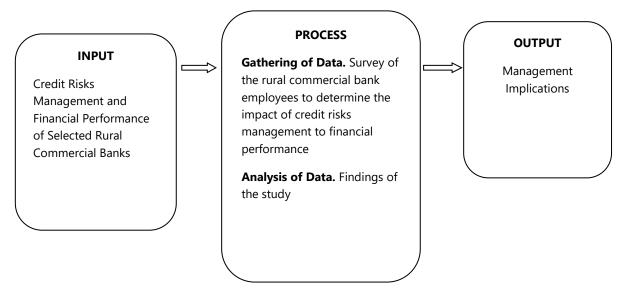


Figure 1. Conceptual Framework of the Study

The theory has given all the basic components of a research study on the impact of service quality to customer trust of selected courier services in China. Based on the theoretical framework, the operational model identified the relationship of the variables in the study. The conceptual framework as shown in Figure 1 above is an illustration of the input-process-output utilized in this study. First, **Input** covered the Credit Risks Management and Financial Performance of Selected Rural Commercial Banks in China. Second, the **Process** described how employees determine the impact of credit risks management to financial performance. Based on the result of the survey, this study show the management implication which is the **Output.** This process helped the researcher follow the method of the research.

2.11 Statement of the Problem

The researcher aims to assess the Credit Risk Management Practices and the impact on the financial performance of selected rural banks in terms of Credit Risk Management Practices.

Specifically, the researcher will be able to answer the following question:

- 1. How may the credit risk management practices be described in terms of:
 - 1.1 Appropriate Credit Risk Environment;
 - 1.2 Sound Credit granting process;
 - 1.3 Credit administration, measurement, and monitoring process; and
 - 1.4 Appropriate credit control process?
- 2. How may the financial performance be described in terms of:
 - 2.1 Capital Adequacy Ratio (CAR);
 - 2.2 Return on Equity (ROE); and
 - 2.3 Return on Asset (ROA)?
- 3. Is there a significant impact of credit risk management practices in the Financial Performance of the banks.
- 4. What management implications can be drawn on the findings of the study?

2.12 Definition of Terms

The following terms will be conceptually and operationally defined for a better understanding of the study.

Capital Adequacy Ratio (CAR). According to Banks Manual of Regulation for Banks, it is a measurement of a bank's available capital expressed as a percentage of a bank's risk-weighted credit exposures. It is the proportion of a bank's own equity in relation to its risk exposures. is the amount of capital a bank or other financial institution has to hold as required by its financial regulator. It is a measure of the amount of bank's capital expressed as a percentage of its risk weighted exposure. It consists of the types of financial capital considered the most reliable, primarily shareholders' equity. Theoretically, banks with good capital adequacy ratio have a good profitability. A bank with a strong capital adequacy is also able to absorb possible loan losses and thus avoids bank "run, insolvency and failure.

Credit Risk. Defined in the Bank International Settlement webiste, credit risk is the possibility of a loss resulting from a borrower's failure to repay a loan or meet contractual obligations. Traditionally, it refers to the risk that a lender may not receive the owed principal and interest, which results in an interruption of cash flows and increased costs for collection.

Credit Risk Management. It is the practice of mitigating losses by understanding the adequacy of a bank's capital and loan loss reserves at any given time – a process that has long been a challenge for financial institutions.

Loan Loss Provisioning. A loan loss provision is an income statement expense set aside as an allowance for uncollected loans and loan payments.

Loan Portfolio. Cbonds.com define loan portfolio as the balance of all loans that the bank has issued to individuals and entities, calculated on a specific date. The loan portfolio is one of the reporting indicators that are part of the assets of a credit organization.

Past Due. According to Investopedia ,past due refers to a payment that has not been made by its cutoff time at the end of its due date.

Past Due Ratio. For any Accrual Period: (i) the aggregate Outstanding Balance of all Receivables which are more than 60 days past due as of the last day of such Accrual Period divided by; (ii) the aggregate Outstanding Balance of all Receivables.

Return on Asset (ROA). The ratio of an institution's net income to total assets. It assesses the bank's management's ability to generate profits from scarce resources. The higher the ROA, the more efficient the bank's management (Gizaw, et al, 2015). Return on assets ratio is an important profitability ratio because it measures the efficiency with which the company manages its investment in assets and uses them to generate profit (Harelimana, 2017). Return on assets (ROA) is a basic measure of bank profitability that corrects the size of the bank by dividing the bank's net income by the amount of its assets. ROA is a useful indicator of how well a bank manager is performing.

Return on Equity (ROE). Return on Equity (ROE) is a financial ratio that measures how much profit a company makes in relation to the total amount of shareholder equity invested or found on the balance sheet. The return on equity (ROE) is what shareholders expect in exchange for their investment. A company that has a high return on equity is more likely to be capable of generating cash internally. As a result, the higher the ROE, the better the company's profit generation. According to Khrawish (2011), ROE is the ratio of Net Income after Taxes divided by Total Equity Capital. It denotes the rate of return on funds invested in the bank by stockholders. ROE reflects how efficiently a company operates.

This is a dependent variable, and it measures the return on shareholders' investment in the bank. ROE was used as the indicator of the profitability in the regression analysis because ROE along with ROA has been widely used in earlier research (Ara, et al., 2009).

2.13 Scope and Delimitation of the Study

The study included eighteen (18) rural banks out of sixty-four (64) member rural commercial banks of the Confederation of Rural bankers. The time period for this study is five (5) months. There were three (3) respondents from each bank and was selected purposively. The identities of the respondents were hidden.

The researcher will be distributing questionnaires using online forms to primary education teachers.

3. Methodology of the Study

3.1 Methods and Techniques of the Study

The descriptive correlational research design was utilized in this study to determine the impact of Credit Risk Management on financial performance. The data gathered in the study were obtained from two sources: Published Financial Statements of rura commercial banks covering the year-end report from 2016 to 2020 which will be obtained on the Data Center. The study will include rural banks in China

A quantitative method approach of research was followed to describe the impact of the Credit Risk Management on the Banks Financial Performance.

3.2 Respondents of the Study

There were at least two (2) respondents for each bank. The respondents of the study will be the Board of Directors, Internal Auditors/Compliance Officers, Managers, and the Loan Officers. A sample of eighteen (18) rural banks were selected out of sixty-four (64) member banks of the Confederation of China Rural Bankers. Survey questionnaires were floated using the google form that were sent via email and/or via Facebook messenger.

3.3 Instruments of the Study

For collecting information regarding the Credit Risk Management Practices, a standardized questionnaire were adopted and reconstructed based on the variables needed as a data collection instrument. The questionnaire was used to acquire data with regard to the implementation of Credit Risk Management in their respective rural banks and how it affects the financial performance of the bank.

There were two (2) parts of the survey questionnaire. The first part is the respondent's profile, this is to determine the number of years and what position they are holding. This will also determine the reliability of their answers based on the current practices they are implementing in the bank. The respondents will be asked the number of years in their current position as member of the Board, Manager, Loan/Credit Officer, or Internal Auditor, and Compliance Officer.

All scale variables were standardized. A total of eight (8) variables were used five of them were Likert Scale with sub-questions, while the three (3) variables will be a secondary data that were obtained from the a previous study on banks..

A Quantitative Method of research method were followed to determine the impact of the credit risk management practices to the financial performance of the rural banks in China. The researcher will be using the Quantitative Descriptive Correlational approach.

3.4 Data Gathering Procedure

The researcher will utilize the survey methodology to gather data, wherein participants will complete the survey questionnaire through online forms. The survey questionnaire will be disseminated to the employees of rural banks in China within a span of two (2) weeks. Utilizing data gathered from appropriate literature and other pertinent sources will support the research assertion. Respondents who consent to partake in the survey will not undergo interviews if the collected data demonstrates adequate coherence for analysis.

Data collection will be conducted using the following procedures:

- 1. The survey questionnaire will be sent to a group of specialists for the purpose of validating the research instrument.
- 2. The research instrument will be submitted to the Graduate School Office for permission for the dissemination of the survey questionnaire.

- 3. A formal request letter will be written to the Human Resource Manager of the chosen vocational schools in China, seeking permission to gather data. The letter will also clarify that there is no conflict of interest between the parties involved in conducting the research.
- 4. Once the human resources manager gives consent, the researcher will distribute the questionnaires to the respondents via online forms. The researcher will elucidate the strict adherence to the Data Privacy Act of 2012 in regards to maintaining the confidentiality of the information collected from the respondents.
- 5. The researcher will verify whether all the items will be completed for the implementation of the study following a ten- to fifteenminute period of response from the participants in order to prevent any undue stress on their behalf.
- 6. The researcher will ensure that a duplicate of the result will be given to the study location.

3.5 Data Processing and Statistical Treatment

The statistical tool that will be used in this study is Linear Correlation. This statistical tool analyzed how Credit Risk Management practices correlate to the financial performance of rural banks in China. The bank's financial performance will be measured by the Return on Asset (ROA) and Return on Equity (ROE), wherein: ROA= Annual Net Income/Total Assets; ROE= Annual Net Income/Shareholders' Equity and the bank's Capital Adequacy Ratio (CAR). Secondary Data was acquired in the Rural Commercial Banks Data Center.

4. Presentation, Analysis, and Interpretation of Data

4.1 Frequency and percentage distribution of the respondents

Table 2. Distribution of Bank Personnel's Position

Position	Frequency	Percentage
Board of Director	2	4
Manager	16	30
Internal Auditor/Compliance Officer	18	33
Loan/Credit Officer	18	33
Total:	54	100

As shown in Table 2 Distribution of Bank Personnel's Position, out of 54 respondents, Loan/Credit Officer, and Internal Auditor/Compliance Officer has the highest frequency of 18, with a percentage of 33%, followed by Manager having a frequency of 16 with a percentage of 30%. The least frequency is the Board of Directors having a frequency of 2, with a percentage of 4%. This implies that most of the Bank Personnel respondents are Loan/Credit Officer and Internal Auditor/Compliance Officer.

The respondents were selected according to the credit risk management structure, credit risk management structure, the board of directors shall oversight the implementation of the impactiveness of credit risk management practices. Senior-Management shall ensure that credit risk-taking activities are aligned with the implementation of the credit risk management. Loan/Credit Officer is a front office function that shall perform credit originating and provide support in the overall credit administration

4.2 Frequency and percentage distribution of the respondent's year of experience Table 3. Distribution of Bank Personnel's Year of Experience

Year of Experience	Frequency	Percentage
1 to 5 years	10	18
5 to 10 years	21	39
10 to 15 years	23	43
Total:	54	100

As shown in Table 3 Distribution of Bank Personnel's Year of Experience, out of 54 respondents. 10 to 15 years of experience has the highest frequency of 23, with a percentage of 43%, followed by 5 to 10 years of experience having a frequency of 21, with a percentage of 39%. The least frequency is 1 year to 5 years having a frequency of 10, with a percentage of 18%. This implies that most of the Bank Personnel respondents have 10 to 15 years of experience.

Under the Circular item (j) the personnel or staff involved in all phases of the credit risk management process shall be qualified, competent and have the necessary training and experience to exercise prudent judgment in assessing, managing, and controlling credit risk.

4.3 The Credit Risk Management

Table 4. Appropriate Credit Risk Environment

Year of Experience	Weighted Mean	Verbal
real of Experience	Weighted Mean	Interpretation
1 Fatablishing Anguan data Condit vial	2.02	•
1. Establishing Appropriate Credit risk	3.93	Always
environment Bank credits risk strategies,		
policies and procedures are regularly		
reviewed and updated by the Board of		
Directors.		
2. Senior management are responsible for	4.00	Always
implementing credit risk strategy approved		
by board and for developing credit policies		
and procedures.		
3. Board of Directors and Senior Managers	3.41	Always
closely monitor the major credit risk		
exposure of the bank.		
4. Credit risk management strategies,	3.35	Always
policies and procedures are consistently		
applied in all credit product and activities of		
the bank.		
5. The bank staffs stake the necessary	3.35	Always
precaution against default risk.		
6. Authority and responsibility of risk	3.41	Always
management are clearly set out and		,
understood throughout the bank.		
7. There is proper identification of credit risk	3.35	Always
inherent in all products and activities of our		,
bank.		
8. There is common understanding about	3.35	Always
credit risk management strategy, policies		,
and procedures across the bank.		
Composite Mean	3.52	Always

As shown in Table 4 Appropriate Credit Risk Environment, the data were interpreted from highest to lowest weighted mean. There were eight (8) indicators that were presented in this table. The highest weighted mean of 4.00, interpreted as "Always" or the most observable parameters under the context of the credit risk management practices. This fell under, indicator 2 "(Senior management are responsible for implementing credit risk strategy approved by the board and for developing credit policies and procedures)." which implies that the banks senior management were properly implementing the credit risk strategy approved by the board of director.

The second to it has a mean of 3.93, interpreted as "Always" fell under, indicator

1 "(Establishing Appropriate Credit risk environment Bank's Credit risk strategies, policies, and procedures are regularly reviewed and updated by the board of directors)." Next to the last has a mean of 3.41, interpreted as "Always" fell under, indicator 3 "(Boards of Directors and Senior Managers closely monitor the major Credit Risk exposure of the Bank)", and the indicator 6 (Authority and Responsibility of Risk Management are clearly set out and understood throughout the bank).

The categories with a least weighted mean value of 3.35, that interpreted as "Always" fell under indicator 4 "(Credit Risk management strategy, Policies, and Procedures are consistently applied in all Credit product and activities of the bank)", the indicator 5 (The banks' staff stake the necessary precaution against default risk), the indicator 7 (There is proper identification of Credit Risk inherent in all products and activities of our Bank), and the indicator 8 (There is a common understanding about Credit Risk Management Strategy, Policy, and Procedures across the Bank).

The Appropriate Credit Risk Environment has a Composite Mean of 3.52, interpreted as "Always". This implies that the respondents have Always feedback on the Appropriate Credit Risk Environment. This shows that rural banks in China is in compliance with establishing an appropriate credit risk environment. The principles set forth in the credit risk management guidelines shall be used

in determining the adequacy and impassiveness of the bank's credit risk management process and adequacy of capital relative to exposure.

Table 5. Sound Credit granting process

	Indicator	Weighted Mean	Verbal Interpretation
1.	It is too risky to invest our bank's funds in one specific sector of the economy.	3.19	Often
2.	Adequacy, marketability and enforceability of collateral requirement is properly evaluated and measured by professional personnel or expertise.	3.78	Always
3.	The Bank conducts comprehensive Creditworthiness analysis properly before granting loan.	3.59	Always
4.	The Bank uses well defined Credit- granting Criteria for assessing credibility of each loan applicants.	3.81	Always
5.	For approving new credits as well as amending, Renewing and re-financing existing credits.	4.00	Always
6.	The bank has established comprehensive Credit limit for the main categories of risk factors in all types of credit facilities.	3.65	Always
7.	The Bank optimally diversifies its credit exposure to different economic sectors and geographical area.	4.00	Always
8.	The Bank undertakes Credit granting process based on a reliable and substantial amount of date related to macroeconomic and borrower specific factors	4.00	Always
	Composite Mean	3.75	Always

As shown in Table 5, the Sound Credit granting process, the data were interpreted from highest to lowest weighted mean. The eight (8) indicators were also presented in this table.

The highest weighted mean of 4.00, interpreted as "Always" fell under, indicator 5 (For approving new credits as well as amending, Renewing, and re-financing existing credits)." The indicator 7 (The Bank optimally diversifies its credit exposure to different economic sectors and geographical areas), and indicator 8 (The Bank undertakes Credit granting process based on a reliable and substantial amount of data related to macroeconomic and borrower specific factors). Second, to it has a mean of 3.81, interpreted as "Always fell under, the indicator 4 (The Bank uses well defined Credit- granting Criteria for assessing the credibility of each loan applicant), next is indicator 2 (Adequacy, marketability, and enforceability of collateral requirement is properly evaluated and measured by professional personnel or expertise) has a mean of 3.78 interpreted as "Always". Next is indicator 6 (The bank has established a comprehensive Credit limit for the main categories of risk factors in all types of credit facilities) has a mean of 3.65 interpreted as "Always". Next to last has a mean of 3.59, interpreted as "Always" fell under, 3 (The Bank conducts comprehensive Creditworthiness analysis properly before granting loan). The category with a least weighted mean value of 3.19, interpreted as "Often" fell under indicator 1 (It is too risky to invest our bank's funds in one specific sector of the economy). The Sound Credit granting process has a Composite Mean of 3.75, interpretedas "Always". This implies that the respondents have "Often" feedback or frequently observed parameters on Sound Credit granting process.

This result shows that rural banks in China are compliant with the Circular, operating under sound credit granting process, in which the approval process for new credit as well as the amendment, renewal, and refinancing of existing credit exposures were aligned with the credit management policy.

Table 6. Credit administration

	Indicator	Weighte d Mean	Verbal Interpre tation
1.	The bank strictly monitors loan terms and conditions that have been stipulated at the time of loan approval.	3.35	Always
2.	Performance of Credit quality at individual and portfolio level.	3.22	Often
3.	There is a complete, neatly organized and regularly updated credit file in our bank.	3.94	Always
4.	The bank has developed its own internal risk rating system and applying in credit risk management process effectively.	3.22	Often
5.	There is effective Credit monitoring system and procedures.	3,94	Always
6.	The bank quantifies its credit risk at individual and portfolio level	3.87	Always
7.	There is effective system and practice of reporting and communicating risk data/information among relevant staffs of our bank.	3.22	Often
8.	The bank's Credit risk management system and practice has been integrated with appropriate Management Information Systems	3.94	Always
	Composite Mean	3.59	Always

Presented in Table 6 Credit administration, the data were interpreted from highest to lowest weighted mean. There were also eight (8) indicators that were presented in this table. The highest weighted mean of 3.94, interpreted as "Always" fell under, indicator 3 (There is a complete, neatly organized, and regularly updated credit file in our bank), indicator 5 (There is an impactive Credit monitoring system and procedures), and indicator 8 (The bank's Credit risk management system and practice have been integrated with appropriate Management Information Systems). Second to it has a mean of 3.87, interpreted as "Always fell under, indicator 6 (The bank quantifies its credit risk at individual and portfolio level)", next to last has a mean of 3.35, interpreted as "Always" fell under, indicator 1 (The bank strictly monitors loan terms and conditions that have been stipulated at the time of loan approval).

The category with least weighted mean value of 3.22, interpreted as "Often" fell under indicator 2 (Performance of Credit quality at individual and portfolio level), indicator 4 (The bank has developed its own internal risk rating system and applying in credit risk management process impactively), and indicator 7 (There is an impactive system and practice of reporting and communicating risk data/ information among relevant staff of our bank).

The Credit administration has a Composite Mean of 3.59, that is interpreted as "Always". This implies that the respondents have Always feedback or constantly observed on Credit administration parameter.

As stipulated in the Circular on Credit Administration, rural banks shall have in place a system for the ongoing administration of their various credit portfolios in which the result of the survey shows that majority of the rural banks in China has in place proper credit documentation and maintenance of credit files.

Table 7. Measurement and monitoring process

	Indicator	Weighted Mean	Verbal Interpretation
1.	The bank has appropriate policy, procedures and techniques for improving loan repayment and handling troubled loan.	3.13	Often
2.	Credit loss, Loan concentration, large exposure and level of NPL can be reduced if banks' Credit policy, Procedure and Techniques are implemented properly.	3.19	Often
3.	The bank's top managements have strong commitment toward controlling default trisk	3,41	Always
4.	Appropriate and timely policy measures have been taken for resolving loan recovery problem during the last three years.	3.41	Always
5.	The Bank keeps its Actual risk profile at or below its risk tolerance/appetite.	3.06	Often
6.	There is an appropriate level of Control over Credit Risk the bank faces.	3.19	Often
7.	The Bank carry out regular independent internal Credit quality reviews accurately.	3.13	Often
8.	There is a nearly identification of Credit default sign with immediate corrective action.	2.54	Often
	Composite Mean	3.13	Often

As shown in Table 7, the measurement and monitoring process, the data were interpreted from highest to lowest weighted mean. There were also eight (8) indicators are presented in this table. The highest weighted mean of 3.41, interpreted as "Always" fell under, indicator 3 (The bank's top managements have a strong commitment toward controlling default trick), and indicator 4 (Appropriate and timely policy measures have been taken for resolving loan recovery problem during the last three years).

Second to it has a mean of 3.19, interpreted as "Often" fell under, indicator 2 (Credit loss, Loan concentration, large exposure, and level of NPL can be reduced if banks' Credit policy, Procedure, and Techniques are implemented properly)", and indicator 6 (There is an appropriate level of Control over Credit Risk the bank faces). Next has a mean of 3.13, interpreted as "Often" fell under, indicator 1 (The bank has an appropriate policy, procedures, and techniques for improving loan repayment and handling the troubled loan), and indicator 7 (The Bank carry out regular independent internal Credit quality reviews accurately). Next is indicator 5 (The Bank keeps its Actual risk profile at or below its risk tolerance/appetite) has a mean of 3.06 interpreted as "Often".

The category with a least weighted mean value of 2.54, interpreted as "Often" fell under indicator 8 (There is a near identification of Credit default sign with immediate corrective action). The measurement and monitoring process has a Composite Mean of 3.13, interpreted as "Often". This implies that the respondents have Often frequently observed feedback on the measurement and monitoring process.

Banks must have to develop and implement comprehensive procedures and information systems to monitor the condition of individual credits and single obligors across the bank's various portfolios. These procedures need to define criteria for identifying and reporting potential problem credits and other transactions to ensure that they are subject to more frequent monitoring as well as possible corrective action, classification, and/or provisioning. An impactive credit monitoring system will include measures to: (i) ensure that the bank understands the current financial condition of the borrower or counter-party; (ii) ensure that all credits are in compliance with existing covenants; (iii) follow the use customers make of approved credit lines; (iv) ensure that projected cash flows on major credits meet debt servicing requirements; (v) ensure that, where applicable, collateral provides adequate coverage relative to the obligor's current condition; and (vi) identify and classify potential problem.

Table 8. Appropriate credit control process

	Indicator	Weighted Mean	Verbal Interpretation
1.	Establishing and Practicing effective Credit Risk Management system is one of the main objectives of my bank.	4.00	Always
2.	Success and failure of any bank is mostly depends on the effectiveness of Credit Risk Management System and Practice.	4.00	Always
3.	The bank has well-documented Credit Risk Management Strategy, Policy and Procedures that guide the staffs in their daily activities of managing credit risks.	4.00	Always
4.	The bank has established Sound Credit Risk Management System in line with BSP Circular 855 guide line and directives.	4.00	Always
5.	There is suitable Organizational structure that enables me to undertake effective Risk Management System and practice.	3.94	Always
6.	This Bank has adequate and qualified risk management staffs and expertise.	3.72	Always
7.	There is adequate Deposit mobilization and fund utilization in this bank.	3.81	Always
	The bank gives adequate and effective Risk gement training for staffs	3.20	Often
	Composite Mean	3.84	Always

Table 8 presented the Appropriate credit control process, the data were interpreted from highest to lowest weighted mean. There were eight (8) indicators that were presented in this table. The highest weighted mean of 4.00, interpreted as "Always" fell under, indicator 1 (Establishing and Practicing impactive Credit Risk Management system is one of the main objectives of my bank), indicator 2 (Success and failure of any bank mostly depends on the impactiveness of Credit Risk Management System and Practice), indicator 3 (The bank has well-documented Credit Risk Management Strategy, Policy, and Procedures that guide the staff in their daily activities of managing credit risks), and indicator 4 (The bank has established Sound Credit Risk Management System in line with guidelines and directives). Second to it has a mean of 3.94, interpreted as "Always" fell under, indicator 5 (There is suitable Organizational structure that enables me to undertake impactive Risk Management System and practice), next has a mean of 3.81, interpreted as "Always" fell under, indicator 7 (There is adequate Deposit mobilization and fund utilization in this bank). Next is indicator 6 (This Bank has adequate and qualified risk management staffs and expertise) has a mean of 3.72 interpreted as "Always".

The category with a least weighted mean value of 3.20 interpreted as "Often" fell under indicator 8 (The bank gives adequate and impactive Risk Management training forstaff). The Appropriate credit control process has a Composite Mean of 3.84, interpreted as "Always" . This implies that the respondents have Always or regularly implemented feedback on the Appropriate credit control process.

The result was in accordance with maintaining an appropriate credit control process. Credit review process is being observed specifically credit are granted in accordance with the bank's policies.

4.4 Credit Risk Management Practices and the impact on the Financial Performance Table 9. Appropriate Credit Risk Environment and Its Impact on the Financial Performance

	Beta (ß)	r - value	p - value	F - Crit	Interpretation
Appropriate Credit Risk Environment and Capital Adequacy Ratio (CAR)	0.426402	0.209067	0.405084	0.731308	Not Significant
Appropriate Credit Risk Environment and Return on Equity (ROE)	0.04206	0.096002	0.704735	0.148832	Not Significant
Appropriate Credit Risk Environment and Return on Asset (ROA)	0.302040	0.155609	0.537518	0.39704	Not Significant

If p - value < 0.05; Reject null

Table 9 reveals that there is no significant impact between the appropriate credit risk environment and the level of rural banks Capital Adequacy Ratio (CAR), Return on Equity (ROE) and Return on Assets (ROA). Using Linear Correlation, Pearson r, results are for Appropriate Credit Risk Environment and Capital Adequacy Ratio (CAR) beta of 0.426402, r - value of 0.209067,P-value of 0.405084 and F - value of 0.731308. Appropriate Credit Risk Environment and Return on Equity (ROE) beta of 0.04206, r - value of 0.096002, P-value of 0.704735 and F - value of 0.148832. Appropriate Credit Risk Environment and Return on Asset (ROA) beta of 0.302040, r - value of 0.155609, P-value of 0.537518 and F - value of 0.39704. Since all P - value > 0.05. Therefore, Accept null hypothesis. Hence, the null hypotheses were accepted and reject alternative hypothesis. This implies that there is no significant relationship.

If p - value < 0.05; Reject null

The result reveals that there is no significant impact between the appropriate credit risk environment and the financial performance. This was supported by the study of (Mendoza and Rivera 2017) that the Credit Risk Management Environment has a negative relationship with the banks financial performance. Also in the research of (Olobo,et.al 2021) revealed that the Credit Risk management Environment has a negative impact on the banks financial performance.

Table 10. Sound Credit Granting Process and its Impact Financial Performance

	Beta (ß)	r - value	p - value	F - Crit.	Interpretation
Sound Credit Granting Process and Capital Adequacy Ratio (CAR)	-0.071370	0.071466	0.7781	0.082137	Not Significant
Sound Credit Granting Process and Return on Equity (ROE)	0.008881	0.041398	0.870441	0.027468	Not Significant
Sound Credit Granting Process and Return on Asset (ROA)	-0.166457	0.175139	0.486986	0.506312	Not Significant

If p - value < 0.05; Reject null

Table 10 reveals that there is no significant impact between the Sound Credit Granting Process and the level of rural banks Capital Adequacy Ratio (CAR), Return on Equity (ROE) and Return on Assets (ROA).

Using Linear Correlation, Pearson r, results are for Sound Credit Granting Process and Capital Adequacy Ratio (CAR) beta of -0.071370, r - value of 0.071466, P-value of 0.7781 and F - value of 0.082137. Sound Credit Granting Process and Return on Equity

(ROE) beta of 0.008881, r - value of 0.041398, P-value of 0.870441 and F - value of 0.027468. Sound Credit Granting Process and Return on Asset (ROA) beta of -0.166457 r - value of 0.175139, P-value of 0.486986 and F - value of 0.506312. Since all P - value > 0.05. Therefore, Accept null hypothesis.

Hence, the null hypotheses were accepted and reject alternative hypothesis. This implies that there is no significant relationship.

Table 11. Measurement and Monitoring Process and Its Impact Financial Performance

	Beta (ß)	r - value	p - value	F - Crit.	Interpretation
Credit Administration and Capital Adequacy Ratio (CAR)	0.412990	0.29347	0.237224	1.507864	Not Significant
Credit Administration and Return on Equity (ROE)	0.087502	0.289463	0.243988	1.463221	Not Significant
Credit Administration and Return on Asset (ROA)	0.270841	0.202229	0.420961	0.682244	Not Significant

If p – value < 0.05; Reject null 57

Table 11 reveals that there is no significant impact between the Measurement and Monitoring Process and the level of rural banks Capital Adequacy Ratio (CAR),

Return on Equity (ROE) and Return on Assets (ROA). Using Linear Correlation, Pearson r, results are for Credit Administration and Capital Adequacy Ratio (CAR) beta of 0.412990, r - value of 0.29347, P-value of 0.237224 and F - value of 1.507864. Credit Administration and Return on Equity (ROE) beta of 0.087502, r - value of 0.289463, P-value of 0.243988 and F - value of 1.463221. Credit Administration and Return on Asset (ROA) beta of 0.270841, r - value of 0.202229, P-value of 0.420961 and F - value of 0.682244. Since all P - value > 0.05.

Therefore, Accept null hypothesis. Hence, the null hypotheses were accepted and reject alternative hypothesis. This implies that there is no significant relationship.

This implies that there is no significant impact between Measurement and Monitoring Process and financial performance.

Table 12. Appropriate credit control process and Its Impact Financial Performance

	Beta (ß)	r - value	p - value	F - Crit.	Interpretation
Measurement and Monitoring Process and Capital Adequacy Ratio (CAR)	-0.158363	0.087117	0.731053	0.122358	Not Significant
Measurement and Monitoring Process and Return on Equity (ROE)	-0.103848	0.265947	0.286119	1.217774	Not Significant
Measurement and Monitoring Process and Return on Asset (ROA)	0.046747	0.027022	0.91524	0.011691	Not Significant

If p - value < 0.05; Reject null

Table 12 reveals that there is no significant impact between the Appropriate credit control process and the level of rural banks Capital Adequacy Ratio (CAR), Return on Equity (ROE) and Return on Assets (ROA). Using Linear Correlation, Pearson r, results are

for Measurement and Monitoring Process and Capital Adequacy Ratio (CAR) beta of -0.158363 r - value of 0.087117, P- value of 0.731053 and F - value of 0.122358. Measurement and Monitoring Process and Return on Equity (ROE) beta of -0.103848 r - value of 0.265947, P-value of 0.286119 and F - value of 1.217774. Measurement and Monitoring Process and Return on Asset (ROA) beta of 0.046747, r - value of 0.027022, P-value of 0.91524 and F - value of 0.011691. Since all P - value > 0.05. Therefore, Accept null hypothesis.

Hence, the null hypotheses were accepted and reject alternative hypothesis. This implies that there is no significant relationship. This implies that there is no significant impact between Credit Control Process and financial performance.

BANK	TOTAL ASSET	NETINCOME	SHAREHOLDERS EQUITY	Total Loan Portfolio	INCOME/T OTAL	INCOME/S HAREHOL	
			22.000.00 m.	3 12/16/07/00 21	ASSETS)	DERS	CAR
RB1	3.387.416.002.76	108.378.837.21	587,467,779.36	2,350,477,594.90	0.03	0.18	17%
RB2	5,202,521,998.16	651.945.762.66	1,032,974,625,55	3,705,652,050.57	0.03	0.63	24%
RB3	1,741,339,677.73	48.833.903.45	301,743,976.12	1,211,194,497.57	0.13	0.03	20%
RB4	429,764,940.80	53,181,440.60	73,581,440.60	98,691,256.94	0.12	0.72	29%
RB5	2.513.079.948.37	499.619.606.41	465,801,776.66	1,951,608,799.18		1.07	20%
RB6	418,428,964.64	8.378.653.43	62,312,807.63	161,319,811,35	- 0.02	0.13	13%
RB7	418,705,722.82	40.992.203.63	96,919,186.03	202.101.213.66	0.10	0.42	21%
RB8	605.750.856.44	22,310,308.08	84,212,541,52	243 264 919 63	0.04	0.26	18%
RB9	411,676,980.39	4.631.341.33	44,190,797.26	164,422,425.75		0.10	12%
RB10	494,229,914.46	33,288,750,36	96,779,350.36	350,592,488,93	0.07	0.34	16%
RB11	425.616.628.45	7,376,498.00	73,697,198.00	187.369.413.80	0.02	0.10	24%
RB12	435,711,705.66	8,341,198.00	68,894,404,88	319,089,116,17	0.02	0.12	18%
RB13	3,815,919,632.00	53,926,992 24	417,521,088.01	2,729,496,917.96	0.01	0.13	11%
RB14	2,920,881,325.22	98,506,496,52	521,258,849.48	1,821,829,858,50	0.03	0.19	21%
RB15	463,887,619.49	26,872,739.73	53,271,594.62	255,249,722.03	0.06	0.50	14%
RB16	506,055,377.53	19,488,407.53	96,402,123.30	213,172,164.82	0.04	0.20	25%
RB17	303,455,225.67	67,022,254.91	155,282,254.91	96,520,249.95	0.22	0.43	50%
RB18	693,436,358.34	93,100,325.72	148,944,645.54	499,746,184.18	0.13	0.63	13%

Table 13. Average Summary of Financial Performance

5. Summary of Findings, Conclusions and Recommendations

5.1 Summary of Findings

It has been observed that the increase in credit risk tends to lower the banks financial performance in terms of profits, which is the primary goal of the bank through credit creation. The goal of rural banks is to make a lot of money. It appears that banks are competing to expand their balance sheets. As a result, almost all banks' total loan size is rapidly increasing, which is a common observation. Additionally, these banks have increased their deposit base to match the increase in assets (due to increased loans and advances). The increase in loans and advances is unquestionably beneficial, but these institutions should maintain a high level of risk management.

Credit control and risk management standards are in place. Banks should also pay close attention to maintaining a healthy asset portfolio. Otherwise, these loans could quickly become problematic, causing the bank to suffer financial losses. (Shakya, 2017).

The research aims to investigate the overall impact of credit risk indicators on banks' financial performance in China by identifying credit risk indicators and financial performance ratios over the time period (2016-2020), thus, investigating the overall and subtotal impact of credit risk indicators on banks' financial performance by using certain partial credit risk indicators.

In light of the findings of the study, the following conclusions were drawn: Most of the respondents of Bank Personnel were Loan/Credit Officer and Internal Auditor/Compliance Officer and have 10 to 15 years of experience.

Financial Profile. One rural bank got the highest average total assets amounting to 5.2 billion pesos and on the contrary, another rural bank has only 303 million pesos of its total assets. The average asset size of rural banks in China is at a 1.4 billion level. It can be considered that rural banks in China are substantially backed up by capital to support their operations.

The highest average net income that has been posted by a rural bank in China is 652 million and the lowest is eight hundred thousand pesos (CNY 893,000). There is a wide gap between the highest earners and the low earners among rural banks in China. Although the income is just proportionate to their assets. The average rural bank in China would earn around 45 million pesos a year.

The highest stockholders' equity also belongs to the top grosser rural bank in terms of income. That rural bank has a stockholders' equity of 1.1 billion pesos. Considerably, these two financial metrics goes hand in hand. The lowest stockholders' equity is at 44 million has also the lowest net income. The average stockholders' equity among rural banks in China is a 45.6 million pesos.

Distribution of Bank Personnel's Position, out of 54 respondents, Loan/Credit Officer, and Internal Auditor/Compliance Officer has the highest frequency of 18, with a percentage of 33%, followed by Manager having a frequency of 16 with a percentage of 30%. The least frequency is the Board of Directors having a frequency of 2, with a percentage of 4%. This implies that most of the Bank Personnel are Loan/Credit Officer and Internal Auditor/Compliance Officer.

Out of 54 respondents, in terms of the Distribution of Bank Personnel's Year of Experience, the 10 to 15 years of experience has the highest frequency of 23, with a percentage of 43%, followed by 5 to 10 years of experience having a frequency of 21, with a percentage of 39%. The least frequency is 1 year to 5 years having a frequency of 10, with a percentage of 18%. This implies that most of the Bank Personnel have 10 to 15 years of experience.

Further, the summary of the findings are as follows:

5.1.1 Credit Risk Management Practices

The findings revealed that credit risk management practices does have an insignificant effect on both ROE and ROA.

However, based on the researches of (Guna, R., & Chhetri. 2021), (Tangngisalu et.al, 2020), and (Li, Zu 2014) Non-Performing Loans has a significant effect on the both ROE and ROA while CAR has an insignificant effect on both ROE and ROA.

- 1. Establishing an appropriate credit risk environment. The Appropriate Credit Risk Environment has a Composite Mean of 3.52, interpreted as "Always" . This implies that the respondents answered "Always" feedback or practices were consistently observed on Appropriate Credit Risk Environment.
- 2. The result reveals that there is no significant impact between the appropriate credit risk environment and the financial performance. This was supported by the study of (Mendoza and Rivera 2017) that the Credit Risk Management Environment has a negative relationship with the banks financial performance. Also in the research of (Olobo,et.al 2021) revealed that the Credit Risk management Environment has a negative impact on the banks financial performance.
- 3. According to the website of Central Bank van Aruba, in order to create an appropriate credit risk environment, the institution must have a clear credit risk strategy and adequate credit risk policies in place. The strategy and policies should reflect the institution's risk tolerance and the level of profitability that it expects to achieve by taking various credit risks.

Sound Credit granting process. The Sound Credit granting process have a Composite Mean of 3.75, interpreted as "Always". This implies that the respondents have "Always" feedback or practices were consistently implemented on Sound Credit granting process. The result reveals that there is no significant impact between Sound Credit Granting Process and financial performance.

This was in compliance with the Circular which states that a sound credit granting process entails careful examination by the supervised entity of each credit applicant's ability to meet his obligations. To analyze the financial status and credit worthiness, sufficient information must be obtained about the borrower.

Credit Administration, Measurement, and Monitoring process. The Credit administration has a Composite Mean of 3.59, interpreted as "Always". This implies that the respondents have "Always" feedback or practices were regulalry implemented on Credit administration. On measurement and monitoring process the respondents have an "Often" feedback or practices are frequently observed. The result reveals that there is no significant impact between Credit Administration, Measurement, and Monitoring Process, and financial performance.

Appropriate Credit Control Process. The Appropriate credit control process have a Composite Mean of 3.84, interpreted as "Always". This implies that the respondents have "Always" provide feedback or consistently implemented on Appropriate credit control process. The result reveals that there is no significant impact between Credit Control Process and financial performance.

1. Significant impact Between Credit Risk Management Practices and Financial Performance. Based on the foregoing result of the study, it depicts that Credit risk management practices have "Always" or consistently been observed by the rural banks.

5.1.2 Credit Risk Management Practices does not have a significant impact on the banks' Capital Adequacy Ratio (CAR). Credit Risk Management Practices does not have a significant impact on the banks' Return on Assets (ROA).

Credit Risk Management Practices does not have a significant impact impact on the banks' Return on Equity (ROE).

6. Conclusions

Based from the findings of the study, the following conclusions are drawn:

- 1. Rural Banks in has a clear written credit risk management policy in place with the board of directors having oversight responsibility for its execution.
- 2. Credit risk management should be at the center of banks operations ub order to maintain financial stability. Credit risk management includes the system process and control which a company has in place to ensure the efficient collection of customer payment and the risk of non- payment. To achieve the goal of the bank's wealth maximization, banks should manage their assets, liabilities and capital efficiently. In doing this, credit policy should set out the bank's lending philosophy, specific procedures and means monitoring the lending activity.
- 3. The study revealed that Credit Risk Management Practices have no significant impact with the rural bank's financial performance. This was supported by the study of Mendoza & Rivera (2017) that credit risk management practices has a negative impact with profitability.
- 4. But this result was contrary to Aruwa and Musa (2012) who found that the rate of capital to total weighted risk assets has a positive impact while interest rate risk negatively affects the banks' financial performance. Moreover, Kurawa and Garba (2014) shows in their findings that credit risk management as measured by capital adequacy variable has a significant positive impact on the financial performance, and also is in consistence with results of Ogboi and Unuafe (2013) which revealed that impactive credit risk management has a positive impact on bank's financial performance.
- 5. According to Lukman (2014), there is a significant relationship between bank performance (profitability) and credit risk management (in terms of loan performance). Loans and advances, as well as non-performing loans, are important factors in determining a bank's asset quality. Some of the recommendations made in this study are that management should be cautious in establishing a credit policy that will not have a negative impact on profitability, and that they should also understand how credit policy affects the operation of their banks in order to ensure judicious utilization of deposits and profit maximization. Improper credit risk management reduces bank profitability, lowers asset quality, and increases loan losses and non-performing loans, all of which can lead to financial distress.
- 6. Credit Risk Management Practices does not have a significant impact on CAR, ROE, and ROA. Previous research findings show that the relationship between CAR, ROA, and ROE is not significant. This is in accordance with the research of Li and Zu (2014) and Tangngisalu, et al (2020). They also state that the higher the Non-performing Loan is, the less the available capital for banks to invest.
- 7. The empirical findings of the study of Alshatti (2015), shows that there is a positive impact of the credit risk indicators of non-performing loans/Gross loans ratio on financial performance, and a negative impact of Provision for Facilities loss/Net facilities ratio on financial performance. While, there is no impact of the Capital adequacy ratio and the credit interest/Credit facilities ratio on banks' financial performance when measured by ROA.
- 8. This is in agreement with Li and Zou (2014) who found that Non-performing loans/Gross loans have positive impacts on the financial performance of firms, as measured by ROA and ROE, and with Abdelrahim (2013) and Li and Zou (2014) who concluded in their separated studies that the capital adequacy ratio has no impact on credit risk management, and with Boahene, Dasah and Agyei (2012) who found that some of the credit risk indicators have a positive impact on banks' financial performance.
- 9. Several studies have shown that credit risk has a negative impact on profitability. When Staikouras and Wood (2004) studied the determinants of profitability of 685 in thirteen (13) European economies using Ordinary Least Squares (OLS) and a fixed-impact model of regression, they discovered that credit risk has a significant negative impact on the ROA. Similarly, Ali, et al (2011) discovered that credit risk has a negative impact on ROA when they investigated 22 commercial banks in Pakistan. This finding is consistent with Kargi's (2014) study, which concluded that credit risk has a significant negative impact on ROA based on a study of six (6) Nigerian banks. Similarly, in a study of 17 banks in Macedonia, Iloska (2014), it was identified that loan loss provision as a driver of profitability had a negative relationship with ROA. Furthermore, Erina and Lace (2013) and Abbas et al. (2014).

6.1 Recommendations

The following recommendations are hereby offered out of the result of the aforesaid findings and conclusions.

- 1. Based on the findings, the researcher recommends that banks should improve their credit risk management practices in order to increase profits. Banks should also establish adequate credit risk management policies by imposing strict credit estimation before granting loans to customers, and banks should design an impactive credit risk management system. Credit Risk management as a structural requirement needs to be enhanced while balancing the business requirements with controls. Rural bank should work in partnership with credit reference bureaus in the Philippines. This will enable the rural bank to effectively access adequate information on loan applicants and identify credit worthy loan applicants there by mitigating credit risk exposures. The rural bank should consider creating a loan recovery department that will be sorely responsible for recovering overdue loans. The rural bank should ensure that credit officers monitor customers regularly to ensure that credits accessed by borrowers are used for the intended purpose.
- 2. Return on Asset (ROA) and Return on Equity (ROE) were used as proxies for financial performance indicators. It is recommended that Non-Performing Loans (NPLs) will be used as one of the credit risk indicators. The estimation results showed that there is a negative impact between credit risk and ROA as well as between credit risk and ROE. The result shows that there is a relationship between credit risk management and profitability of Rural Banks in China. Accordingly, banks should concentrate more on credit risk management, especially on the control and monitoring of non- performing loans. In addition, managers should focus more on modern credit risk management techniques.
- 3. The study sought to assess the impact of credit risk management practices on the financial performance of rural banks in China and recommend that similar research should be done but with a specific focus on Non-Performing Loan/Total Loan Portfolio as one of the variables of Credit Risk Management.
- 4. Further, this study will help Rural banks improved its operation by minimizing the credit risk aspect. This will minimize the number of banks placed under the Prompt Corrective Action (PCA) through proper credit risk management that will reduce the Past Due ratio or its Non-Perfroming Loan. Early supervisory interventions prompt banks to address their weaknesses in a timely manner. The purpose is either to put banks back on a sound footing or to mitigate the consequences of a failure..
- 5. Moreover, the researcher encourages rural banks Board of Directors to increase their profitability through improved CRM. Before lending to consumers and banks, the rural banking sector must develop appropriate CRM strategies and policies based on a thorough credit appraisal; an appropriate CRM mechanism must be developed, and the credit awards system must be thoroughly reviewed, properly informed, and used to repay loans. Rural banks would develop and implement strategies to improve their performance and competitiveness while limiting their exposure to lending risk.

The researcher came up of developing a Credit Risk Management Assessment Plan that can be used by the Internal Auditors and Compliance Officers of the member rural banks of China.

Funding: This research received no external funding.

Conflicts of Interest: The authors declare no conflict of interest.

Publisher's Note: All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers.

References

- [1] Abbas, A., Haider, A., and Rana, U. A., (2014). Credit risk exposure and performance of banking sector of Pakistan. *Journal of Basic and Applied Sciences*, 4(3), 240-245.
- [2] Abdelrahim K.E. (2013). Effectiveness of Credit Risk Management of Saudi Banks in the Light of Global Financial Crisis: A Qualitative Study, Asian Transactions on Basic and Applied Sciences. 73-91
- [3] Abdelrahim, K.E. (2013). impactiveness of Credit Risk Management of Saudi Banks in the Light of Global Financial Crisis: *A Qualitative Study, Asian Transactions on Basic and Applied Sciences, 3 (2).* 73-91. Available at: http://asian-transactions.org.
- [4] Abiola, I. and Olausi, A.S. (2014). Theimpactof Credit Risk Management on the Commercial Banks Performance in Nigeria, *International Journal of Management and Sustainability*, *3* (5). 295-306. Available at: http://pakinsight.com.
- [5] Adequacy on the Profitability of Rural Banks in the Philippines. Scientific Annals of Economics and Moody's Analytics (n.d). "Credit Risk Solutions." Accessed Aug. 22, 2020
- [6] Adequacy on the Profitability of Rural Banks in the Philippines (n.d). *Scientific Annals of Economics and Business*, 64(1), 83–96. https://doi.org/10.1515/saeb-2017-0006
- [7] Adeusi, S.O., Akeke, N.I., Adebisi, O.S. and Oladunjoye, O. (2013). Risk Management and Financial Performance of Banks in Nigeria, *Journal of Business and Management, 14* (6) 52-56. Available at: http://iosrjournals.org.

- [8] Adjirackor, T., Oppong, D., Agarwal, S., Paintsil, R., Akuma, J., & Gagakuma, W. (2016). Evaluation of Credit Risk Management Practices in Societe Generale Ghana. *Research Journal of Finance and Accounting*, 7, 102-113.
- [9] Aduda, J. and Gitonga, J. (2011). The Relationship between Credit Risk Management and Profitability Among the Commercial Banks in Kenya, Journal of Modern Accounting and Auditing, 7 (9), pp. 934-946. Available at: file:///C:/Users/alial_000.
- [10] Adusei, C. (2018). Credit Risk Management Practices at the Branch Level of a RuralBank.https://www.researchgate.net/publication/344300738_Credit_Risk _Management_ Practices_at_the_Branch_Level_of_a_Rural_Bank
- [11] Afriyie, H. O. and Akotey, J. O. (2012). Credit risk management and profitability of selected rural banks in Ghana. Ghana: Catholic University College of Ghana, 7(4), 176-181.
- [12] Afriyie, H. O. and Akotey, J. O. (2013). Credit risk management and profitability of rural banks in the Brong Ahafo region of Ghana. management, 5(24).
- [13] Akanyonge, J. (2019). Credit Risk Management Assessment as an Operational Strategy in the Ghanaian Banking Sector: Empirical Evidence. Texila International Journal OfManagement, 5(2), 8–18. https://doi.org/10.21522/tijmq.2015.05.02.art002
- [14] Al Zaidanin, J. S. and Al Zaidanin, O. J. (2021). Theimpactof credit risk management on the financial performance of United Arab Emirates commercial banks. *International Journal of Research in Business and Social* https://doi.org/10.20525/ijrbs.v10i3.1102
- [15] Al Zaidanin, J. S., & Al Zaidanin, O. J. (2021). The impact of credit risk management on the financial performance of United Arab Emirates commercial banks. International Journal of Research in Business and 10(3), 303–319. https://doi.org/10.20525/ijrbs.v10i3.1102
- [16] Ali Sulieman A. (2015). The impact of credit risk management on financial performance of the Jordanian commercial banks. *Investment Management and Financial Innovations*, 12(1-2), 338-345
- [17] Alzeaideen, Cogent Business & Management (2019), 6: 1675455 and Bank Lending PDF Download. Retrieved fromh ttps://eduprojecttopics.com/product/credit-management-and-bank-lending/
- [18] Apanga M.A.N., Appiah K.O., Arthur J. (2016). Credit risk management of management. 162 178. Archive. 7(5), 562-573.
- [19] Aremu, M. A., Ekpo, I. C., and Mustapha, A. M. (2013). Determinants of banks' profitability in a developing economy: Evidence from Nigerian banking industry. *Interdisciplinary Journal of Contemporary Research in Business,* 4(9), 155-181.
- [20] Aruwa, S.A. and Musa, O.A. (2014). Risk components and the financial of Social Sciences, and Entrepreneurship, 1 (11). 1-8. Available at: http://www.ijsse.org.
- [21] Awosanya, Y & Elena, P. (2019). Credit Risk and The Financial Performance of Islamic Banks in Africa: A Critical Literature Review.
- [22] Ayertey Odonkor, A. (2018). An Assessment of Credit Risk Management Practices of Adansi Rural Bank Limited. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3252463
- [23] Ayertey O A. (2018). An Assessment of Credit Risk Management Practices of Adansi Rural Bank Limited (September 20, 2018). Available at SSRN: https://ssrn.com/abstract=3252463 or https://dx.doi.org/10.2139/ssrn.3252463
- [24] Albanese, M. A. & Mitchell, S. (1993). Problem-based Learning: A Review of Literature.
- [25] Bangko Sentral ng Pilipinas, (2013). Philippine Banking System. Status Report on http://www.bsp.gov.ph/downloads/publications/2013/statrep_2sem2013b.pdf.
- [26] Bangko Sentral ng Pilipinas, (2014). Circular No. 855. Guidelines on Sound Credit http://www.bsp.gov.ph/downloads/regulations/attachments/2014/c855.pdf.
- [27] Bangko Sentral ng Pilipinas, (2014). Circular No. 855. Guidelines on Sound Credit http://www.bsp.gov.ph/downloads/regulations/attachments/2014/c855.pdf.
- [28] Bangko Sentral ng Pilipinas, (2016). Philippine Banking System. Status Report on the http://www.bsp.gov.ph/downloads/publications/2013/statrep_2sem2013b.pdf.
- [29] Bank for International Settlements (2000). Principles for the Management of Credit
- [30] Bank of America. "5 Cs of Credit: What Are Banks Looking For?" Accessed Aug. 22,
- [31] Barth, J. R., Caprio Jr., G., and Levine, R. (2013). Bank Regulation and Supervision
- Financial Economic Policy, 5(2), 111-219.
 [32] Barth, J. R., Caprio J. G., and Levine, R., (2013). Bank Regulation and Supervision
- Financial Economic Policy, 5(2), 111-219. doi: http://dx.doi.org/10.1108/17576381311329661
- [33] Basel Committee on Banking Supervision, (1999). Principles for the Management of Access on: 12.12.2015.
- [34] Basel Committee on Banking Supervision, (2000). Principles for the management of
- [35] Basel Committee on Banking Supervision, (2000). Principles for the management of
- [36] Basel Committee on Banking Supervision, (2010). Basel III: A global regulatory
- [37] Basel Committee on Banking Supervision, (2010). Results of the comprehensive Committee on Banking Supervision,
- [38] Basel Committee on Banking Supervision, (2015). History of the Basel committee. http://www.bis.org/bcbs/history.pdf
- [39] Basel Committee on Banking Supervision, (2015). History of the Basel committee. http://www.bis.org/bcbs/history.pdf
- [40] Benjamin E D. (n.d). Opportunities for banks in pursuing a green, sustainable https://www.bis.org/review/r200807m.htm.
- [41] Berrios, M.R. (2013). The Relationship between Bank Credit Risk and Profitability and Liqui and Finance Research, 7 (3), pp.105-118. Available at: SSRN: http://ssrn.com/abstract=2149816.

- the Philippine Financial System.
- Risk Management Practices.
- Risk Management Practices.
- Philippine Financial System.
- Risk final document, Available at: http://www.bis.org. 2020.
- in 180 Countries from 1999 to 2011. Journal of
- in 180 Countries from 1999 to 2011. *Journal of*
- Credit Risk, http://www.bis.org/publ/bcbs54.htm.pdf,
- credit risk. 1-26. http://www.bis.org/publ/bcbs75.pdf. credit risk. 1-26. http://www.bis.org/publ/bcbs75.pdf.
- quantitative impact study, Switzerland: Basel
- Retrieved June 23, 2016, from Retrieved June 23, 2016, from
- economy in the current pandemic. Retrieved from
- and Liquidity, the International Journal of Business act=2149816.

- [42] Bhattarai, B. (2019). Effect of Credit Risk Management on Financial Performance of Commercial Banks In Nepal. *European Journal of Accounting, Auditing and Finance Research, 7*(5), 87–103. https://www.eajournals.org/wp-content/uploads/Effect-of-Credit-Risk-Management-on-Financial Performance- of-Commercial-Banks-in-Nepal.pdf
- [43] Bhattarai, B. (2019). Effect Of Credit Risk Management On Financial Performance Of Commercial Banks In Nepal. *European Journal of Accounting, Auditing and Finance Research, 7*(5), 87–103. https://www.eajournals.org/wp-content/uploads/Effect-of-Credit-Risk-Management-on-Financial Performance- of-Commercial-Banks-in-Nepal.pdf
- [44] Bhattarai, Y.R. (2016). The effect of credit risk on the performance of Nepalese commercial banks. *NRB Economic Review, 28*(1),41-62
- [45] Boahene, S.H., Dasah, J. and Agyei, S.K. (2012). Credit Risk and Profitability of Selected Banks in Ghana, *Research Journal of Finance and Accounting, 3* (7). 6-15. Available at: file:///C:/Users/alial_000/Downloads/2628- 4635-1- PB.pdf.
- [46] Boateng, K. (2020). Credit Risk Management And Profitability In Select Savings And Loans Companies In Ghana Dr. Y. Nagaraju. *In International Journal of Advanced Research*. http://www.journalijar.com/uploads/489 THESIS- 0917.pdf
- [47] Bouvatier, V. & Lepetit, L. (2012). impacts of loan loss provisions on growth in bank internationale, 4(4), 91- 116. https://doi.org/10.3917/ecoi.132.0091
- [48] Bülbül, D., Hakenes, H., & Lambert, C. (2019). What influences banks' choice of credit risk management practices? *Theory and evidence. Journal of Financial Stability, 40*, 1–14. https://doi.org/10.1016/j.jfs.2018.11.002
- [49] Business, 64(1), 83–96. https://doi.org/10.1515/saeb-2017-0006 Credit Management capital, Oxford University Press.comparative study for Egypt and Lebanon, Working Paper í Published by The Economic Research Forum (ERF), No. 0137. Available at: http://www.erf.org.
- [50] Broderick, C.(1956)Research in the Use and Purpose of Instructional Materials.Fort Wayne ,Indianna.
- [51] Cox, J. (2011). Teaching Strategies: Selecting Instructional Materials . @ Empowering K6 Educators, or visit her website at Empoweringk6educators . TeachHUB.com and TeachHUB Magazine. European Journal of Humanities and Social Sciences (2011) © Journals Bank.com (2011). ISSN 2220-9425 116
- [52] Credit Risk Management In Commercial Banks (2016). Natalia Konovalova, , Ineta Computer Science, Volume 158, 2019, Pages 979-987, Kristovska, Deposit Banks In Turkey, Procedia
- [53] Dilek Bülbül, Hendrik Hakenes, Claudia Lambert, Edustore.ng. (2019, March 16).
- [54] Ekinci, R., & Poyraz, G. (2019). The Effect of Credit Risk on Financial Performance of Deposit Banks In Turkey. *Procedia Computer Science*, 158, 979–987. https://doi.org/10.1016/j.procs.2019.09.139
- [55] Ekinci, R., & Poyraz, G. (2019). The Effect of Credit Risk on Financial Performance of Deposit Banks In Turkey. *Procedia Computer Science*, 158, 979–987. https://doi.org/10.1016/j.procs.2019.09.139
- [56] Ekinci, R., & Poyraz, G. (2019). The Effect of Credit Risk on Financial Performance of Deposit Banks In Turkey.

 **Procedia Computer Science, 158, 979–987. https://doi.org/10.1016/j.procs.2019.09.139
- [57] Fan, L. and Yijun, Z. (2014). Theimpactof credit risk management on profitability of commercial banks: A study of Europe, Umea School of Business, and Economics: Available at: http://www.diva-portal.org.
- [58] Fatemi, A., and Fooladi, I. (2006). Credit risk management: a survey of practices. Managerial Finance,32(3),227–233. https://doi.org/10.1108/03074350610646735
- [59] Fitch Solutions. (2016). "Fitch Credit Ratings." Accessed Aug. 22, 2020.framework for more resilient banks and banking systems, Switzerland: Basel Committee on Banking Supervision, https://www/bis/org/publ/bcbs189dec2010.pdf, Access on: 20.01.2016.
- [60] Gakure, R.W., Ngugi, J.K., Ndwiga, P.M. and Waithaka, S.M. (2012). impact of CreditRisk Management Techniques on the Performance of Unsecured Bank Loans Employed Commercial Banks in Kenya, *International Journal of Business and Social Research, 2* (4). 221-236. Available at:
- [61] Garr, D. K. (2013. Determinants of credit risk in the Banking industry of Ghana: Developing country studies.
- [62] Gestel, T.V. and Baesens, B. (2008). Credit Risk Management Basic Concepts:
- [63] Guna, R., & Chhetri. (2021). Effect of Credit Risk Management on Financial Performance Of Nepalese Commercial Banks. *Journal of Balkumari College*, 10(1). https://www.nepjol.info/index.php/jbkc/article/download/42088/32021
- [64] Hailu, A., & Veni2, P. (n.d.). Determinants Of Credit Risk In Ethiopian Private Commercial Banks. Retrieved May 29, 2022, From Http://Www.Tjprc.Org/Publishpapers/--1433931683-1.%20Accounting%20-%20Ijafmr%2020Determinants%20of%20Credit%20risk%20in%20Ethiopia n%20private%20%2 0Commercial%20banks.Pdf
- [65] Hsieh, P.H. & Dwyer, F.(2009). The Instructional Effect of Online Reading Strategies and Learning Styles on Student Academic Achievement. Educational Technology & Society, 12 (2), 36–50. International Journal of Business and Social Science .(2012)Vol 3 No.5; March 2012. JournalsBank.com (2011). ISSN 2220-9425 116
- [66] Barth, J. R., Caprio, G., & Levine, R. (2013). Bank regulation and supervision in Economic Policy, 5(2),111–219. https://doi.org/10.1108/17576381311329661
- [67] Alzeaideen, K. (2019). Credit risk management and business intelligence approach of the banking sector in jordan. *Cogent Business & Management*, 0(0). https://doi.org/10.1080/23311975.2019.1675455
- [68] Intellectual capital and financial performance: A study of the Turkish Banking Sector. (2017, September1).

 ScienceDirect.Retrieved from https://linkinghub.elsevier.com/retrieve/pii/S2214845016300011ISSN187705 09,
- [69] Ekinci, R., & Poyraz, G. (2019). The Effect of Credit Risk on Financial Performance of Deposit Banks In Turkey. *Procedia Computer Science, 158*, 979–987. https://doi.org/10.1016/j.procs.2019.09.139
- [70] International Journal of Business and Public Management, 2 (2). 72-80. Available at: http://mku.ac.ke/journals. Journal of Financial Stability, Volume 40,2019, Pages 1-14,ISSN 1572- 3089,https://doi.org/10.1016/j.jfs.2018.11.002.
- [71] Kaaya, I. and Pastory, D. (2013). Credit Risk and Commercial Banks Performance in Finance and Accounting, 4 (16). 55-63. Available at: www.iiste.org.

financial performance of Banks in Kenya for the

Krishna Murthy Institute of Management, Osmania

Interdisciplinary Journal of Contemporary Research in,

- [72] Kenya Kithinji, A.M. (2010). Credit risk management and profitability of commercial banks in Kenya, Working paper, School of Business of Nairobi, Kenya. Available at: http://erepository.uonbi.ac.ke.
- [73] Kibui, N. & Moronge, M. (2014). impacts of credit risk management on financial performance of SACCOS: A case study of Harambee SACCO. International Academic Journal of Information Sciences and Project Management, 1 (3), pp. 157-172.
- [74] Kolapo, T.F., Ayeni, R.K. and Oke, M.O. (2012). Credit risk and commercial banks' performance in Nigeria: A panel model approach, Australian Journal of Available at: Business and Management Research, 2 31-38. http://ajbmr.com/article.
- [75] Konovalova, N., Kristovska, I., & Kudinska, M. (2016). CREDIT RISK MANAGEMENT IN COMMERCIAL BANKS. Polish Journal of Management Studies, 13(2), 90-100. https://doi.org/10.17512/pjms.2016.13.2.09
- [76] Kurawa, J.M. and Garba, S. (2014). An Evaluation of the impact of Credit Risk Management (CRM) on the Profitability of Nigerian Banks, pp.104-115. Journal of Modern Accounting and Auditing, 10 (1),Available at: http://www.academia.edu.
- [77] Lagat, F. K., Mugo, R., and Otuya, R. (2013). impact of credit risk management practices on lending portfolio among savings and credit cooperatives in
- [78] Larkin, M. (2002). Instructional Scaffolding to Improve Learning. Retrieved from Faculty Development and Instructional Design website: http://www.niu.edu/spectrum/2008/fall/scaffolding.shtml.Using Scaffolded Instruction To Optimize Learning. Council For Exceptional
- [79] Leddy, C. (2008). The 'Alarming State Of Reading In America. Writer, 121(5). Levitov, D. D.(2010). Reading As A 21st-Century Skill Cannot Be Taken Lightly. School Library.
- [80] Learning First Alliance (n.d.). First Grade Instruction. Launching Young ReadersReading Rockets.
- [81] Lapteva, M.N. (2009). Credit Risk Management in the Bank, Letter from the Bank of Russia On typical banking risks. Available at: https://www.google.jo.
- [82] Laryea, E., Ntow-Gyamfi, M. and Alu, A.A. (2016), Nonperforming loans and bank profitability: evidence from an emerging market, African Journal of Economic and Management 462-481. https://doi.org/10.1108/AJEMS-07-2015-Studies, 8800
- [83] Li, F., Zou, Y., & Lions Student, C. (n.d.). The Impact of Credit Risk Management on Profitability of Commercial Banks: A Study of portal.org/smash/get/diva2:743402/FULLTEXT01.pdf Europe. http://www.diva-
- [84] Lugman, O. (2014). The Effect of Credit Risk on the Performance of Commercial Banks in Nigeria (December 10. 2014). Available at SSRN: https://ssrn.com/abstract=2536531 or http://dx.doi.org/10.2139/ssrn.25365 31
- [85] Lugman, O. (2014). The impact of Credit Risk on the Performance of Commercial Banks in Nigeria (December 10, 2014). Available at SSRN: https://ssrn.com/abstract=2536531 or http://dx.doi.org/10.2139/ssrn.2536531
- [86] Mendoza, R., & Rivera, J. P. R. (2017). The Effect of Credit Risk and Capital Adequacy on the Profitability of Rural Banks in the Philippines. the Alexandru Ioan Cuza University - Economics, 64(1), 83-96. https://doi.org/10.1515/aicue-2017-0006 Annals of t
- [87] Musyoki, D. and Kadubo, A.S. (2012). Theimpactof credit risk management on the period (2000-2006),
- [88] Naresh C. (2016). Associate Professor, Rao Borala Rajeshwar, Associate Professor Krishna Murthy Institute of Management, Osmania
- University, Hyderabad, Telangana State Online published on 15 March 2016.
- [89] Naresh C. (2016). Associate Professor, Rao Borala Rajeshwar, Associate Professor Telangana State Online published on 15 March University, Hyderabad,
- [90] Nawaz, M. and Munir, S. (2012). Credit risk and the performance of Nigerian, 4 (7), pp. 49-63. Available at: http://journal-archieves25.webs.com.
- [91] Ndwiga, J. M. (2010). Relationship between credit risk management practices and financial performance of microfinance institutions in Kenya (Doctoral dissertation, University of Nairobi, Kenya).
- [92] Njanike, K. (2009). Theimpactof impactive Credit Risk Management on Bank Survival, Journal of Financial Regulation and Compliance, Bindura University, Zimbabwe. Available at: https://ideas.repec.org. Working paper,
- [93] National Research Council .(1997). Choosing and Using Instructional Resources. Science Teaching Reconsidered: A Handbook. Washington ,DC: The National Academies Press. doi: 10.17226/5287.
- [94] Ogboi, C and Unuafe, O.K. (2013). impact of Credit Risk Management and Capital Adequacy on the Financial Performance of Journal of Emerging Issues in Economics, Finance and Banking, 2 (3), pp. 703-717. Available: Commercial Banks in Nigeria, http://www.globalbizresearch.com.
- [95] Olobo, M., Karyeija, G., Sande, P. and Khoch, S. (2021) Credit Risk Management Practices and Performance of Commercial Banks in South Sudan. Journal of Financial Risk Management, 10, 306-316. doi: 10.4236/jfrm.2021.103018.
- [96] Oudat, M. S., & Ali, B. J. (2021). The Underlying Effect of Risk Management On Banks' Financial Performance: An Analytical Study On Commercial and Investment Banking in Bahrain. Ilkogretim Online, 20(5).
- [97] Poudel, R.P. (2012). Theimpactof credit risk management on financial performance of commercial banks in Nepal, International Journal pp. 9-15. Available at: http://www.ijac.org.uk/images.profitability in commercial banks in Sweden, of Arts and Commerce, 1 (5), Master Theses.
- [98] Parlindungan, P. (2010). A Review On Reading Theories And Its Implication ToThe Teaching Of Reading .parlpard2010@gmail.com.Universitas Kristen Indonesia.
- [99] Piaget, J. (2009). Piaget's stages of cognitive development. Retrieved April 30, 2009, from About.com: Psychology Website: http://psychology.about.com/lib rary/quiz/bl_piaget_quiz.htm
- [100]Rehman, Z. U., Muhammad, N., Sarwar, B., & Raz, M. A. (2019). Impact of risk management strategies on the credit risk faced by Balochistan. Financial Innovation, 5(1). https://doi.org/10.1186/s40854-019 0159-8 commercial banks of
- [101] Ekinci, R., & Poyraz, G. (2019). The Effect of Credit Risk on Financial Performance of Deposit Banks In Turkey. Procedia Computer Science, 158, 979-987. https://doi.org/10.1016/j.procs.2019.09.139

- [102]Richard, E., Chijoriga, M., Kaijage, E., Peterson, C. and Bohman, H. (2008), Credit risk management system of a commercial bank in Tanzania", *International Journal of Emerging Markets*, 323-332. https://doi.org/10.1108/17468800810883729
- [103]Sathyamoorthi, C., Mapharing, M., Mphoeng, M., & Dzimiri, M. (2020). Impact of financial risk management practices on financial performance: Evidence from commercial banks in Botswana. *Applied Finance and Accounting, 6*(1), 25-39.
- [104]Singh, A. (2013). Credit risk management in Indian commercial banks, *International Journal of Marketing, Financial Services & Management Research*, 2 (7), pp. 47-51. Available at: http://indianresearchjournals.com.
- [105]Sleimi, M. (2020). Effects of risk management practices on banks' performance: An empirical study of the Jordanian banks. Management Science Letters, 10(2), 489-496.
- [106] Scherl, C. R., & Haley, J. (2000). Computer monitor supervision: A clinical note. The American Journal of Family Therapy, 28, 275–282.
- [107] Sherida, M. (1981). Reading Horizons Volume 22, Issue 1 1981 Article 11 Theories of Reading and Implications for Teachers.
- [108] Smith, R. C., Mead, D. E., & Kinsella, J. A. (1998). Direct supervision: Adding computer-assisted feedback and data capture to live supervision. *Journal of Marital and Family Therapy, 24* (1), 113–125.
- [109]ThesisAcuña, M. (2015). Level of Effectiveness of Oplan Tutok Basa in District VI of Quezon City School Year 2013-2014: An Assessment. Unpublished Graduate Thesis.
- [110]Tangngisalu, J., Hasanuddin, R., Hala, Y., Nurlina, N., & Syahrul, S. (2020). impact of CAR and NPL on ROA: Empirical Study in Indonesia Banks. *The Journal of Asian Finance, Economics and Business, 7*(6), 9–18. https://doi.org/10.13106/JAFEB.2020.VOL7.NO6.009
- [111]Tangngisalu, J., Hasanuddin, R., Hala, Y., Nurlina, N., & Syahrul, S. (2020). Effect of CAR and NPL on ROA: Empirical Study in Indonesia Banks. *The Journal of Asian Finance, Economics and Business, 7*(6), 9–18. https://doi.org/10.13106/JAFEB.2020.VOL7.NO6.009
- [112]Tetteh, F.L. (2012). Evaluation of credit risk management practices in Ghana commercial bank limited, Master Theses, Kwame Nkrumah University of Science and Technology. Available at: http://ir.knust.edu.gh.
- [113] Wambui, E. (2013). Effect Of Use Of Instructional Materials On Learner Participation In Science Classroom In Preschool In Kiine Zone Kirinyaga County Kenya Stephen
- [114]Yeasin, H. (2022). Impact of credit risk management on financial performance: A study of commercial banks in Bangladesh.

 Interdisciplinary Journal of Applied and Basic Subjects, 2(1), 14–22. https://visnav.in/ijabs/wp-content/uploads/sites/11/2022/01/Impact-of-credit-risk-management-on-financial-performance-A-study-of-commercial-banks-in-Bangladesh.pdf
- [115] Tierney, R. J., and Pearson.P.D.(1994). "Learning to learn from text: A Framework Ruddell, and Singer, eds. 1994. 496–513.