THE IMPACT OF RISK MANAGEMENT ON THE FINANCIAL PERFORMANCE OF COMMERCIAL BANKS - A CASE STUDY OF BANGKOK BANK

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AN INDEPENDENT STUDY SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION GRADUATE SCHOOL OF BUSINESS SIAM UNIVERSITY 2024

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ABSTRACT

In recent years, banks have faced various risks such as credit risk, market risk, operational risk, etc. As a major bank in Thailand, Bangkok Bank's strategies for coping with economic fluctuations and risk management measures can provide useful information on financial risk management. Against this backdrop, it is of great significance to study the risk management of Bangkok Bank. Therefore, this study aimed to explore the impact of Bangkok Bank's risk management practices on financial performance. The research objective were: 1) To explore the impact of credit risk on the financial performance of Bangkok Bank. 2) To explore the impact of liquidity risk on the financial performance of Bangkok Bank.

This study employed the quantitative research methods and the risk management theory, using a questionnaire to collect data from 104 respondents, and found a significant relationship between credit risk, liquidity risk, and the bank's financial performance. High credit risk typically leads to an increase in bad debts, which reduces the bank's net profit margin and may affect its capital adequacy ratio. Insufficient liquidity may cause the bank to face high-cost financing or asset sales pressure, which in turn affects its financial soundness and profitability.

This study found that: 1) Credit risk has a significant negative impact on Bangkok Bank's financial performance. 2) Liquidity risk also has a negative impact on financial performance. These findings highlight the importance of effective risk management practices for bank financial performance.

Keywords: risk management, Bangkok Bank, financial performance

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DECLARATION

I, Feng YuanRu, hereby certify that the work embodied in this independent study entitled "The Impact of Risk Management on the Financial Performance of Commercial Banks - A Case Study of Bangkok Bank" is result of original research and has not been submitted for a higher degree to any other university or institution.

(Feng YuanRu)

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1. Introduction

1.1 Background of the Study

The banking industry around the world is one of the most important pillars of any country's economy (Chen, Lee, & Liu, 2020). By providing various financial and credit services, the banking industry plays a decisive role in the country's economic development and growth. It can be said that the banking industry is the driving force, accelerator, balancer, and regulator of the economy. As an integral part of every country's economic system, banks facilitate the flow of funds between surplus and deficit units (Yin et al., 2020). Generally speaking, when surplus funds are deposited into banks, deficit units will receive loans (Dao, 2020). Although the concept may be simple, the design, construction, and management of actual transactions are aimed at ensuring ultimate ownership of funds by all parties, especially depositors. Usually, banks must ensure the repayment of deposits (Jiravichai & Banomyong, 2022). However, sometimes loan repayment becomes impossible. Some borrowers, despite being bound by loan contracts, still fail to repay their bank loans. Therefore, banks have potential losses in loan business and are more inclined to provide loans to borrowers with good credit. These borrowers with good credit will receive lower interest rates, while borrowers with lower credit should pay higher interest rates.

Credit risk analysis has become extremely important, requiring a robust process that enables banks to actively manage their loan portfolios to reduce and minimize potential losses caused by non-performing loans, and create appropriate returns for shareholders (Elamer et al., 2020). Banks have recognized the importance of credit risk management. Credit risk management can establish process standards and division of responsibilities (Gunarapong et al., 2022). Credit risk basically depends on the borrower's ability to repay the borrowed funds, which may lead to potential risks. Credit risk is usually caused by two situations. The first scenario is when the borrower breaches the bank's financial contract and refuses to repay the loan amount. Another reason for credit risk is the bfinancial performanceceder market, when the present value of future cash flows from bank lending projects changes due to certain changes in the financial market. In addition, liquidity risk analysis is also crucial. Liquidity risk refers to the risk that a company or bank may not be able to meet short-term financial needs (Kortana, 2019). This is usually due to the inability to convert securities or tangible assets into cash without losing capital and/or earnings.

Financial institutions operate in the capital and money markets, serving as the backbone of the economy and leading to the flow of funds and capital in society. However, financial institutions face various risks. The types and sometimes severity of these risks are so great that if financial institutions fail to properly control and manage them, it may lead to disasters. In order to earn more profits, financial institutions must ensure that customers can fully repay their loans, as there is information asymmetry in the loan market. Therefore, screening and supervision are crucial in the loan disbursement process.

In the rapidly developing business environment, banks face various risks such as credit risk, liquidity risk, market risk, operational risk, etc. Due to various risks, effective risk management is required. Managing risk is a fundamental task that must be performed after identifying and understanding risks. Good risk management focuses on identifying and addressing risks (Fakhrunnas & Imron, 2019; Jiravichai & Banomyong, 2022). Its goal is to add maximum sustainable value to all activities of the organization. Larger and more profitable banks have lower systemic risk, and additional equity will only reduce the systemic risk of banks subject to regulatory capital requirements. A stable banking sector plays an important role in promoting national financial development, but banks also face various risks. According to Islam et al. (2020), banks face various sizes and levels of risks, with the main being financial risk, which affects the development process of banks.

Bangkok Bank is one of the largest commercial banks in Thailand, and its risk management is crucial for maintaining financial stability and protecting customer interests. With the intensification of competition in the financial sector and the increasing uncertainty in the financial market, banks are facing various risks, such as credit risk, market risk, operational risk, etc. In this context, it is very important to study the risk management of Bangkok Bank. By studying the risk management of Bangkok Bank, it can help banks better identify and manage various risks, thereby improving the efficiency and effectiveness of their risk management. Meanwhile, these research findings can also provide reference and inspiration for other banks and financial institutions, promoting the healthy development of the entire financial system (Kortana, 2019). Therefore, studying the risk management of Bangkok Bank mainly involves gaining a deep understanding of its risk management mechanism and practical experience, proposing effective and improvement suggestions to promote the sustainable development and stable operation of Bangkok Bank and the entire financial industry.

In recent years, bank risk management has been an important issue in the global banking industry (Gunarapong et al., 2022). With the occurrence of consecutive financial and banking crises, banks are facing increasing risks, which have had a significant impact on the global economy. Among them, credit risk is one of the most important risks faced by banks. However, credit risk management has not received sufficient attention, and the bank management has failed to take appropriate measures.

Liquidity is a dynamic challenge faced by enterprises, which depends on constantly changing business and market conditions (Kortana, 2019). When a cash flow crisis occurs, companies may face a series of problems, including supply chain disruptions, hindered capital expansion plans, and loan contract defaults. Enterprises with sufficient liquidity are better able to fulfill their obligations and improve profitability and financial flexibility to address potential challenges and opportunities. Therefore, effective management of liquidity risk is crucial to ensure that businesses can respond to market changes and avoid potential financial difficulties.

1.2 Questions of the Study

1. What is the effect of the credit risk on the financial performance of Bangkok Bank?
2. What is the effect of the liquidity risk on the financial performance of Bangkok Bank?

1.3 Objectives of the Study

The purpose of this study is to analyze and evaluate the risk management practices and their effectiveness in Bangkok Bank. It is divided into two aspects:

1. To explore the impact of credit risk on the financial performance of Bangkok Bank.
2.To explore the impact of liquidity risk on the financial performance of Bangkok Bank.

1.4 Significance of the Study

This study focuses on credit risk and liquidity risk, which has important practical significance for bank and enterprise management. It can be said that through the study of the risk management practices of Bangkok Bank and their impact on financial performance, this research not only enriches the theoretical research of bank risk management, but also provides useful reference and guidance for the risk management practices of the banking industry. Moreover, these findings not only help to understand the complexity of bank risk management, but also provide important references for policy makers and bank management to optimize risk management strategies, playing a certain reference role.

1.5 Scope of the Study

The study used the quantitative research method and the risk management theory to analyze and assess the risks faced by banks, with a particular focus on credit risk, liquidity risk, and their impact on financial performance. To gather relevant data, structured questionnaires were distributed to a sample of 104 participants, and the research employed a probability sampling technique, specifically random sampling, a total of 104 questionnaires with the highest efficiency were received. The questionnaires were had been distributed online, and the distribution period ended in April 2024.

1.6 Definition of Key Terms

Credit Risk: The potential for loss due to a borrower's failure to repay a loan or meet contractual obligations. In the context of banking, it reflects the risk associated with lending activities and affects the bank's profitability and overall financial stability.

Liquidity Risk: The risk that a bank will not be able to meet its short-term financial obligations due to an imbalance between its liquid assets and liabilities. This can arise from an inability to convert assets into cash without significant loss in value, impacting the bank's operational efficiency and financial health.

Financial Performance: A measure of a bank's profitability and overall financial health, typically assessed through key indicators such as net income, financial performance(financial performance), return on equity (ROE), and other financial ratios. Financial performance reflects how well a bank is managing its resources and risks.

Risk Management: The systematic appfinancial performancech to identifying, assessing, and mitigating risks that can adversely affect an organization's financial performance. In banking, effective risk management is crucial for maintaining stability and ensuring compliance with regulatory requirements.

2. Literature Review

2.1 Introduction

According to the cited literature, risk management is an evolving and critical management practice, particularly becoming increasingly important in modern complex business environments. The definition and understanding of risk vary depending on individual perspectives, attitudes, and experiences, gradually evolving from a limited, specific, and qualitative concept to a measurable phenomenon since the 1950s (Akhanolu et al., 2020). Financial risk is defined as events or situations that may cause significant direct losses to institutions, including various forms such as market risk, credit risk, operational risk, and liquidity risk. The existence of these risks has a profound impact on the normal operation of financial markets and institutions, therefore, financial institutions need to implement effective risk management to protect their healthy development and customer interests. Risk management theories provide various methods and frameworks to assist institutions in identifying, assessing, and managing risks. These theories include but are not limited to risk identification, risk assessment, risk control, and risk monitoring, through which institutions can effectively respond to various risks and optimize resource allocation. In the context of global financial crises and other events, market risk measurement methods are particularly important for enhancing the financial system's resilience to unknown events.

Therefore, the second chapter of this study is a review of relevant research literature, including literature on how financial institutions can maintain a competitive advantage in complex and dynamic market environments by understanding and applying risk management theories, and create sustained value for customers and stakeholders.

2.2 Risk

Risk is defined as the situation where an institution suffers significant and direct losses due to reduced revenue sources or capital losses (Phan et al., 2020). A group of economists proposed a financial performance explanation for the phenomenon of risk. They define risk as events or situations that may affect an organization's ability to achieve its goals and limit its activities or capabilities (Debkumar, 2022). If we accept this definition of risk, then risk must be seen as a component of the market economy system. This usually includes several main forms such as market risk, credit risk, operational risk, and liquidity risk (Sharma et al., 2021). The existence of financial risks affects the operation of financial markets and institutions.

Risk is generally defined as "a possible future event or condition that could negatively affect the achievement of objectives or create opportunities". Risk is essentially about uncertainty, representing possible future situations that could affect the objectives of an individual, organization or project (Debkumar, 2022). The core elements of risk include: Uncertainty: Risk stems from uncertainty about the future, meaning that we cannot accurately foresee all possible outcomes. Impact: Risk has potential negative impacts, but can also bring positive opportunities, depending on how it is managed and responded to. Probability: The likelihood of a risk occurring, which usually requires an assessment of its probability of occurrence. Risks can be classified according to different criteria, and common classifications include:

(1) Classification by the area of impact

Financial risk: involves uncertainty in funding and finance, such as market volatility, credit risk and liquidity risk.

Operational risk: risks related to the internal operations of an organization, such as production disruptions, supply chain problems and technological failures.

Strategic risk: involves uncertainty in the implementation of a company's strategy, such as market competition, regulatory changes and corporate decision-making errors.

Legal risk: risks related to legal compliance and litigation, such as contract disputes and regulatory violations.

Environmental risk: risks involving the natural environment and the external environment, such as natural disasters and climate change.

(2) Classification by the nature of risk

Pure risk: Risk with only negative consequences, such as natural disasters and accidents.

Speculative risk: Risk that may bring both gains and losses, such as investment risk and entrepreneurial risk.

(3) Classification by the source of risk

Internal risk: Risk from within the organization, such as employee management, internal processes and system failures.

External risk: Risk from outside the organization, such as market changes, policy changes and economic fluctuations.

Risk should be studied because it varies from person to person (Phan et al., 2020). Through systematic risk identification, assessment, response and monitoring, organizations can effectively manage risks, reduce negative impacts and seize potential opportunities. Although risk management faces challenges, scientific methods and effective strategies can enhance the resilience and probability of success of organizations (Debkumar, 2022). Understanding and responding to risks are key to achieving long-term goals and sustainable development. Risk exists in various activities, including logistics activities, and when risks increase and affect the entire logistics network, managers need to make great efforts to identify and manage risks. Risk research has become increasingly complex because the meaning of risk can vary depending on personal views, attitudes and experiences Once a more comprehensive view was established and risk was considered a measurable phenomenon, companies and financial institutions began to pay attention to risk measurement.

2.3 Financial Risk

Financial risk refers to the risk that investors or financial institutions may suffer financial losses due to changes in market or economic conditions (Kortana, 2019). With the increasing complexity and globalization of financial markets, the types and management of financial risks have become more complex. This article will analyze the definition, main types and management strategies of financial risks to provide an in-depth understanding of this key area. Financial risk refers to the potential financial losses caused by market fluctuations, economic changes or other uncertainties (Kortana, 2019). The core of risk lies in the uncertainty of future results, which may have a negative impact on investors' asset values, cash flow or company operations. Financial risks not only affect individual investors, but also pose a threat to the stability of enterprises and the entire financial system. Financial risks are an inevitable part of the modern financial system. The main types of financial risks are follows:

1) Market risk

Market risk refers to the risk of loss due to fluctuations in market prices or interest rates. It includes stock risk, interest rate risk, exchange rate risk and commodity price risk. The volatility of market risk comes from factors such as economic data, political events and market psychology. For example, during the global financial crisis in 2008, the sharp fluctuations in the stock market caused huge losses to investors.

2) Credit risk

Credit risk refers to the risk that a borrower will default or fail to meet its financial obligations on time. This risk is usually associated with debt investments, such as corporate bonds or loans. The impact of credit risk depends not only on the credit status of the borrower, but also on the macroeconomic environment and market liquidity. The bankruptcy of Enron in 2001 is a typical credit risk event.

3) Liquidity risk

Liquidity risk refers to the risk that assets cannot be quickly liquidated at a reasonable price when funds are needed. This risk may be caused by market inactivity or asset characteristics. For example, during the financial crisis, many financial institutions faced liquidity problems, resulting in market freezes and capital chain breaks.

4) Operational risk

Operational risk involves losses caused by failures in internal processes, people or systems, or due to external events such as natural disasters or fraud. The management of operational risk requires attention to the reliability of the company's internal controls, employee training and technical systems. The London Whale incident at JPMorgan Chase in 2012 is a classic example of operational risk.

Understanding different types of financial risks and their management strategies is critical for investors, companies and financial institutions. Market risk, credit risk, liquidity risk and operational risk each have their own characteristics and require targeted management measures. Financial risks can be effectively managed through hedging, diversification, risk transfer and strengthening of internal control. In the future, as the financial market continues to develop, financial risk management will also continue to evolve to meet new challenges and changes. Financial institutions must handle various risks and conduct risk management to ensure healthy development and protect the interests of customers. Bayar et al. (2020) conducted a study focusing on the relationship between financial literacy and financial risk tolerance among individual investors. Using a multinomial logistic regression financial performance, the research analyzed how varying levels of financial literacy impact investors' willingness to take financial risks. The study employed a scale ranging from 1 (no financial risk taken) to 4 (high financial risk taken for high returns). This financial performance helps in understanding the behavioral aspects of financial decision-making, particularly how educated individuals are in managing financial risks and making investment choices.

Shakil (2021) explored the impact of Environmental, Social, and Governance (ESG) performance on financial risk, particularly focusing on the moderating role of ESG controversies and board gender diversity. This research highlights how firms' ESG performance can influence their financial risk profile, with a specific emphasis on the interaction effects of ESG controversies and board gender diversity. Understanding these dynamics is crucial for assessing how corporate governance and social responsibility impact financial stability. Green Process Innovation and Financial Risk. Tariq et al. (2023) investigated the relationship between green process innovation and financial risk, with a focus on the moderating roles of slack resources and competitive intensity. The study found that green process innovation (GPRIP) affects a firm's financial risk by altering uncertainties related to performance outcomes. The research also examined how the availability of slack resources and the level of competitive intensity moderate this relationship. This work contributes to understanding how sustainable practices impact financial risk and performance in a competitive environment. Systematic Financial Risks and Monetary Policy. Ouyang et al. (2022) analyzed the nonlinear spillover effects of U.S. monetary policy uncertainty on systematic financial risks in China. The study examined how external factors, particularly U.S. monetary policy, influence the formation of systematic financial risks. The research highlights the external impacts on financial stability and provides insights into how global monetary policies can affect domestic financial risk landscapes.

This literature review underscores the multifaceted nature of financial risk and performance. Studies have explored various dimensions, including individual financial literacy and risk tolerance, corporate ESG performance, green innovation, and the effects of global monetary policies. Understanding these aspects provides a comprehensive view of how different factors interplay to influence financial risk and performance. Each study contributes valuable insights into how financial decisions and external influences impact the stability and success of financial entities and individual investors.

2.4 Risk Management

Risk management refers to the design and implementation of procedures for managing business risks (Yin et al., 2020). Risk management aims to track business activities that develop with technological advancements (Debkumar, 2022). Risk is the uncertainty that leads to losses. Risks exist in various activities, including logistics activities, and may increase over time and affect the entire logistics network. There are differences between the comprehensive risk management framework at the micro level and the macro level risk management framework recommended to institutions, enterprises, and banks (Sharma et al., 2021; Gunarapong et al., 2022). Obviously, risk management through the attitude of the board of directors and managers can help organizations and institutions achieve effective and cost-effective risk management through the use of more diverse unilateral strategies.

2.4.1 Risk Management Theory

Risk management theory is a technique used by enterprises to identify, assess, and manage risks (Mishchenko et al., 2022). By identifying potential risks, companies can develop plans to avoid or reduce these risks. Risk management theory helps companies protect themselves from financial losses, legal liabilities, and reputational damage.

The focus of this article is to study the theoretical basis of bank risk management strategies, where risk management is defined as a set of hedging strategies aimed at changing the probability distribution of the future value of bank assets. Tran et al. (2020) pointed out that banks should assess the liquidity risk of their various departments and entities, including product portfolios, business activities, cash flow conditions, and on balance sheet and of balance sheet obligations. This comprehensive risk assessment helps banks understand and manage the risk exposures they face, which in turn affects their liquidity risk management strategies and implementation.

The extensive literature on general corporate decision-making, as pointed out by Mio et al. (2022), suggests that in a perfect and complete market world, financial decisions are irrelevant because they do not alter the equity value of shareholders in the company. The only way to increase shareholder wealth is to increase the value of company assets. Capital structure and risk management decisions will not have an impact on shareholder wealth. However, in the context of the Modigliani Miller model's perfect capital market, some important deviations have been identified that provide motivation for companies to focus on risk management, such as taxes, bankruptcy costs, agency costs, etc. (Agrawal & Sehgal, 2018; Catherine, 2019; Harb et al., 2023; Singh

& Rastogi, 2020). When these risk management reasons are incorporated into the objective function of the enterprise, the basic conclusion is that when all risks can be fully traded, the enterprise maximizes shareholder value through complete hedging (Siddika & Haron, 2020; Yanenkova et al., 2021). Risk management is a process of identifying and measuring risks through existing resources and developing management strategies. Risk management and internal control share the same elements and components, and are interrelated. The existing risk management needs to assess its reliability. Meanwhile, the control activities will be optimized and utilized through risk management methods.

In today's rapidly developing business environment, risk management has become a standard practice. It is a key factor in evaluating the future potential and management performance of banks. Many banking institutions are actively participating in the development of risk management policies and frameworks, and approving their risk appetite. As is well known, there is no return without risk. There is a relationship between risk and return in various fields of banking or industrial business. The banking sector involves many risks, among which credit risk is a challenge among various risks. Credit risk can be controlled through appropriate mathematical and statistical tools. Credit rating agencies are also very important for calculating credit risk. All reasonable data must be collected and used for analysis and interpretation purposes. Liquidity risk is considered one of the concerns and challenges faced by modern banks (Golubeva et al., 2019).

Even if banks have good asset quality, strong returns, and sufficient capital, they may face the risk of failure if they cannot maintain sufficient liquidity. It is obvious that every field of life will undergo changes, and the banking industry is no exception. According to some evaluations, the global financial crisis that began in 2007 was also one of the biggest crises in the history of civilization, and this sensational conclusion should be left for time to judge. An undeniable fact is that the global financial crisis has triggered many problems in the financial sector, and the resolution of these problems depends on the future development of the financial sector. One of the most frequent issues is related to identifying the causes of financial system vulnerability and potentially preventing similar events in the future. People are striving to quantify uncertainty and risk in order to increase the resilience of the financial system in the event of future unpredictable events (Alawattegama, 2018). In this process, market risk measurement methods play a very important role. Through this article, we hope to provide researchers with an opportunity to understand the basic concepts of risk management. We have conducted research on several latest studies and methods used on this topic.

2.4.2 Credit Risk Management

Credit risk is one of the most important risk factors faced by banks and financial institutions (Altaf et al., 2022). Credit risk typically manifests in the form of changes in the value of assets or liabilities, which arise from borrowers' failure to fulfill their debt obligations, possibly due to their inability or unwillingness to perform in a pre-agreed manner. This will affect banks holding loan contracts and other lenders. Therefore, the borrower's financial condition and the current value of any potential collateral are crucial to the bank. The actual risk of credit risk lies in the deviation of investment portfolio performance from expected values. Although credit risk can be managed through diversification, it is still difficult to completely eliminate it, as some default risks may be caused by the systemic risks mentioned above. In addition, although diversification is beneficial for overall uncertainty, the unique nature of certain losses remains a problem faced by creditors, especially in situations where the lending market is relatively localized and assets are highly illiquid, making it difficult to transfer credit risk and accurately estimate losses (Alawattegama, 2018). This risk arises from the borrower's inability or unwillingness to repay the debt, known as default, which is synonymous with credit risk.

Generally speaking, the following four traditional indicators are widely used to evaluate the credit risk level of banks:

a. The ratio of overdue, overdue, and doubtful accounts receivable to total credit limit: The higher this ratio, the higher the credit risk of the institution.

b. The ratio of overdue, overdue, and doubtful accounts receivable to assets: an increase in this ratio may indicate an increase in credit risk.

c. The ratio of suspicious accounts receivable storage to total credit: An increase in suspicious accounts receivable due to an increase in overdue and delinquent accounts receivable may indicate an increase in credit risk.

d. The ratio of suspicious accounts receivable to total assets: an increase indicates an increase in risk, while a decrease indicates a decrease in risk.

In theory, default occurs when the value of a company's assets is lower than the value of its liabilities, making default risk one of the most important risks affecting banks and monetary financial institutions. The default of a few customers may cause unexpected losses to the organization.

Financial institutions, such as banks, investment brokers, trust companies, insurance companies, and credit unions, typically have significant credit exposure due to their tendency towards lending and financial service transactions. Traditional credit risk comes from: 1. Loans 2. Investments 3. Credit activities 4. Sales of goods 5. Counterparty performance in derivative contracts. When financial obligations are not fully fulfilled, losses may occur due to the counterparty's inability or unwillingness to fulfill their obligations.

2.4.3 Liquidity Risk Management

Liquidity risk management refers to banks avoiding excessive concentration of risks in various business varieties during a specific period and the risk of fund flow gaps arising from business operations (Leo, Sharma, & Maddulety, 2019). The main difference between commercial banks and other financial institutions is that they issue loans by absorbing deposits, using "leverage operation" and "term conversion" to balance the supply and demand of funds. This creates a natural possibility of liquidity risk for commercial banks. Once liquidity risk occurs, it has great destructive effects on commercial banks, the entire financial system, and the economy. In the "Liquidity Risk Management and Investment Securities" published in 2010, the Office of the Thrift Supervision (OTS), a US financial regulatory authority, defined "liquidity" in three ways: "liquidity refers to the ability to use asset financing to repay maturing debts; the total amount of cash held and other assets that can be quickly converted into cash; and the ability to meet the funding requirements for debt repayment or commitment fulfillment at a reasonable or acceptable cost" (Milojević & Redzepagic, 2021). Regardless of its definition, the essence of liquidity is to ensure sufficient funds when needed.

The Federal Reserve defined liquidity in its 2010 Commercial Banking Regulatory Manual as "the ability of financial institutions to meet their cash and debt collateral needs without causing unexpected losses" (Lechner & Gatzert, 2018). In order to ensure sufficient liquidity, financial institutions must strike a balance between costs and benefits: insufficient liquidity may lead to the inability to stably meet contractual obligations, thereby exposing financial institutions to a series of negative shocks; On the contrary, excessive liquidity may bring significant opportunity costs and have a negative impact on the profitability of the enterprise. Therefore, liquidity focuses on the ability to repay at a specific point in time, rather than long-term solvency. Even when the balance sheet appears healthy, the inability to repay debts or fulfill commitments at a specific point in time can still lead to liquidity risk.

In practice, it is necessary to distinguish between the liquidity risk and solvency risk of banks. Repayment risk refers to the inability of a bank to pay off all its liabilities, and even if the bank has the ability to repay in certain circumstances, it may still suffer from liquidity risk (Golubeva et al., 2019). Liquidity risk refers to the inability of a bank to raise sufficient funds at a reasonable price at a specific point in time to fulfill its obligations and meet customers' funding needs. The insufficient liquidity risk does not necessarily lead to the bank losing its solvency, but in some cases, it may transform into solvency risk. Therefore, banks must effectively manage liquidity risk to ensure stable operation under various market conditions.

2.5 Financial Performance

Financial performance is one of the important indicators for evaluating the financial condition and stability of commercial banks, which directly affects the long-term development and competitiveness of banks (Akhanolu et al., 2020). The financial performance of banks is a critical aspect that influences their operational efficiency, stability, and overall market performance. Analyzing financial performance through various financial ratios provides insights into a bank's strengths, weaknesses, and operational efficiency. This review examines relevant literature on the application of financial ratios to assess the performance of banks, with a focus on different geographical contexts and types of banking institutions. In a study conducted by Islam (2014), the financial performance of National Bank Limited was analyzed using financial ratios. The research aimed to identify the unique strengths and weaknesses of the bank over a six-year period. Financial ratios, such as liquidity, profitability, asset management efficiency, and financial leverage, were employed to provide a comprehensive view of the bank’s performance. This longitudinal analysis helps in understanding how the bank has evolved and what factors contribute to its financial health. Uwuigbe and Fakile (2012) investigated the impact of board size on the financial performance of banks in Nigeria. Their study highlighted the significance of corporate governance structures, particularly the size of the board, on the performance metrics of banks. The research contributed to the understanding of how governance factors, such as board composition, influence financial outcomes, and provided insights into the importance of effective management and oversight in enhancing bank performance.

Karamoy and Tulung (2020) explored the effect of financial performance and corporate governance on stock prices within the non-bank financial industry. Their study focused on non-bank financial institutions listed on the Indonesian Stock Exchange (IDX). The research demonstrated how financial performance metrics, combined with corporate governance practices, impact stock prices and overall market valuation. This study underscores the importance of integrating financial performance with governance practices to drive shareholder value and market confidence. Financial ratio analysis remains a fundamental tool for evaluating the performance of banks and financial institutions. The studies reviewed provide a comprehensive understanding of how financial ratios and governance structures impact banking performance across different contexts. Future research could further explore the interplay between financial ratios and emerging trends in banking, such as technological advancements and regulatory changes.

When studying the factors that affect the financial performance of commercial banks, scholars usually focus on two important factors: credit risk and liquidity risk. Credit risk refers to the possibility of losses due to the borrower's inability to fulfill their repayment obligations, while liquidity risk refers to the possibility of default. Surjandari et al. (2019) identified four key factors affecting a business's financial performance:1) Liquidity: This is assessed through the current ratio and acid-test ratio, which indicate the business's ability to meet short-term obligations.2) Profitability: This evaluates a business's ability to generate profit, using metrics such as net profit margin, operating profit margin, and return on assets.3)Asset Management Efficiency: This is measured by inventory turnover, accounts receivables turnover, and total asset turnover, reflecting how well a business utilizes its assets. 4) Financial Leverage: Measured by return on equity and debt-to-equity ratio, this indicates the extent to which a company uses debt to finance its operations. High leverage can enhance return on equity if the business earns more from borrowed funds than the interest paid (Tugas, 2012). Sulaiman et al. (2001) examined business failures in Malaysia using a logit model to predict failure. Their study highlighted that leverage, interest rate, and total asset turnover were significant predictors of business failure. Abdullah & Sofian (2012) compared various methods for predicting operational efficiency and found that leverage, net income growth, and financial performance were crucial indicators of performance. Factors such as innovation strategies, management accounting systems, and internal business processes play a role in financial operations (Hariyati & Tjahjadi, 2018).

Additionally, a business's strategy for gaining a competitive advantage must consider external factors. The Industry/Organization (I/O) model posits that external environmental factors, especially industry-specific ones, significantly influence a business's operational effectiveness. Research on the performance of commercial banks has been conducted globally, comparing Islamic and conventional banking systems to assess their effectiveness.

2.6 Overview of Bangkok Bank

Bangkok Bank is a leading bank in Thailand and a major regional bank in Southeast Asia, a market leader in corporate and business banking, with a large retail customer base. Bangkok Bank gives people and businesses the confidence and support they need to make the right decisions in a changing world. Bangkok Bank, one of Thailand's largest commercial banks, plays a significant role in the country's financial sector. Established in 1944, it has grown to become a leading financial institution with an extensive network of branches and ATMs both domestically and internationally. The bank provides a wide range of financial services, including retail and corporate banking, investment banking, and wealth management.

As a key player in Thailand's banking sector, Bangkok Bank's risk management practices are vital for maintaining its financial stability and protecting customer interests (Golubeva et al., 2019). By effectively managing risks, the bank can navigate financial uncertainties, minimize potential losses, and uphold its reputation as a reliable financial institution. Its comprehensive risk management framework covers various risk types, such as credit risk, liquidity risk, and market risk, which enhances its overall resilience and performance in the competitive banking landscape.

Bangkok Bank offers a complete range of business, investment banking, and personal banking services. It is a prominent global trader of Thai baht and baht-denominated bonds and engages in transactions involving all major and several regional currencies. The bank provides services including same-day transactions for import and export bills, remittances, swaps, options, forward contracts, and trading in both primary and secondary markets for government bonds and corporate debentures.

The current president of Bangkok Bank is Chartsiri Sophonpanich, who is the grandson of the bank's founder, Chin Sophonpanich, and the son of former president Chatri Sophonpanich, who currently serves as the chairman. The shares of the stock of Bangkok Bank are traded on the Stock Exchange of Thailand, under the symbol: BBL. As of February 2020, the major shareholders in the bank's stock were as follows:

Table 2.1 Bangkok Bank Stock Ownership

Rank	Name of Owner	Percentage Ownership
1	Thai NVDR Company Limited	29.7
2	South East Asia UK (Type C) Nominees Limited	4.16
3	Social Security Office	3.15
4	Thailand Securities Depository	2.29
5	UOB Kay Hian (Hong Kong) Limited - Client Account	2.03

2.7 Research Framework

The analysis of the risk management theory is helpful for this study, in clarifying the independent and dependent variables. Independent variables: 1. Credit risk: measures the level of credit risk faced by banks, usually using indicators such as non-performing loan ratio and loan loss provision. 2. Liquidity risk: Measuring the level of liquidity risk faced by banks, typically using indicators such as liquidity coverage ratio and net stable funds ratio.

Dependent variables is Financial performance. The relationship between the variables ultimately determined is shown in Figure 2.1:

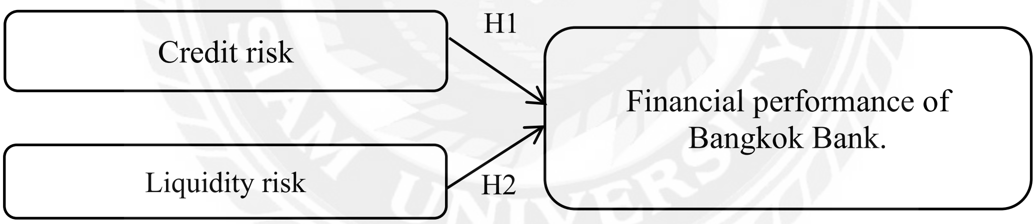


Figure 2.1 Research Framework

3 Research Methodology

3.1 Research Design

This study employed a quantitative research design to examine the impact of credit risk and liquidity risk on the financial performance of Bangkok Bank. A structured questionnaire survey served as the primary data collection method, consisting of closed-ended questions and a 5-point Likert scale to quantify respondents' perceptions and experiences regarding these risks.

3.2 Sampling and Sample Size

The research sample of this study included 104 participants such as bank employees, internal and external auditors, board members, risk management departments of Bangkok Bank. Structured questionnaires were issued to 104 participants. The study used probability sampling techniques, i.e. random sampling, and received a total of 104 questionnaires. The reason for selecting these people as research subjects and collecting sample sizes is that these respondents pay special attention to credit risk, liquidity risk and their impact on financial performance.

This study adopted the probability sampling technique and distributed 104 questionnaires. The distribution time was March 2024, and the questionnaires were collected one week after the distribution. A total of 104 questionnaires were received, with a collection rate of 100%.

3.3 Questionnaire Design

The questionnaire is divided into two sections: Section A gathers demographic data such as age, gender, educational background, and position in the bank, while Section B comprises 15 questions addressing credit and liquidity risks. Respondents indicated their level of agreement on a scale from 1 (strongly agree) to 5 (strongly disagree). To ensure clarity, the questionnaire was written in English, and permission was obtained to use and adapt the developed scale. The collected data was analyzed using appropriate statistical methods, including descriptive and inferential statistics, to identify trends and correlations between the specified risks and the bank's financial performance. This study used the Likert scale to collect and analyze risk management practices, and employed a 1–5-point scale to calculate the mean and standard deviation.

Table 3.1 Questionnaire Design for Influencing Factors

Variable	Measurement items	NO.
	1) The bank has a quantitative support system for assessing customers' credit standing.	Q1
	2) Improved pricing of products is the most important potential benefit of accrediting risk management strategy.	Q2
	3) Accuracy of exposure modeling is the most important potential benefit of accrediting risk management strategy.	Q3
	4) Reduction in losses is the most important potential benefit of accrediting risk management strategy.	Q4
	5) The credit risk policy is part of the company-wide capital management strategy.	Q5

Credit risk.	6) The following models are employed by the banks to identify the creditworthiness of customers: - credit portfolio view - equity-based app financial performances - stress testing - scenario analysis - rating based financial performance - sensitivity analysis.	Q6
	7) Major challenges faced in the successful implementation for credit risk management policies: Difficulty in qualifying risks - timeliness and quality of information - calculation for parameters - business priorities are often conflicting - lack of technical knowledge and trained personnel - the high cost of information technology.	Q7
	8) Assessing risks regularly and handling its changes properly establish a better credit risk management environment.	Q8
	9) Establishing an effective strategy according to the size of the bank creates a better credit risk management environment.	Q9
	10) Having a strong group risk and internal audit functions which report directly to the center, establish a good credit risk management environment.	Q10
Liquidity risk.	11) Controlling effectively reported hazards, create a better liquidity risk management environment.	Q11
	12) The bank has countermeasures (contingency plan) against disaster and accidents.	Q12
	13) There are derivatives instruments to mitigate liquidity risk assessing risks regularly and handling its changes properly establishes a better liquidity risk management environment.	Q13
	14) The most important characteristics for Liquidity risk professionals are; risk knowledge, communication knowledge, product knowledge, and market knowledge.	Q14
	15)Liquidity risk is important for the overall stability of a bank	Q15
	16)I have observed changes in Bangkok Bank's financial performance due to liquidity risk in the past year.	Q16
	17)The strategies employed by Bangkok Bank to mitigate liquidity risk are effective.	Q17
	18)I am confident in Bangkok Bank’s ability to handle liquidity crises.	Q18
	19)Liquidity risk significantly impacts the profitability of Bangkok Bank.	Q19
	20)I am familiar with the concept of liquidity risk.	Q20
Financial Performance	21)The overall profitability of Bangkok Bank has been satisfactory over the past year.	Q21
	22)I believe that effective risk management positively influences the bank's financial performance.	Q22
	23)The bank’s financial performance has improved due to effective credit risk management.	Q23
	24)I feel confident in the bank's ability to maintain strong financial performance in the future.	Q24
	25)Bangkok Bank maintains a strong capital position.	Q25
	26)I believe Bangkok Bank is well-prepared for future financial challenges.	Q26

	27)The bank's cost-to-income ratio has improved in recent years.	Q27
	28)I believe that Bangkok Bank's profit margins are competitive within the banking industry.	Q28
	29)Bangkok Bank has achieved consistent revenue growth over the last few years.	Q29
	30)Bangkok Bank effectively manages its operating costs.	Q30

3.4 Data Collection Methods

The data collection process took place in March 2024. The distribution of the questionnaires occurred at the beginning of the month, with a collection period of one week, allowing ample time for respondents to complete and return the surveys. A total of 104 questionnaires were distributed. All responses collected within the one-week period were counted, achieving a response rate of 100%. After initial data collection, the responses were screened for validity, ensuring that all responses were complete and applicable to the study objectives.

3.5 Data Analysis Methods

Utilizing the sample size formula for a finite population proposed by Golubeva et al. (2019), the study will adopt a probability sampling technique, distributing a total of 104 questionnaires in March 2024, with all collected within one week, achieving a 100% response rate. This study adopted descriptive and inferential analysis methods for analysis; In descriptive analysis methods, this study used tables, frequencies, charts, percentages, means, and standard deviations to describe respondents' responses. On the other hand, in the inferential analysis, the data analyzed the causal relationship between the dependent variable and the independent variables was analyzed by using correlation analysis and regression Analysis.

3.6 Reliability and Validity Analysis of the Scale

Cronbach's alpha value is used to represent the impact of a set of problems when measuring a specific variable. Usually, the higher the correlation between problems, the higher the alpha value of Kresbach. Therefore, each variable's item should have strong correlation to ensure high internal consistency in testing. The provided financial performance, credit risk, and liquidity risk values demonstrate the internal consistency used to measure each constructed project or indicator, as shown in the table below. The results confirm that the Cronbach alpha values for all variables are above 0.7.

Table 3.2 Reliability Analysis

No.	Construct	Cronbach's (α)	No.
1	Financial performance	0.784	10
2	Credit risk	0.775	10
3	Liquidity risk	0.878	10

Here is an explanation of these values:

Financial performance: The Cronbach alpha value is 0.784. This indicates that the items or indicators used to measure financial performance have a medium to high degree of internal consistency. Generally speaking, a Cronbach alpha value of 0.7 or higher is considered acceptable for research purposes, indicating that the item used to measure financial performance are reliable in capturing the concept of asset return on investment.

Credit risk: The Cronbach alpha value is 0.775. Similarly, items measuring credit risk show a moderate level of internal consistency. The alpha coefficient of 0.775 indicates that these items reliably measure the concept of credit risk in the context in which they are applied.

Liquidity risk: The Cronbach alpha value is 0.878. The items used to measure liquidity risk exhibit a high level of internal consistency. The Cronbach's alpha value of 0.878 indicates that these items are highly consistent in measuring liquidity risk in this specific dimension.

Financial performance: The Cronbach's alpha values of credit risk and liquidity risk indicate that their respective measurements have good internal consistency and reliability. These values indicate that the items or indicators used to evaluate each construct (financial performance, credit risk, liquidity risk) are reliable and consistent in capturing the expectations of their respective financial dimensions. This reliability is crucial for ensuring that these measurements accurately reflect the fundamental constructs in the financial analysis and risk management context they represent. Therefore, according to the recommendations of Siddika & Haron (2020), the questionnaire is considered reliable.

Table 3.3 Validity Analysis

Sample a sufficient Kaiser-Meyer-Olkin metric.		0.753
The sphericity test of the Bartlett	Approximate chi square	534.874
	df	120
	Sig.	0.000

The KMO value is 0.753, this supports the validity of the constructs being measured in the study, suggesting that the variables are related and that underlying factors can be identified.

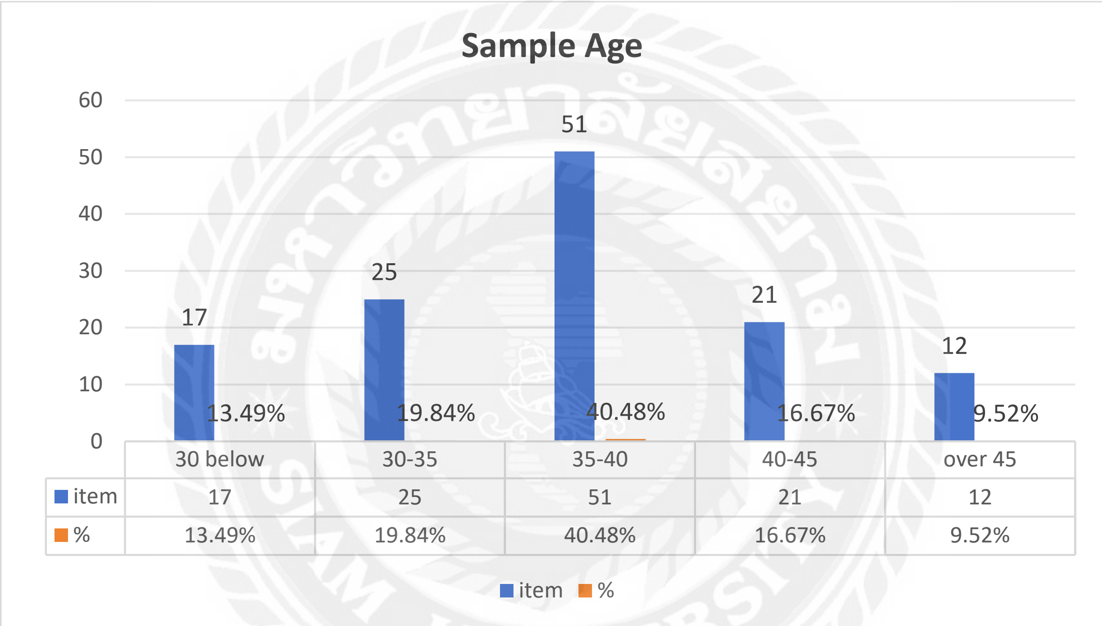
4 Findings and Discussion

4.1 Findings

4.1.1 Demographic Characteristics of Respondents

Firstly, a descriptive statistical analysis of the sample is needed for the respondents in this study, most of whom are relatively young. The descriptive statistical analysis is shown in Figure 4.1 and Table 4.1.

Figure 4.1 Sample Age



According to the data in Figure 4.1, the frequency and percentage distribution of age are shown, which displays the number of people in different age groups in the sample and their proportional distribution. Among them, the sample aged 35-40 has the largest number, accounting for 40.48% of the sample, followed by the sample aged 30-35. These pieces of information can help understand the distribution of different age groups in the sample, which is of great significance for analyzing the possible relationship between age and other variables.

In addition, in this study, risk management practices were analyzed according to the risk procedures described in the questionnaire. This study also analyzed the mean and standard deviation of these variables to investigate the impact of risk management practices on bank performance in the Bangkok region. The data is shown in the table below:

Table 4.1 Descriptive Statistics Variables

Variable	Mean	Standard deviation	N
Financial performance	3.567%	5.3688%	104
Credit risk	.06713	.02840	104
Liquidity risk	.0246080160	.0009234740	104

Table 4.1 shows the average values of each risk management practice and the standard deviation of data collected from Bangkok Bank. The small standard deviation of credit risk and liquidity risk indicates minimal changes in these risk management.

4.1.2 Correlation Analysis

As shown in Table 4.2, this study conducted correlation analysis among various variables and found that there is a correlation between them.

Table 4.2 Correlation Analysis of Variables

	Financial performance	Credit risks	Liquidity risk
Financial performance	1		
Credit risk	0.43**	1	
Liquidity risk	0.61**	0.47**	1

Note 2: * $p < 0.05$, * * $p < 0.01$.

The correlation analysis shows that financial performance and credit risk have a correlation coefficient of 0.43 **, indicating a significant positive correlation ($p<0.01$). Financial performance and liquidity risk: The correlation coefficient is 0.61 **, indicating a significant positive correlation between the two ($p<0.01$). Credit risk and liquidity risk: The correlation coefficient is 0.47 **, showing a significant positive correlation ($p<0.01$). There is a significant positive correlation between financial performance and credit risk, as well as financial performance and liquidity risk, indicating that higher credit risk and liquidity risk may be associated with higher financial performance. In addition, there is a significant positive correlation between credit risk and liquidity risk, indicating a mutual relationship between the two risk management practices of Bangkok Bank.

4.1.3 Regression Analysis

Table 4.3 Results of Linear Regression Analysis (n=104)

	Non-standardized coefficients		Standardization coefficient			Collinearity diagnostics	
	B□	Standard Error □	*Beta*□	*t*□	*p*□	VIF□	Tolerance
Constant	1.673	0.421	-	3.976	0.000**	-	-
Financial performance	0.496	0.112	0.439	4.332	0.000**	2.091	0.480
Credit risk	0.204	0.084	0.232	2.435	0.017*	1.862	0.536
Liquidity risk	0.191	0.112	0.167	1.711	0.090	1.948	0.511
R 2□	0.372						
Adjust *R* 2□	0.315						
F□	*F* (11,112)=6.947,*p*=0.000						
D-W	2.053						

Independent variable: The impact of financial performance

* p<0.05 ** p<0.01

The regression analysis reveals that the model is significant overall (F(3, 100) = 6.947, p = 0.000) and explains 37.2% of the variance in financial performance (R^2 = 0.372), with significant positive effects of financial performance (B = 0.496, p = 0.000**), Credit Risks (B = 0.204, p = 0.017*), and a positive but non-significant effect of Liquidity Risk (B = 0.191, p = 0.090); there is no significant autocorrelation in the residuals (D-W = 2.053), and collinearity diagnostics indicate no severe multicollinearity among the predictors.

4.2 Discussion

Credit risk is one of the biggest opportunities that banks face. Credit risk arises from the possibility that bank borrowers may not be able to fulfill their legal obligations. The establishment of credit risk management involves defining enterprise priorities, loan approval processes, credit risk rating systems, risk adjustment pricing systems, loan review mechanisms, and comprehensive reporting systems. Due to the write down (loss) of investment and trading portfolios, the scope of credit risk management has expanded to include the risks of guarantors and counterparties. Stress testing has become a necessary method to test the resilience of banking institutions to adverse economic and market conditions. This is a tool used to respond to potential events. The stress testing of credit risk is an important component of the Basel II framework.

Liquidity management is the bank's confidence in fully fulfilling its contractual obligations. In fact, liquidity management means that banks can manage the reduction of assets and the management of other liabilities, loan funds, and other assets at the lowest cost in the shortest possible time, thereby making up for their resource shortages. The main purpose of risk management is to measure and predict various types of risks to control them. In fact, liquidity management tools are not complete and cannot optimize the management of liquidity. In addition to tools, other factors hindering liquidity management include structural deficiencies required for capital market growth and development, lack of coordination and appropriate interbank markets, lack of specific technology and policies, and effective supervision systems to provide high-quality services. On the other hand, in order to strengthen their liquidity tools, improve liquidity management and business operations, banks should further educate people about the principles of Islamic banking.

The questionnaire used in this study was redesigned based on relevant literature, and its reliability and validity tested before actual distribution. Through reliability and validity analysis, the result is that 1) financial performance is a key financial performance indicator in this study. The Cronbach's alpha coefficient is 0.784, indicating that the financial performance concept has good internal consistency. This means that there is a high degree of consistency among the various items measuring financial performance, which can reliably reflect the actual situation of the concept. 2) Credit risk management - Cronbach's alpha=0.775, indicating good internal consistency of the credit risk management concept. This indicates a high degree of consistency among the questionnaire items used to measure credit risk management, which can reliably measure this construct. 3) Liquidity risk management - Cronbach's alpha=0.878, indicating that the internal consistency of the liquidity risk management concept is very good. This means that there is a high degree of consistency among the various items measuring liquidity risk management, which can reliably reflect the actual situation of the concept. These results indicate that the questionnaire used to measure financial performance, credit risk management, and liquidity risk management has high reliability and can reliably reflect the actual situation of the research subjects, providing a solid foundation for subsequent analysis. And linear regression analysis conducted with a sample size of 104, aiming to understand the impact of various independent variables on financial performance. The overall regression model is significant ($F (3, 100) = 6.947$, $p = 0.000$), indicating that the independent variables collectively have a statistically significant relationship with financial performance. Additionally, the model explains 37.2% of the variance in financial performance ($R^2 = 0.372$), suggesting that while it accounts for a portion of the variability, there are other factors not included in the model that may also influence financial performance.

These results indicate that the questionnaires used to measure financial performance, credit risk management, and liquidity risk management have high reliability and internal consistency, providing a solid foundation for subsequent analysis. Further descriptive statistical analysis shows that the mean and standard deviation of credit risk and liquidity risk are relatively high, indicating that there is not much difference in these risk management practices within Bangkok Bank. Further correlation analysis shows a significant positive correlation between financial performance and credit risk as well as liquidity risk, indicating that higher credit risk and liquidity risk may be associated with higher financial performance. In addition, there is a significant positive correlation between credit risk and liquidity risk, indicating their interdependence in bank risk management.

These findings provide important insights into the risk management practices of Bangkok Bank and their impact on financial performance. Then, through descriptive statistical analysis, it was found that the mean and standard deviation of credit risk and liquidity risk were relatively high, indicating that the differences in these risk management practices among banks were small. Further correlation analysis showed a significant positive correlation between financial performance and credit risk and liquidity risk (correlation coefficients of 0.43 and 0.61, respectively, $p<0.01$), indicating that higher credit risk and liquidity risk may be associated with higher financial performance. In addition, there is a significant positive correlation between credit risk and liquidity risk (correlation coefficient of 0.47, $p<0.01$), indicating that these two risk management practices have a certain degree of interdependence in Bangkok Bank. Finally, through in-depth research on the risk management practices of Bangkok Bank, good risk management practices of Bangkok Bank will lead to positive financial performance. This is the conclusion drawn from the correlation analysis of research variables. This indicates that although the goal of risk management is to reduce risk, appropriate risk-taking and management can promote the profitability of banks.

The findings from this study align with existing literature that emphasizes the critical role of effective risk management in enhancing financial performance. Previous studies have shown that banks with robust credit and liquidity risk management frameworks tend to exhibit better financial outcomes. For example, the significant positive correlation found between financial performance and both credit risk (correlation coefficient of 0.43) and liquidity risk (correlation coefficient of 0.61) supports earlier research indicating that well-managed risks contribute to higher profitability. Moreover, the strong internal consistency (Cronbach's alpha) observed in the constructs of financial performance, credit risk management, and liquidity risk management is consistent with findings from prior studies that highlight the reliability of these measures as indicators of effective risk management practices.

One unexpected result from the analysis was the significant positive correlation between credit risk and liquidity risk (correlation coefficient of 0.47). While one might typically assume that higher credit risk would lead to tighter liquidity due to potential defaults, this finding suggests a more complex relationship. It indicates that, within the context of Bangkok Bank, an increase in credit risk could be associated with a more proactive liquidity management approach, possibly due to the bank's strategies to cushion against potential loan losses. This could also reflect a broader banking environment where institutions that engage in higher-risk lending simultaneously implement robust liquidity management practices to mitigate those risks. Such interdependence points to the necessity for banks to adapt their risk management strategies in an integrated manner, reinforcing the idea that effective risk management does not solely aim to reduce risks but can also enhance overall financial performance. In conclusion, the study's findings not only corroborate existing research but also highlight the intricate dynamics between risk management practices at Bangkok Bank, presenting a nuanced understanding of how effective credit and liquidity management can coexist and promote profitability.

5 Conclusion and Recommendation

5.1 Conclusion

This study aimed to analyze the risk management practices of Bangkok Bank, with a specific focus on credit risk and liquidity risk and their effects on the bank's financial performance. By utilizing the quantitative research method and the risk management theory, the study involved distributing structured questionnaires to 104 participants, including bank employees, auditors, board members, and risk management professionals. The research focused on two main objectives:

Objective 1: To explore the impact of the credit risk on the financial performance of Bangkok Bank: Through descriptive statistical analysis and correlation analysis of questionnaire data and official website data of Bangkok Bank, the results show that Bangkok Bank have high credit risk and liquidity risk. The small standard deviation of credit risk and liquidity risk indicates that the variability of these risk management practices is relatively small. High credit risk typically leads to an increase in bad debts, which reduces the bank’ s net profit margin and may affect its capital adequacy ratio.

Objective 2: To explore the impact of the liquidity risk on the financial performance of Bangkok Bank: Insufficient liquidity may cause the bank to face high-cost financing or asset sales pressure, which in turn affects its financial soundness and profitability. Insufficient liquidity can severely undermine a bank's financial health, leading to a cascade of negative consequences. When a bank lacks adequate liquidity, it often finds itself in a precarious position where it must resort to high-cost financing options. This situation arises because lenders perceive higher risk in extending credit to a bank struggling with liquidity, resulting in elevated interest rates and unfavorable terms. Consequently, these increased financing costs directly erode the bank's profitability, as more revenue is allocated to interest payments rather than reinvestment or returning value to stakeholders.

These findings emphasize the importance of effective risk management practices for bank financial performance and provide empirical evidence for further optimizing bank risk management strategies. The study’ s findings reveal significant insights into the influence of credit and liquidity risks on financial performance, enriching theoretical understanding and offering practical guidance for improving risk management practices. The results are beneficial for enhancing bank risk management strategies and contribute to the stability and sustainable development of financial markets.

5.2 Recommendation

As a large financial institution, Bangkok Bank's risk management is crucial. In the financial industry, risk management is one of the key factors in ensuring the healthy operation of financial institutions. However, with the continuous changes and development of financial markets, the risks faced by banks are also constantly increasing and evolving (Annannab, Bakar, & Khan, 2022). Therefore, for Bangkok Bank, strengthening risk management to ensure timely identification and effective control of risks is of great significance for ensuring its healthy operation.

5.2.1 Establish a Sound Risk Management System

In order to effectively identify, assess, and control risks, Bangkok Bank should establish a sound risk management system to ensure comprehensive management of various risks. Risk management is crucial in modern banking, especially for financial institutions like Bangkok Bank. A sound risk management system can not only help banks cope with various internal and external risks, but also ensure their sustained and stable operation and protect customer interests. This study discussed why Bangkok Bank needs to establish such a system and how to effectively implement risk management strategies.

As a capital intensive and risk sensitive industry, the banking industry faces various potential risks, such as credit risk, market risk, operational risk, and liquidity risk. These risks may not only have a direct impact on the profitability of banks, but also threaten their stability and long-term development. Therefore, establishing a sound risk management system is the key to ensuring the sustainable development of banking business. A comprehensive risk management system includes: banks need to be able to identify and assess various risks, including customer credit risk, market volatility risk, and operational and liquidity risk. Through systematic risk assessment, banks can more accurately quantify risk exposure and develop corresponding response strategies for the future. On the basis of identifying and assessing risks, banks need to develop and implement effective control measures to reduce the likelihood and impact of risk occurrence. Meanwhile, through continuous monitoring and review, ensure the effectiveness and timeliness of risk management measures. Internal control is the key to ensuring the normal operation of banking business and the effectiveness of risk management. Compliance requires banks to comply with regulations and industry standards to reduce legal and regulatory risks.

Bangkok Bank, as a financial institution with an important position in the Asian market, faces challenges from global economic fluctuations, intensified market competition, and technological changes. In this complex environment, banks need to enhance their competitiveness and risk resistance in the market by establishing a sound risk management system. Specifically, Bangkok Bank should establish a dedicated risk management department responsible for the comprehensive management of various risks in the bank. By conducting risk training and educational activities, we aim to enhance employees' risk management skills and ensure the smooth implementation of risk management work.

5.2.2 Strengthen Monitoring and Response to External Environmental Changes

As a key component of the financial system, banks face risks that cover multiple aspects, including credit, market, operations, and liquidity. By comprehensively managing these risks, banks can more effectively ensure sufficient capital, enhance the long-term profitability of their business, and maintain stability in the face of increased market volatility and uncertainty (Fakhrunnas & Imron, 2019). To establish a sound internal risk management system, Bangkok Bank also needs to strengthen monitoring and response to external environmental changes, and adjust risk management strategies and measures in a timely manner. Establish a flexible risk management mechanism that can adjust and change risk management strategies in a timely manner (Yin et al., 2020). As a large financial institution, risk management is crucial for Bangkok Bank. As a modern financial institution, Bangkok Bank needs to establish a comprehensive and effective risk management system to adapt to the rapidly changing market environment and complex risk challenges. Only through sound monitoring practices of external environmental changes can banks ensure their long-term stable development and create sustained value and trust for customers and shareholders. By establishing a sound risk management system and strengthening monitoring and response to external environmental changes, we ensure the stability and healthy development of financial institutions.

5.3 Further Research

In today's global financial market, commercial banks face various complex financial risks that directly affect their financial performance and long-term stability. Existing research has confirmed that liquidity risk and credit risk factors have a significant impact on the financial performance of Bangkok Bank.

1. Future research should explore other factors that affect bank financial performance, such as interest rate risk, to deepen our understanding of these impacts. Interest rate risk, as a potential important factor, has an undeniable impact on the financial operations and profitability of banks. Through further research, the changing trends of these factors in different economic environments can be revealed, providing theoretical support and empirical evidence for banks to formulate more effective risk management strategies. The study calls for strengthening joint risk management strategies, with a particular focus on the comprehensive financial risks faced by banks.

2. At the same time, due to the limitations of various factors such as one's own level, this study is not yet mature. In order to expand the depth and breadth of the research, future studies should consider the impact of macroeconomic factors on various risk management. The changes in the macroeconomic environment have a significant impact on banking business and risk management strategies, such as economic cycles, policy adjustments, and changes in market structure. By analyzing these factors in depth, we can gain a more comprehensive understanding of the risks

faced by banks and their impact mechanisms, providing reference for bank managers to make more adaptable strategic decisions. In order to enhance the representativeness and credibility of the research, future studies should also increase the sample size and study duration, including the participation of more banks. This not only helps to verify the universality of existing research conclusions, but also captures the different performances and results caused by differences in risk management practices among different banks, providing a more comprehensive and in-depth understanding of risk management in the overall industry.

In summary, through continuous research and theoretical exploration, we can further deepen our understanding of the factors influencing the financial performance of Bangkok Bank, promote the continuous optimization and innovative development of risk management in the banking industry, and cope with constantly changing market challenges and risk pressures.

References

Abdullah, D. F., & Sofian, S. (2012). The relationship between intellectual capital and corporate performance. *Procedia-Social and Behavioral Sciences, 40*, 537-541.

Agrawal, T. J., & Sehgal, S. (2018). Dynamic interaction of bank risk exposures: An empirical study for the Indian banking industry. *IIM Kozhikode Society & Management Review, 7*(2), 132-153.

Akhanolu, I. A., Ehimare, O. A., Mathias, C. M., Deborah, K. T., & Yvonne, O. K. (2020). The impact of credit risk management and macroeconomic variables on bank performance in Nigeria. *WSEAS Transactions on Business and Economics, 17*(1), 956-965.

Alawattegama, K. K. (2018). The impact of enterprise risk management on firm performance: Evidence from Sri Lankan banking and finance industry. *International Journal of Business and Management, 13*(1), 225-237.

Altaf, K., Ayub, H., Shabbir, M. S., & Usman, M. (2022). Do operational risk and corporate governance affect the banking industry of Pakistan? *Review of Economics and Political Science, 7*(2), 108-123.

Annannab, H., Bakar, A. A., & Khan, S. J. B. M. (2022). Operational risk management and performance of cooperative microfinance in Thailand. *Innovation Journal of Social Sciences and Economic Review, 4*(1), 17-24.

Bayar, Y., Sezgin, H. F., Öztürk, Ö. F., & Şaşmaz, M. Ü. (2020). Financial literacy and financial risk tolerance of individual investors: Multinomial logistic regression approach. *Sage Open, 10*(3), 2158244020945717.

Catherine, N. (2019). Credit risk management and financial performance: A case of Bank of Africa (U) Limited. *Open Journal of Business and Management, 8*(1), 30-38.

Chen, I. J., Lee, Y. Y., & Liu, Y. C. (2020). Bank liquidity, macroeconomic risk, and bank risk: Evidence from the Financial Services Modernization Act. *European Financial Management, 26*(1), 143-175.

Dao, B. (2020). Determinants of profitability in commercial banks in Vietnam, Malaysia and Thailand. *Journal of Asian Finance, Economics and Business, 7*(4), 133-143.

Debkumar, C. S. (2022). Leading bank performances under extended caretaker government: Empirical approach from Thailand. *International Journal of Multidisciplinary: Applied Business and Education Research, 3*(10), 1995-2012.

Elamer, A. A., Ntim, C. G., & Abdou, H. A. (2020). Islamic governance, national governance, and bank risk management and disclosure in MENA countries. *Business & Society, 59*(5), 914-955.

Fakhrunnas, F., & Imron, M. A. (2019). Assessing financial risk and regional macroeconomic influence to Islamic rural bank performance. *Global Review of Islamic Economics and Business, 7*(1), 049-055.

Golubeva, O., Duljic, M., & Keminen, R. (2019). The impact of liquidity risk on bank profitability: Some empirical evidence from the European banks following the introduction of Basel III regulations. *Journal of Accounting and Management Information Systems, 18*(4), 455-485.

Gunarapong, N., Tongkong, S., & Boonyanet, W. (2022). Information content of the voluntary disclosure on stock returns: Evidence from listed commercial banks in Thailand. *Rajapark Journal, 16*(48), 301-320.

Hariyati, H., & Tjahjadi, B. (2018). Contingent factors affecting the financial performance of manufacturing companies: The case of East Java, Indonesia. *Asian Journal of Business and Accounting, 11*(1), 121-150.

Harb, E., El Khoury, R., Mansour, N., & Daou, R. (2023). Risk management and bank performance: Evidence from the MENA region. *Journal of Financial Reporting and Accounting, 21*(5), 974-998.

Islam, M. A. (2014). An analysis of the financial performance of National Bank Limited using financial ratio. *Journal of Behavioural Economics, Finance, Entrepreneurship, Accounting and Transport, 2*(5), 121-129.

Islam, M. N., Akter, A., Alam, M. J., & Shahriar, A. H. M. (2020). Analyzing how credit risk influences the performance of commercial banks in Bangladesh: A quantile regression modeling. *International Journal of Banking, Risk and Insurance, 8*(2), 14-26.

Jiravichai, A., & Banomyong, R. (2022). A proposed methodology for literature review on operational risk management in banks. *Risks, 10*(5), 108.

Karamoy, H., & Tulung, J. E. (2020). The effect of financial performance and corporate governance on stock price in the non-bank financial industry. *Corporate Ownership & Control, 17*(2).

Kortana, T. (2019). The effectiveness of risk management and business performance: SMEs in Bangkok, Thailand. *International Journal of Supply Chain Management, 8*(5), 551-558.

Lechner, P., & Gatzert, N. (2018). Determinants and value of enterprise risk management: Empirical evidence from Germany. *The European Journal of Finance, 24*(10), 867-887.

Leo, M., Sharma, S., & Maddulety, K. (2019). Machine learning in banking risk management: A literature review. *Risks, 7*(1), 29.

Milojević, N., & Redzepagic, S. (2021). Prospects of artificial intelligence and machine learning application in banking risk management. *Journal of Central Banking Theory and Practice, 10*(3), 41-57.

Mishchenko, V., Naumenkova, S., Grytsenko, A., & Mishchenko, S. (2022). Operational risk management of using electronic and mobile money. *Banks and Bank Systems, 17*(3), 142-157.

Mio, C., Agostini, M., & Panfilo, S. (2022). Bank risk appetite communication and risk taking: The key role of integrated reports. *Risk Analysis, 42*(3), 634-652.

Ouyang, Z., Dou, Z., Wei, L., & Vasa, L. (2022). Nonlinear spillover effect of US monetary policy uncertainty on China's systematic financial risks. *Journal of Business Economics and Management, 23*(2), 364-381.

Phan, H. T., Hoang, T. N., Dinh, L. V., & Hoang, D. N. (2020). The determinants of listed commercial banks' profitability in Vietnam. *The Journal of Asian Finance, Economics and Business, 7*(11), 219-229.

Shakil, M. H. (2021). Environmental, social and governance performance and financial risk: Moderating role of ESG controversies and board gender diversity. *Resources Policy, 72*, 102144.

Sharma, K., Ow-Jariyapithak, D., Dasri, P., Van Brecht, D., & Sahakijpicharn, D. (2021). Impact of corporate governance on firm efficiency: A study of Thai banking companies. *International Journal of Multidisciplinary in Management and Tourism, 5*(2), 66-86.

Siddika, A., & Haron, R. (2020). Capital regulation and ownership structure on bank risk. *Journal of Financial Regulation and Compliance, 28*(1), 39-56.

Singh, I., & Rastogi, S. (2020). Drivers impacting bank risk in India. *Test Engineering and Management, 83*(5/6), 8005-8011.

Sulaiman, M., Jili, A., & Sanda, A. U. (2001). Predicting corporate failure in Malaysia: An application of the Logit Model to financial ratio analysis. *Asian Academy of Management Journal, 6*(1), 99-118.

Surjandari, D. A., Anggraeni, D., Yulianto, Y., & Religiosa, M. W. (2019). Analysis of determinants of financial and non-financial aspects for the fund adequacy ratio (FAR) at pension fund institutions. *The Indonesian Accounting Review, 9*(2), 181-193.

Tariq, A., Ehsan, S., Badir, Y. F., Memon, M. A., & Khan, Sumbal, M. S. U. (2023). Does green process innovation affect a firm’s financial risk? The moderating role of slack resources and competitive intensity. *European Journal of Innovation Management, 26*(4), 1168-1185.

Tran, T. T., Do, N. H., & Nguyen, Y. T. (2020). Impact of board characteristics on bank risk: The case of Vietnam. *The Journal of Asian Finance, Economics and Business, 7*(9), 377-388.

Thirapanmethee, P., Pichayasupakoon, T., & Bootchai, N. (2022). The effect of financial risk and enterprise internal management on enterprise performance of automotive and automotive part industry in Thailand. *วารสารการจัดการธุรกิจ มหาวิทยาลัยบูรพา, 11*(2), 140-158.

Tugas, F. C. (2012). A comparative analysis of the financial ratios of listed firms belonging to the education subsector in the Philippines for the years 2009-2011. *International Journal of Business and Social Science, 3*(21).

Uwuigbe, O. R., & Fakile, A. S. (2012). The effects of board size on financial performance of banks: A study of listed banks in Nigeria. *International Journal of Economics and Finance, 4*(2), 260-267.

Yanenkova, I., Nehoda, Y., Drobyazko, S., Zavhorodnii, A., & Berezovska, L. (2021). Modeling of bank credit risk management using the cost risk model. *Journal of Risk and Financial Management, 14*(5), 211.

Yin, H., Chen, Z., Xiao, Y., & Wang, S. (2020). Analysis of risk management performance with innovative approach: A case study of China’s shipping companies. *Maritime Policy & Management, 47*(8), 1082-1096.

Appendix

Survey questionnaire design

Hello!

The results of this survey will only be used for my master's thesis research and do not involve any commercial purposes. Please fill in truthfully based on your own actual situation and feelings. Thank you for your support and assistance!

Part 1: Personal Information

1.May I ask your gender

A Male

B Female

2.May I ask your age

A Under 30 years old

B 30-35 years old

C 35-40 years old

D 40-45 years old

E Over 45 years old

Part 2: Factor Analysis

Dear interviewee, please carefully read these statements about variables and mark a " √ " on the answer that best suits your thinking. Choose only one item for each question.

Note: 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5=Strongly Agree

Variable	Measurement items	1	2	3	4	5
	1) The bank has a quantitative support system for assessing customers' credit standing.					

Credit risk.	2) Improved pricing of products is the most important potential benefit of accrediting risk management strategy.					
	3) Accuracy of exposure modeling is the most important potential benefit of accrediting risk management strategy.					
	4) Reduction in losses is the most important potential benefit of accrediting risk management strategy.					
	5) The credit risk policy is part of the company-wide capital management strategy.					
	6) The following models are employed by the banks to identify the creditworthiness of customers: - credit portfolio view - equity-based app financial performances - stress testing - scenario analysis - rating based appfinancial performancech - sensitivity analysis.					
	8) Major challenges faced in the successful implementation for credit risk management policies: Difficulty in qualifying risks - timeliness and quality of information - calculation for parameters - business priorities are often conflicting - lack of technical knowledge and trained personnel - the high cost of information technology.					
	8) Assessing risks regularly and handling its changes properly establish a better credit risk management environment.					
	9) Establishing an effective strategy according to the size of the bank creates a better credit risk management environment.					
	10) Having a strong group risk and internal audit functions which report directly to the center, establish a good credit risk management environment.					
	11) Controlling effectively reported hazards, create a better liquidity risk management environment.					
	12) The bank has countermeasures (contingency plan) against disaster and accidents.					
	13) There are derivatives instruments to mitigate liquidity risk assessing risks regularly and handling its changes properly establishes a better liquidity risk management environment.					

Liquidity risk.	14) The most important characteristics for Liquidity risk professionals are; risk knowledge, communication knowledge, product knowledge, and market knowledge.					
	15)Liquidity risk is important for the overall stability of a bank					
	16)I have observed changes in Bangkok Bank's financial performance due to liquidity risk in the past year.					
	17)The strategies employed by Bangkok Bank to mitigate liquidity risk are effective.					
	18)I am confident in Bangkok Bank's ability to handle liquidity crises.					
	19)Liquidity risk significantly impacts the profitability of Bangkok Bank.					
	20)I am familiar with the concept of liquidity risk.					
Financial Performance	21)The overall profitability of Bangkok Bank has been satisfactory over the past year.					
	22)I believe that effective risk management positively influences the bank's financial performance.					
	23)The bank's financial performance has improved due to effective credit risk management.					
	24)I feel confident in the bank's ability to maintain strong financial performance in the future.					
	25)Bangkok Bank maintains a strong capital position.					
	26)I believe Bangkok Bank is well-prepared for future financial challenges.					
	27)The bank's cost-to-income ratio has improved in recent years.					
	28)I believe that Bangkok Bank's profit margins are competitive within the banking industry.					
	29)Bangkok Bank has achieved consistent revenue growth over the last few years.					
	30)Bangkok Bank effectively manages its operating costs.					

Thank you for your answer!