

Analysis of the Implementation of Internal Control Systems in Minimizing the Risk of Non-Performing Loans in Commercial Banks

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ABSTRACT

This study aims to analyze the implementation of internal control systems to minimize the risk of non-performing loans in commercial banks. The study used a qualitative approach with a case study method. Data were obtained through in-depth interviews, observation, and documentation with key informants consisting of Account Officers, Credit Managers, and Internal Auditors at commercial banks. Data analysis used the Miles and Huberman interactive model. The results show that an internal control system based on the COSO framework has been implemented, but is not yet fully effective. The main weaknesses lie in risk assessment and credit monitoring. Contributing factors include pressure on credit distribution targets, limited human resources, and weak post-disbursement supervision. This study contributes to enriching empirical studies related to banking internal control and provides strategic recommendations for improving the quality of credit risk management.

INTRODUCTION

Banking plays a strategic role in the economic system as an intermediary institution that collects funds from the public and redistributes them in the form of credit to both productive and consumer sectors. This intermediary function makes banking a driving force for economic growth, as credit distribution can expand business activity, increase investment, and maintain public purchasing power. However, despite this strategic role, credit distribution also carries various unavoidable risks, particularly the risk of non-performing loans. *Non-Performing Loan* (NPL). High NPL levels can be an indicator of declining bank asset quality and have the potential to disrupt financial stability at both the individual bank level and the banking system as a whole (Kasmir, 2019).

The risk of non-performing loans essentially arises when a debtor is unable to fulfill its obligations as agreed upon. This condition can be caused by various factors, both external factors such as economic slowdown and market instability, and internal factors within the bank, such as weak credit analysis, inadequate supervision, and ineffective internal control systems. In this context, the internal control system is a key factor in determining the quality of credit distribution. A poorly functioning internal control system opens up the opportunity for errors in the credit granting process, including errors in assessing the creditworthiness of debtors and the potential for irregularities by internal bank parties (Arens et al., 2017).

An internal control system is a process designed and implemented by management to provide reasonable assurance that organizational objectives can be achieved effectively and efficiently. These objectives include the reliability of financial reporting, compliance with applicable regulations, and the effectiveness of the organization's operations. In practice, an internal control system serves not only as a monitoring tool but also as a prevention mechanism against risks that could harm the organization, including the risk of non-performing loans in the banking sector (Romney & Steinbart, 2018).

The control environment is the primary foundation of an internal control system, reflecting management's attitudes, awareness, and actions regarding the importance of control. A strong control environment fosters an organizational culture that upholds integrity and ethics, thereby minimizing the potential for irregularities in the credit granting process. Furthermore, risk assessment is the process of identifying and analyzing risks that could hinder the achievement of organizational goals, including the risk of non-performing loans. Without adequate risk assessment, banks will struggle to anticipate potential debtor defaults.

The next component is control activities, which include policies and procedures designed to ensure that necessary actions are taken to address identified risks. In the banking context, control activities can include the application of the precautionary principle (*prudential banking principle*), creditworthiness analysis using the 5C approach (character, capacity, capital, collateral, condition), and the implementation of a multi-layered credit approval system. Furthermore, information and communication also play a crucial role in ensuring that credit risk information is delivered to stakeholders in a timely and

accurate manner. Finally, monitoring is conducted to continuously assess the effectiveness of the internal control system and ensure that it remains relevant to developments in the business environment (COSO, 2013).

Furthermore, research by Sari and Utama (2019) shows that risk assessment and monitoring are the most influential factors in determining the quality of internal control in the banking sector. The study also emphasized that weak post-credit disbursement supervision is a major cause of the increase in non-performing loans. This finding aligns with international research conducted by Almazari (2018), which states that ineffective credit risk management can directly impact increased NPLs and reduced bank financial performance.

Furthermore, research by Dewi and Sujana (2022), indexed by SINTA, shows that pressure to achieve credit distribution targets often leads to deviations in the credit analysis process. Under these circumstances, banks tend to ignore prudent principles in order to achieve established targets. This indicates a conflict between business objectives and risk management, which can ultimately lead to increased non-performing loans.

Although various studies have been conducted, most of these studies still use a quantitative approach that focuses on statistical relationships between variables. This approach has limitations in explaining how the internal control system implementation process is carried out in practice and the contextual factors that influence its effectiveness. Therefore, a qualitative approach is needed to delve deeper into this phenomenon.

A qualitative approach allows researchers to understand the realities of what happens on the ground through direct interaction with informants involved in the credit granting and monitoring process. Through in-depth interviews, observations, and document analysis, researchers can obtain a more comprehensive picture of the implementation of internal control systems and the challenges encountered in practice. Thus, the research results are expected to provide deeper and more contextual insights than a quantitative approach (Creswell, 2016).

Based on the above description, it can be concluded that internal control systems play a crucial role in minimizing the risk of non-performing loans in banking. However, there remains a gap between theoretical concepts and implementation in the field that requires further study. Therefore, this study aims to analyze in-depth the implementation of internal control systems in minimizing non-performing loan risk in commercial banks, as well as identify obstacles and possible improvement efforts.

This research is expected to contribute theoretically to the development of accounting and risk management, and practically serve as evaluation material for banks in improving the effectiveness of their internal control systems. This is expected to improve the quality of credit distribution and minimize the risk of non-performing loans.

THEORETICAL REVIEW

Internal Control System Theory

An internal control system is a process designed and implemented by the board of commissioners, management, and all employees to provide reasonable assurance that organizational goals can be achieved effectively and efficiently. These goals include operational effectiveness and efficiency, the reliability of financial reporting, and compliance with applicable laws and regulations. In the banking sector, internal control systems play a crucial role in maintaining asset quality, managing risk, and ensuring operational activities are conducted in accordance with prudent principles (Arens et al., 2017).

According to Romney and Steinbart (2018), an internal control system functions as a preventive, detective, and corrective control mechanism for various risks that could disrupt the achievement of organizational goals. In the banking context, an internal control system is a key instrument in minimizing the possibility of non-performing loans due to procedural weaknesses, credit analysis errors, or irregularities committed by internal and external parties.

Kerangka COSO (Committee of Sponsoring Organizations)

The COSO framework is the most widely used internal control model in various organizations, including the banking sector. According to COSO (2013), the effectiveness of an internal control system is determined by five integrated components:

a. Control Environment

The control environment is a key foundation reflecting ethical values, integrity, human resource competency, organizational structure, and management's commitment to internal control. A strong control environment will create an organizational culture that supports the application of prudent principles in credit management.

b. Risk Assessment

Risk assessment is the process of identifying and analyzing risks that could hinder the achievement of organizational goals. In the banking sector, this process includes identifying the risk of debtor default, changes in economic conditions, and other factors that can impact credit quality.

c. Control Activities

Control activities are policies and procedures designed to ensure that necessary actions are taken to mitigate identified risks. Examples of control activities in banking include credit authorization, segregation of duties, document verification, and the implementation of standard operating procedures (SOPs).

d. Information and Communication

This component emphasizes the importance of an information system capable of producing accurate, relevant, and timely data to support decision-making. Effective communication enables information regarding credit risk to be disseminated to relevant parties quickly and accurately.

e. Monitoring

Monitoring is the ongoing process of evaluating the effectiveness of internal control systems. In credit activities, monitoring involves monitoring the

condition of debtors after credit disbursement to detect potential problem loans early.

Credit Risk Theory

Credit risk is the risk that arises from the failure of a debtor or other party to fulfill their obligations to the bank as agreed upon. According to Ismail (2018), credit risk is the primary risk faced by banking institutions because the majority of bank revenues are derived from lending activities.

Banking authorities measure credit risk levels through the Non-Performing Loan (NPL) ratio. A higher NPL ratio indicates a lower quality of a bank's credit portfolio. Therefore, effective credit risk management is crucial for maintaining the health and sustainability of bank operations.

Non-Performing Loans

A non-performing loan (NPL) is a loan that experiences difficulty in repaying principal and interest according to the specified schedule. According to Kasmir (2019), a non-performing loan is a condition where a debtor is unable to meet its obligations, resulting in a decline in the quality of the bank's productive assets.

Under banking regulations, loans can be categorized as current, special mention, substandard, doubtful, and loss. Loans that fall into the substandard, doubtful, and loss categories are generally classified as non-performing loans. High levels of NPL can have various negative impacts, including:

1. Reduce bank profitability.
2. Reduce liquidity and quality of productive assets.
3. Increase the need for credit loss reserves.
4. Reduce the level of public trust in banks.
5. Threatens the stability of the banking system.

Prudential Banking Principle

The principle of prudence is a fundamental principle that banks must apply in conducting their business activities. This principle aims to protect public funds and maintain the stability of the banking system.

In the credit analysis process, the application of the precautionary principle is generally carried out through the 5C approach, namely:

- a. Character
Assessment of the character, integrity and good faith of prospective debtors.
- b. Capacity
The debtor's ability to manage the business and fulfill credit payment obligations.
- c. Capital
The condition of capital or financial capacity of the debtor.
- d. Collateral
Collateral submitted by the debtor as a risk mitigation tool in the event of default.
- e. Condition of Economy

Economic conditions and business prospects can influence the debtor's ability to repay credit.

Consistent application of the 5C principles can help banks reduce the risk of granting credit to unworthy debtors.

Banking Risk Management Theory

Risk management is a set of methods and procedures used to identify, measure, monitor, and control risks arising from a bank's business activities. According to banking regulations, the implementation of risk management is an integral part of good corporate governance.

The risk management process includes:

1. Risk identification.
2. Risk measurement.
3. Risk monitoring.
4. Risk control.

In the context of this research, the internal control system and risk management have a close relationship because both aim to minimize the possibility of non-performing loans and maintain the quality of the bank's credit portfolio.

Conceptual Framework of the Research

This research is based on the assumption that the effectiveness of the internal control system as measured by the five COSO components influences the bank's ability to minimize the risk of non-performing loans.

Components of Internal Control (COSO):

1. Control Environment
2. Risk Assessment
3. Control Activities
4. Information and Communication
5. Monitoring (Monitoring)

METHODOLOGY

This research uses a qualitative approach with a case study design, aimed at gaining a deeper understanding of the implementation of internal control systems in minimizing the risk of non-performing loans at "Bank Umum" (name disguised). This approach was chosen because it allows for comprehensive exploration of the phenomenon based on real-world conditions. The informants in this study consisted of two Account Officers, one Credit Manager, and one Internal Auditor, selected purposively based on their direct involvement in the credit granting and monitoring process.

Data collection techniques were carried out through in-depth interviews (*in-depth interview*) with a semi-structured approach to obtain more flexible and in-depth information, direct observation of the credit granting process to understand operational practices in reality, and relevant internal documentation as supporting data. The data obtained were then analyzed using the Miles and Huberman interactive model which includes three stages, namely data reduction, data presentation, and conclusion drawing. Data reduction is carried out by filtering and focusing information relevant to the research objectives, while data presentation is carried out in the form of a systematic narrative to

facilitate interpretation, and the final stage in the form of conclusion drawing is carried out continuously throughout the research process.

To ensure data validity, this study employed triangulation techniques, including source triangulation by comparing information from various informants, and technical triangulation by comparing interview results, observations, and documentation. Thus, the data obtained is expected to have a high level of validity and reliability, accurately depicting actual conditions in the field.

RESULTS

Implementation of Internal Control System Based on COSO Framework

Based on interviews and observations, the implementation of internal control systems at commercial banks generally adheres to the COSO framework. However, implementation has not yet been fully optimized across all components.

a. Control Environment (*Control Environment*)

The control environment in commercial banks demonstrates a clear organizational structure, a defined division of duties, and the implementation of a company code of ethics. This aligns with the concept of the control environment as the primary foundation of the internal control system (COSO, 2013).

However, interview results indicate a significant level of target pressure in credit distribution, which has the potential to impact independence in decision-making. The following is one of the results of an interview with *Account Officer 1*:

"We have to follow the standard operating procedures (SOPs) by law, but in the field, there's still pressure to meet credit distribution targets." (Interview, 2026)

This finding indicates a conflict between control culture and business orientation. This condition aligns with research by Dewi and Sujana (2022), which states that target pressure can reduce the quality of internal control.

b. Risk Assessment (*Risk Assessment*)

Risk assessment is a crucial component of an internal control system, particularly in the credit granting process. Research shows that commercial banks have implemented credit analysis based on the 5C principles, but its implementation is not yet fully optimal. As stated by *Account Officer 2*:

"Analysis is still being conducted, but it's sometimes difficult to delve deeply into customer character due to time constraints." (Interview, 2026)

This shows that the process *risk assessment* tends to be administrative in nature, not yet fully substantive. This finding supports the research of Pratiwi and Setiawan (2020), which states that weaknesses in risk assessment contribute to the increase in non-performing loans. From a theoretical perspective, this condition indicates that the component *risk assessment* within the COSO framework has not been implemented optimally.

c. Control Activities (*Control Activities*)

Control activities at commercial banks have been formalized through credit standard operating procedures (SOPs), which cover the analysis, approval, and

disbursement stages of credit. However, in practice, flexibility in the application of SOPs has been found. As stated by a credit manager:

"SOPs exist and are clear, but under certain circumstances, there can be tolerance, especially for customers who are considered potential customers." (Interview, 2026)

This flexibility has the potential to create moral hazard and increase the risk of non-performing loans. This is in line with Arens et al. (2017), who stated that inconsistent controls can reduce the effectiveness of the overall system.

d. Information and Communication (*Information and Communication*)

The information systems used by commercial banks have supported the credit management process, including recording and reporting. However, data integration between units remains suboptimal. As stated by an internal auditor:

"The system is in place, but not all data can be connected in real time, so there are sometimes delays in information." (Interview, 2026)

This situation indicates that even though information systems are in place, their effectiveness in supporting decision-making still needs to be improved. This aligns with Romney and Steinbart (2018), who emphasized the importance of integrated information systems in supporting internal control.

e. Monitoring

Monitoring is the weakest component in the implementation of internal control systems at commercial banks. Post-disbursement credit oversight has not been consistently implemented. As stated by an Internal Auditor:

"Monitoring is usually done, but not always routinely, especially for small loans." (Interview, 2026)

This weakness leads to delays in detecting potential non-performing loans. This finding aligns with research by Sari and Utama (2019), which found that weak monitoring is a major factor in the rise in NPLs.

Effectiveness of Internal Control in Minimizing Problematic Credit

Based on research results, the implemented internal control system is not fully effective in minimizing the risk of non-performing loans. This is evident in the continued discovery of cases of credit quality decline due to weaknesses in initial analysis and oversight.

This finding reinforces the argument in the introduction that the mere existence of an internal control system is not enough; it must be accompanied by consistent and high-quality implementation. Consistent with Rahmawati (2021), the effectiveness of internal control is highly dependent on the quality of its implementation in practice.

The Gap between Theory and Practice

One of the key findings of this study is the gap between the theoretical concept and the practical implementation of internal control systems. Theoretically, the COSO framework emphasizes the comprehensive integration of the five components. However, in practice, not all components operate in a balanced manner.

This gap is seen in:

1. In-depth risk assessment

2. Inconsistent monitoring
3. Target pressures affecting independence

This condition shows that the implementation of internal control is still influenced by organizational factors and work culture.

Factors Causing Problematic Credit from an Internal Perspective

Based on interviews and observations conducted at commercial banks, several internal factors were identified as contributing to the emergence of non-performing loans. These factors relate to risk management, human resource quality, and the implementation of internal control systems in the credit granting and monitoring process. Research findings indicate that although banks have clear operational procedures and standards, in practice, various obstacles still affect the quality of credit management.

The first and most dominant factor is the pressure of credit distribution targets. Interviews revealed that internal bank personnel, particularly Account Officers, face pressure to meet credit targets set by management. This situation has led to accelerated credit analysis processes in some cases to ensure targets are met more quickly.

"If the target isn't achieved, there will definitely be an evaluation, so we have no choice but to push for credit." (Interview, 2026)

The target pressure indirectly affects the quality of the implementation of the precautionary principle (*prudential banking principle*). In certain situations, Account Officers tend to focus more on achieving business targets than conducting in-depth credit analysis. As a result, there is the potential for errors in assessing debtors' creditworthiness, which can increase the risk of future credit problems. This finding aligns with research by Dewi and Sujana (2022), which states that pressure from business targets can lead to laxity in the credit analysis process and reduce the effectiveness of internal controls.

The second factor is limited human resources (HR), particularly the disproportionate number of Account Officers compared to the number of customers they handle. Interviews revealed that a single Account Officer can handle multiple debtors simultaneously, resulting in suboptimal credit analysis and monitoring.

"The number of account officers is limited, so one person handles many customers." (Interview, 2026)

These conditions result in high workloads and a decline in the quality of credit analysis. Furthermore, limited human resources also impact the effectiveness of monitoring disbursed loans. In some cases, routine monitoring of debtors' business development cannot be conducted due to time and manpower constraints. This demonstrates that human resources significantly influence the quality of internal control in the banking sector.

The third factor is weak monitoring or supervision after loan disbursement. Research shows that monitoring is not consistently implemented, especially for small loans considered low-risk. Yet, monitoring is a crucial part of the internal control system, as it serves to detect potential credit quality declines early.

"Monitoring is usually done, but not always routinely, especially for small loans." (Interview, 2026)

Weak monitoring results in banks being late in recognizing a decline in a debtor's repayment capacity, preventing prompt credit rescue measures. This situation aligns with research by Sari and Utama (2019), which found that weak post-credit disbursement supervision is a major factor in the increase in *Non-Performing Loan* (NPL).

The next factor is insufficient in-depth credit analysis. Although commercial banks have implemented analysis based on the 5C principles (*character, capacity, capital, collateral, And condition*), in practice the analysis process still tends to be oriented towards the completeness of administrative documents rather than a substantive evaluation of the debtor's character and capabilities.

"The documents are complete, but sometimes the analysis of the customer's character isn't very in-depth due to time constraints." (Interview, 2026)

This condition shows that the process *risk assessment* has not been running optimally. Inadequate analysis has the potential to lead banks to grant credit to debtors who actually have a high risk of default. This finding supports research by Pratiwi and Setiawan (2020), which states that weaknesses in risk assessment and credit analysis contribute significantly to the increase in non-performing loans.

Overall, the research results indicate that internal bank factors significantly influence the emergence of non-performing loans. Pressure from business targets, limited human resources, weak monitoring, and inadequate credit analysis indicate that the effectiveness of internal control systems is highly dependent on the quality of implementation on the ground. These findings also support research by Almazari (2018), which states that weaknesses in credit risk management can directly impact the increase in non-performing loans (NPLs) and the decline in bank asset quality.

DISCUSSION

Research findings indicate that the implementation of internal control systems in commercial banks is not fully effective in minimizing the risk of non-performing loans. When analyzed using the COSO framework, the main weakness lies in the internal control component *risk assessment* (risk assessment) and *monitoring* (monitoring). These two components play a crucial role in ensuring the quality of credit management, so weaknesses in these aspects have a direct impact on the potential for increased non-performing loans.

Weaknesses in Risk Assessment

Research results indicate that the risk assessment process at commercial banks tends not to be conducted in-depth, particularly in terms of debtor character analysis. This is evident from interviews, which revealed that time constraints and target pressures lead to a credit analysis process that focuses more on completing administrative documents than on substantive evaluations of debtor creditworthiness.

Theoretically, this condition shows that the principle of prudence (*prudential banking principle*) has not been fully implemented optimally. From the perspective of Arens et al. (2017), a weak internal control system in the risk assessment stage will increase the likelihood of errors in decision-making, including in granting credit. In other words, the quality of credit decisions is highly dependent on the depth of the risk analysis process conducted.

This finding is in line with research by Pratiwi and Setiawan (2020) which states that weaknesses in the internal control system, especially at the credit analysis stage, contribute significantly to increasing the level of *Non-Performing Loan* (NPL). Furthermore, Rahmawati (2021) also found that internal control effectiveness has a negative relationship with the level of non-performing loans, meaning that the better the quality of internal control, the lower the resulting NPL level.

Furthermore, research by Sari and Utama (2019) confirms that the components *risk assessment* is a dominant factor in determining the success of internal control systems in the banking sector. Failure to accurately identify and evaluate risks will expose banks to higher credit risk in the future. Therefore, this study's findings reinforce previous findings that weaknesses in risk assessment are a key cause of non-performing loans.

Weaknesses in Monitoring

In addition to risk assessment, weaknesses were also identified in credit monitoring. The study found that post-disbursement credit oversight was not conducted consistently and intensively. Suboptimal monitoring resulted in banks being late in detecting potential credit quality declines, preventing timely and appropriate corrective action.

Within the COSO framework, monitoring is a component that ensures that the entire internal control system operates effectively and sustainably. Without adequate monitoring, the internal control system cannot function optimally because there is no mechanism for evaluating its performance.

This finding aligns with research by Sari and Utama (2019), which states that weak post-credit disbursement supervision is a major factor in the rise in non-performing loans. Furthermore, international research by Almazari (2018) also shows that failures in credit monitoring can directly impact bank asset quality and increase credit risk.

From a practical perspective, weak monitoring at commercial banks is also influenced by limited human resources and high workloads. This situation results in incomplete oversight, particularly for small loans considered low-risk. Yet, the accumulation of these small loans still has the potential to significantly impact the overall NPL level.

Target Pressure and the Trade-off between Profitability and Risk Management

One of the key findings of this study is the pressure of credit disbursement targets, which impacts the quality of internal control system implementation. Interviews revealed that internal bank personnel faced pressure to achieve credit

targets, which in some cases led to laxity in the credit analysis and approval processes.

This condition reflects the existence of *trade-off*. There's a trade-off between profitability and risk management. On the one hand, banks are required to increase credit distribution to generate profits, but on the other hand, they must maintain credit quality to manage risk. An imbalance between these two objectives can lead to deviations in the implementation of internal control systems.

This finding aligns with research by Dewi and Sujana (2022), which states that pressure from business targets can influence the behavior of organizational decision-makers, leading them to neglect the principle of prudence. Furthermore, research by Ismail (2018) also confirms that internal factors such as management policies and organizational culture significantly influence the quality of internal control.

The Gap between Theory and Practice

Overall, the results of this study indicate a gap between the theoretical concept of internal control systems and their implementation in practice. Theoretically, the COSO framework emphasizes that the five components of internal control must operate in an integrated and consistent manner. However, in practice, not all components are optimally implemented, particularly in the areas of risk assessment and monitoring.

This gap indicates that the success of an internal control system is determined not only by system design, but also by human factors, organizational culture, and the external pressures faced by the bank. This aligns with Creswell (2016), who stated that a qualitative approach can uncover complex social realities, including organizational dynamics that cannot be explained quantitatively.

CONCLUSIONS AND RECOMMENDATIONS

Based on the research results and discussion, it can be concluded that the implementation of internal control systems in commercial banks generally adheres to the COSO framework, but its implementation has not been fully effective in minimizing the risk of non-performing loans. The main weakness lies in the risk assessment component (*risk assessment*) and monitoring (*monitoring*), which has not been implemented optimally and consistently. The risk assessment process tends to be administrative and in-depth, thus not fully reflecting the principle of prudence in lending. Furthermore, a weak monitoring function causes delays in detecting potential declines in credit quality. Furthermore, pressure from credit distribution targets and limited human resources also affect the quality of internal control system implementation. These findings indicate a gap between the theoretical concept of internal control and actual practice, so the effectiveness of the system is highly dependent on the quality of its implementation.

Based on these conclusions, it is recommended that commercial banks strengthen their risk assessment by improving the quality of credit analysis in a more comprehensive manner, particularly in assessing the character and

capabilities of borrowers. Furthermore, it is necessary to enhance the monitoring function through more intensive and continuous supervision of disbursed loans, so that potential non-performing loans can be detected early. Banks also need to optimize the use of information technology to support a more integrated and responsive internal control system. From a managerial perspective, it is crucial to balance achieving business targets with the application of the prudent principle to prevent laxity in the control process. Furthermore, improving human resource competency through ongoing training is also a strategic step in strengthening the effectiveness of the internal control system. This is expected to improve the quality of credit management and sustainably minimize the risk of non-performing loans.

FURTHER STUDY

This study provides valuable insights into the implementation of internal control systems in minimizing non-performing loans (NPLs) within commercial banks. However, several limitations should be acknowledged. First, the research was conducted using a qualitative case study approach at a single bank, which may limit the generalizability of the findings to other banking institutions with different organizational characteristics and risk management practices. Second, the study primarily focused on internal factors influencing credit risk, while external factors such as economic conditions, regulatory changes, and industry competition were not examined in depth. Third, the data were obtained from a limited number of informants, which may not fully capture the perspectives of all stakeholders involved in the credit management process.

Future research is recommended to expand the scope by involving multiple banks and employing comparative analyses across different banking institutions. Researchers may also adopt a mixed-methods or quantitative approach to measure the statistical relationship between internal control effectiveness and non-performing loan ratios. Furthermore, future studies should explore the role of digital banking technologies, artificial intelligence, and data analytics in strengthening internal control systems and credit risk management. Investigating the impact of organizational culture, corporate governance, and employee competency on the effectiveness of internal controls would also provide a more comprehensive understanding of factors influencing credit quality in the banking sector.

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