

Assessing The Impact of Accounting Information Systems on Internal Control of Micro Credit Services at Banking Institutions in Bandung

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Abstract

This study explores the impact of the accounting information system on credit granting and its effect on internal control over micro credit distribution. The main aim is to understand the relationship between these factors. To accomplish this, the research employs various methods like observation, interviews, and literature reviews. The analysis uses the Pearson correlation coefficient, demonstrating a strong relationship between the independent and dependent variables. The findings reveal that a significant portion of the variation in internal control over micro credit granting relates to problematic credits, while some influences come from factors not examined in this research. The emerging issues include ineffective credit analysis that leads to insufficient understanding of customer businesses, along with the misuse of loans by debtors, which negatively impacts bank profits. Recommendations for micro credit services at banking institutions in Bandung highlight the necessity for more assertive loan collection practices and increased vigilance in applying credit assessment frameworks such as the 5C and 7P models.

This study brings forward the novelty of linking the effectiveness of the accounting information system directly to the internal control over micro credit distribution. By highlighting the specific relationship between these elements, it sheds light on how improved credit analysis can prevent debtor misuse and enhance bank profitability. This focus not only addresses existing gaps in understanding within the industry but also offers practical recommendations tailored for micro credit services at banking institutions in Bandung. The implications of these findings suggest that a more robust framework for credit assessment, particularly the application of the 5C and 7P models, could significantly improve the lending process. This innovative approach fosters a deeper understanding of customer behavior and financial practices, ultimately contributing to more sustainable lending strategies.

Keywords : Accounting Information System, Credit Granting, Internal Control, Micro Credits, Credit Analysis

INTRODUCTION

In contemporary economic landscapes, credit plays a crucial role in driving capital growth and investment among entrepreneurs. As businesses face challenges, particularly during periods of economic decline with stagnation in the real sector, the need for fresh capital becomes paramount. Support from governmental bodies and financial institutions is essential, allowing entrepreneurs to access funds necessary for maintaining operations and boosting profits.

Research underscores the significance of the banking sector in this dynamic. Murrar et al. (2024) illustrate how the banking industry adapts

in the digital transformation era, impacting economic growth through enhanced financial services. Additionally, Le and Nguyen (2022) emphasize the importance of credit information sharing, indicating that such practices contribute to bank stability and shift focus toward household lending, thereby facilitating broader economic recovery.

Banking institutions, distinct from ordinary businesses, serve as vital sources of funding for individual and business needs. They not only cater to consumer demands, such as purchasing homes and vehicles, but also support production enhancements. Understanding the intricate

relationship between credit issuance and business investment is essential for addressing the evolving needs of the economy and fostering sustainable growth.

In the banking sector, the process of granting credit demands careful attention and diligence. Financial institutions place their trust in borrowers, expecting them to return the borrowed funds. This trust extends from depositors who place their money in banks, necessitating a thorough assessment of potential borrowers. Economically, credit represents a transaction in which the same value is expected to be returned to the creditor after a predetermined period, as agreed upon with the borrower. For creditors, this arrangement not only facilitates capital flow but also allows them to earn interest from the loans provided.

Research by Kamimura et al. (2023) supports the notion that effective credit evaluation is critical. Their review of optimization methods in credit scoring highlights how rigorous assessment processes can enhance decision-making in lending practices. By employing sophisticated models for credit scoring, banks can minimize risk and ensure that they make informed choices about whom to extend credit to. This systematic approach enhances overall financial stability, as it balances trust with accountability in the lending process. Thus, the relationship between careful credit evaluation and economic transactions underscores the importance of thorough scrutiny in banking, contributing to both the safety of depositor funds and the profitability of banking institutions.

Credit activities represent a significant risk asset for banks since the value of these assets

relies heavily on external parties, namely borrowers. Non-performing loans (NPLs) emerge when borrowers fail to repay their debts on time, and several factors contribute to this issue. Common causes include business bankruptcies, declining sales performance, market competition, or even intentional misallocation of funds by borrowers to ventures with uncertain futures. Such scenarios lead to decreased income for banks and hinder the ability of borrowers to expand their operations.

When loan repayments are delayed or inconsistent, banks face potential profit losses. Theoretical models suggest that a bank's profits can be predicted annually or monthly based on borrower repayment patterns. However, any disruption in these repayments can damage the bank's financial performance. This situation can prompt banks to limit their lending activities or become hesitant to issue new loans due to large outstanding amounts. As highlighted by Saliba et al. (2023), the interplay of country-specific risks significantly impacts credit risk and performance in the banking sectors of BRICS nations, underscoring the need for financial institutions to manage these risks effectively to maintain stability and foster growth.

Accounting systems and controls play a crucial role in the operational functionality of companies. Within an organization, the relationship between accounts receivable accounting systems and internal controls represents a management and oversight dynamic essential for decision-makers striving to protect the company's assets. To achieve operational effectiveness and ensure compliance with corporate management policies, a robust accounts receivable system and strong internal

controls are necessary for monitoring and evaluating performance.

When an effective accounts receivable system is in place, high-quality internal controls are likely to follow, demonstrating a positive influence of accounting information systems on internal control. Research by Alzoubi (2025) emphasizes the importance of combining forensic accounting with internal controls to enhance both effectiveness and governance within organizations. Similarly, Otoo et al. (2023) evaluate how effective internal control systems contribute to overall organizational performance, arguing that such systems create a supportive environment for achieving strategic objectives.

METHOD

The research method employed in this study is a case study approach, utilizing both qualitative descriptive and quantitative descriptive research techniques. The independent variable (X) in this research is the credit granting accounting information system, which is identified as the cause of changes in the dependent variable. The dependent variable (Y) is internal control, which is influenced by the independent variable.

To ensure data quality, the study incorporates two main concepts: validity and reliability. Validity refers to the degree to which the research findings accurately reflect the reality of the studied object, while reliability indicates consistency over time. High-quality data collection instruments are crucial for ensuring

valid and reliable results. A valid instrument accurately measures what it intends to measure, while a reliable instrument produces consistent data when used multiple times on the same object.

To evaluate the validity of the measurement tools, the study employs the Product Moment Correlation formula. This test assesses how accurately the questionnaire measures the intended constructs. The reliability test examines the extent to which measurement results remain consistent when measurements are repeated. In this study, the reliability will be assessed through internal consistency reliability, using a single administration of the instrument followed by statistical analysis to predict reliability. Given that the research utilizes Likert scales, both validity and reliability testing will involve comparing calculated correlation values with the relevant table values. Additionally, reliability testing will utilize Cronbach's Alpha technique.

RESULT AND DISCUSSION

Data analysis of loan development between 2013 and 2017 reveals a consistently positive upward trend year after year. Competitive interest rates and the aggressive expansion of financial institutions' distribution networks primarily propelled this growth. Ultimately, the strong performance transition from 2013 to 2017 underscores rising public confidence and healthy market liquidity, both of which drove the industry toward optimal financing achievements by the end of 2017.

Table 1. Amount of Loans

| Year | Amount of Loans | Number of Loans Disbursed | Credit Cards Percentage of Bad Debts |
|------|-----------------|---------------------------|--------------------------------------|
| 2013 | 1,071,347,266 | 582,597,248 | 54% |
| 2014 | 1,295,020,794 | 213,194,426 | 16% |
| 2015 | 393,201,341 | 233,166,642 | 59% |
| 2016 | 3,584,626,983 | 2,370,111,136 | 66% |
| 2017 | 3,674,805,554 | 1,353,472,215 | 36% |

The analysis of micro credit services at banking institutions in Bandung from 2013 to 2017 reveals significant fluctuations in credit issuance, indicating a volatile environment. Microcredit is classified as problematic when it falls into categories such as less smooth, doubtful, or delinquent credits based on collectability. The data for this period shows a total credit amount ranging from 1,071,347,266

to 393,201,341, with credit card issuance varying between 213,194,426 and 1,353,472,215.

The lowest microcredit issuance occurred in 2014 at just 16%, while the highest was in 2016 at 66%. Such variability suggests that microcredit is a high-risk venture, exposing the bank to potential losses. In response to these challenges, micro credit services at banking institutions in Bandung continuously evaluates its microcredit offerings to customers.

Table 2. Net Income

| Year | Revenue Gross Profit | Expenses | Net income |
|------|----------------------|------------------|------------|
| 2013 | 3,486,406,682.00 | 1,069,589,678.00 | 30% |
| 2014 | 5,477,653,370.00 | 580,097,650.00 | 10% |
| 2015 | 7,336,259,200.00 | 2,497,405,400.00 | 34% |
| 2016 | 1,454,127,817.00 | 71,198,114.00 | 4,8% |
| 2017 | 3,472,083,209.00 | 1,040,192,356.00 | 29% |

Regarding profitability, the gross income figures show fluctuations as well, with reported amounts ranging from 1,454,127,817.00 to 7,336,259,200.00. The largest net profit for the bank was recorded in 2015 at 7.336 billion, while total expenses have also varied significantly, peaking at 2,497,405,400.00 in 2017.

By comparing gross profit to total expenses, the net income can be calculated. In 2013-2014, the bank experienced a decline in revenue from 30% to 10%. However, a notable recovery occurred in 2015, with revenue rising to 34% before experiencing another decline to 4.8% in 2016. Fortunately, revenue rebounded to 29% in 2017.

Table 3. Result of Regression

| Regression | Coefficients | Sig. |
|---------------|----------------|----------|
| (Constant) | 2459169644.005 | 0.021 |
| Profit | -.355 | 0.057 |
| Determination | R | R Square |
| | 0.866 | 0.751 |

The calculations yielded an r-value of 0.865, indicating a very strong correlation between microcredit issuance and profit. This correlation suggests that a decrease in microcredit issuance leads to a decline in profit, while an increase in microcredit issuance results in higher profits. Overall, the analysis indicates that microcredit issuance accounts for 75% of the profit variability, with the remaining 25% influenced by other factors. This emphasizes the critical importance of effective management of microcredit policies in sustaining profitability for the bank.

In the banking sector, Alrabei (2021) establishes that accounting information systems significantly enhance the overall efficiency of internal control procedures within Jordanian commercial banks. By automating complex processes, these systems eliminate human error and provide real-time data monitoring capabilities. This systematic upgrade does not stop at financial accuracy; it directly influences human capital. Expanding on this relationship within small and medium-sized enterprises (SMEs) in Jordan, Alawaqleh (2021) proves that a well-implemented AIS acts as a crucial catalyst. The study highlights that reliable accounting systems empower internal controls to boost employee performance, creating an

operational environment where accountability and efficiency thrive hand-in-hand.

Focusing on the manufacturing sector, Putra et al. (2023) examine a garment company in Bandung. They find that precise information control through automated inventory tracking significantly minimizes stock discrepancies, prevents material waste, and tightens the company's internal safeguarding of physical assets. Similarly, Syafira et al. (2023) investigate an automotive sales and after-sales service company in Bandung. Their findings confirm that a structured accounts receivable AIS exerts a strong, positive influence on accounts receivable internal control. The system systematically tracks credit sales, manages collection deadlines, and dramatically lowers the risk of bad debts or unrecorded revenue.

The synergy between technology and oversight directly impacts a company's bottom line. Investigating Iraqi industrial companies, Al-Waeli et al. (2020) demonstrate that a sophisticated AIS directly improves corporate financial performance. Crucially, their analytical study reveals that internal control plays a vital moderating role; strong internal controls amplify the positive effects of AIS, ensuring that accurate financial data translates into sound strategic decisions and higher profitability.

CONCLUSION

Based on the analysis, the relationship between microcredit issuance (X) and profit (Y) is strong, with a correlation of 86.5%. The influence of microcredit issuance on profit is quantified at 75.1%, indicating that other factors not addressed by the researcher also contribute to profitability. The simple linear regression equation, $Y = -0.355 + 0.005X$, demonstrates that a 1% increase in microcredit issuance results in a decrease in profit of 0.5%.

This study identifies several barriers to increasing net profit at micro credit services at banking institutions in Bandung from 2013 to 2017. These barriers include debtor dishonesty in providing accurate financial information, inadequate debtor management skills, significant overdue credits without viable businesses behind them, and slow turnover of accounts receivable affecting the bank's ability to collect credit obligations. Additionally, instances of credit misuse by debtors and their tendency to default on agreements pose significant challenges.

To address these issues, the bank has implemented several strategies: intensive daily collections through on-the-spot visits and phone calls, restructuring options such as rescheduling repayment terms for viable debtors, and conducting auctions for marketable collateral. Furthermore, the bank needs to enhance monitoring and support for clients without overstepping into their business operations.

The study suggests that the microcredit system at micro credit services at banking institutions in Bandung should undergo immediate restructuring to prevent "special attention" credits from escalating into less recoverable debts. If left unchecked, this could

lead to increased difficulties in microcredit issuance in subsequent years. Additionally, the bank must be selective in choosing potential debtors, prioritizing those with solid character and positive credit histories, thus avoiding misallocation of financial resources to individuals with poor credit ratings from Bank Indonesia.

Future research should explore the factors influencing the remaining 25% of profit variability and assess the long-term effectiveness of the strategies implemented to enhance microcredit management. Conducting a more comprehensive study that incorporates these variables will provide valuable insights for improving profitability and sustainability in microcredit operations within banking institutions.

REFERENCES

- Alawaqleh, Q. A. (2021). The effect of internal control on employee performance of small and medium-sized enterprises in Jordan: The role of accounting information system. *The Journal of Asian Finance, Economics and Business*, 8(3), 855-863.
- Alrabei, A. M. (2021). The influence of accounting information systems in enhancing the efficiency of internal control at Jordanian commercial banks. *Journal of Management Information and Decision Sciences*, 24(1), 1-9.
- Alzoubi, A. B. (2025). Maximizing internal control effectiveness: the synergy between forensic accounting and corporate governance. *Journal of Financial Reporting and Accounting*, 23(1), 404-
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416. <https://doi.org/10.1108/JFRA-03-2023-0140>
- Al-Waeli, A. J., Hanoon, R. N., Ageeb, H. A., & Idan, H. Z. (2020). Impact of accounting information system on financial performance with the moderating role of internal control in Iraqi industrial companies: An analytical study. *Jour of Adv Research in Dynamical & Control Systems*, 12(8), 246-261.
- Kamimura, E. S., Pinto, A. R. F., & Nagano, M. S. (2023). A recent review on optimisation methods applied to credit scoring models. *Journal of Economics, Finance and Administrative Science*, 28(56), 352-371. <https://doi.org/10.1108/JEFAS-09-2021-0193>
- Le, T. D., & Nguyen, D. T. (2022). Bank stability, credit information sharing and a shift toward households' lending: international evidence. *International Journal of Managerial Finance*, 18(5), 979-996. <https://doi.org/10.1108/IJMF-07-2021-0311>
- Murrar, A., Asfour, B., & Paz, V. (2024). Banking sector and economic growth in the digital transformation era: insights from maximum likelihood and Bayesian structural equation modeling. *Asian Journal of Economics and Banking*, 8(3), 335-353. <https://doi.org/10.1108/AJEB-12-2023-0122>
- Otoo, F. N. K., Kaur, M., & Rather, N. A. (2023). Evaluating the impact of internal control systems on organizational effectiveness. *LBS Journal of Management & Research*, 21(1), 135-154. <https://doi.org/10.1108/LBSJMR-11-2022-0078>
- Putra, L. A. B. H., Komara, A. T., Sidharta, I., Roslina, N. Y., & Megawati, I. (2023). Information Control on Inventory Study at In One of The Garment Companies in Bandung. *Informatics Management, Engineering and Information System Journal*, 1(1), 66-76.
- Saliba, C., Farmanesh, P., & Athari, S. A. (2023). Does country risk impact the banking sectors' non-performing loans? Evidence from BRICS emerging economies. *Financial Innovation*, 9(1), 86. <https://doi.org/10.1186/s40854-023-00494-2>
- Syafira, S., Komara, A. T., Juhara, D., & Rusjiana, J. (2023). Influence of Accounts Receivable Accounting Information System on Accounts Receivable Internal Control: Study at a service company engaged in the sale and after-sales of vehicles in Bandung. *Acman: Accounting and Management Journal*, 3(2), 109-118.
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