
The Effect of Credit Risk on the Financial Stability of Rural Credit Banks in West Java: The Mediating Role of Profitability

Zaidan Rahadian¹, Ujang Suherman², Rengga Madya Pranata³

Abstract:

This study aims to analyze the impact of credit risk on the financial stability of People's Credit Banks (BPR) in West Java from 2019 to 2023, considering the mediating role of profitability. Employing a quantitative methodology with descriptive and verificative approaches, the research utilizes secondary data from annual financial reports of BPRs obtained from the Financial Services Authority (OJK). The sample comprises 94 BPRs, with data analysis conducted using panel data regression and the Sobel test. Descriptive analysis reveals significant variations in credit risk levels, profitability, and financial stability across BPRs. Regression results indicate that credit risk exerts a negative but statistically insignificant effect on financial stability, while profitability demonstrates a positive and significant influence. Mediation analysis via the Sobel test confirms that profitability does not mediate the relationship between credit risk and financial stability. Simultaneously, both variables collectively contribute to financial stability, though external factors outside the model also play a role in shaping outcomes. The study concludes that enhanced credit risk management and improved profitability can bolster the financial stability of BPRs. Recommendations include strengthening credit risk governance, optimizing operational efficiency, and ensuring adequate capital buffers to maintain financial resilience amid economic challenges.

Keywords: Credit Risk; Profitability; Financial Stability; BPR; Mediation; Panel Data Regression.

Submitted: April 8, 2025, Accepted: May 18, 2025, Published: May 25, 2025

1. Introduction

The global economic landscape over recent years has experienced significant instability due to the pandemic, triggering recessions and economic pressures across various countries. The ongoing global economic uncertainty, characterized by volatile markets and soaring inflation, has directly impacted growth rates, which have tended to decelerate amid declining investment and weakened consumer purchasing power (Bian, 2023). Monumental events such as exchange rate fluctuations and interest rate adjustments in Indonesia's economy, amid widespread challenges across various business sectors, have heightened credit risk and directly impacted economic stability

¹ Universitas Buana Perjuangan Karawang, Indonesia. mn21.zaidanrahadian@mhs.ubpkarawang.ac.id

² Universitas Buana Perjuangan Karawang, Indonesia. ujang.suherman@ubpkarawang.ac.id

³ Universitas Buana Perjuangan Karawang, Indonesia. rengga.madya@ubpkarawang.ac.id

(Ispriyarso & Wibawa, 2023). This underscores that Indonesia's current economic conditions are influenced by exchange rate fluctuations and interest rate adjustments, which have led to decreased revenues for many businesses or even operational closures, thereby undermining their capacity to fulfill loan obligations.

As a vital sector within Indonesia's economy, the banking industry plays a significant role in supporting economic recovery through credit distribution and financing. While exchange rate fluctuations and interest rate adjustments have had notable economic impacts, Bank Indonesia has urged the government to implement policy measures. One such initiative is the Funding for Lending (FFL) scheme, a monetary policy designed to incentivize financial institutions to accelerate credit growth. This policy encourages banks and financial institutions to expand lending to households and small and medium-sized enterprises (SMEs), thereby directly stimulating economic growth (Fabio et al., 2024). The People's Credit Bank (BPR) plays a crucial role as a microfinance institution, providing financing to local communities—particularly small-scale entrepreneurs in regions underserved by conventional banks.

The financial stability of People's Credit Banks (BPRs) in West Java has deteriorated annually, with the number of BPRs experiencing declining financial stability continuing to rise. The increasing incidence of bankruptcies among BPRs is attributed to elevated credit risk, which directly undermines their financial stability.

The financial stability of People's Credit Banks (BPRs) in West Java remained relatively stable despite fluctuations, with a decline in 2021 followed by gradual improvement in subsequent years. Credit risk decreased significantly until 2022 but saw a slight uptick in 2023. Profitability was volatile, marked by sharp declines in 2021 and 2023. These downturns indicate that many BPRs struggled to withstand financial pressures stemming from elevated credit risk and diminished profitability, particularly among smaller BPRs (those with smaller asset bases). High credit risk led to liquidity challenges, reduced interest income, and failures to meet financial obligations (Hutagaol et al., 2024).

Banking stability reflects the ability of the banking system to perform its core functions such as fund distribution, risk management, and payment system operations despite market challenges, including volatility in the local currency's value and the dynamics of benchmark interest rates influenced by central bank policies. In Indonesia, particularly within the People's Credit Banks (BPR) segment in West Java, banking stability heavily depends on asset quality and the effectiveness of credit risk management strategies. High-quality assets and efficient risk management serve as the main pillars for maintaining BPRs' financial health, thereby significantly contributing to regional economic stability (Suhaedi & Rinaldo, 2023). Furthermore, Ariefdianto et al. (2024) highlight that exchange rate movements and sharp interest rate dynamics have exacerbated the rise in non-performing loans, with many debtors—particularly small and medium-sized enterprises (SMEs)—facing difficulties meeting payment obligations. These conditions, compounded by capital constraints and a lack of product diversification, have further amplified the

vulnerability of People's Credit Banks (BPRs) in maintaining financial stability. The impact is profound, as BPR instability risks eroding public trust, diminishing banking functionality, and disrupting regional economic resilience.

Financial intermediation refers to the role of banks as intermediaries between parties with surplus funds (savers) and those requiring financing (borrowers). According to My & Quoc (2022), the effectiveness of this intermediation function heavily depends on banks' ability to manage risks, particularly credit risk, which stems from the potential inability of borrowers to repay obligations as agreed. High credit risk can adversely affect banking stability, as rising non-performing loans erode bank capital, reduce their capacity to extend new credit, and diminish public confidence in the banking system.

In greater detail, credit risk arises when borrowers or clients who purchase on credit fail to meet their obligations as stipulated in the agreement, or when there is a decline in credit quality that heightens the perceived likelihood of default (Ariefdianto et al., 2024). High credit risk reflects significant uncertainty regarding borrowers' ability to repay obligations, potentially resulting in financial losses for banks (Nguyen et al., 2022). Furthermore, Le (2020) highlights that in West Java's People's Credit Banks (BPRs), credit risk complexity is particularly pronounced, given that the majority of clients are small and micro-enterprises. Beyond external pressures, exchange rate fluctuations and sharp interest rate dynamics have exacerbated conditions by squeezing clients' incomes amid a global economic slowdown. This has strained borrowers' capacity to meet credit obligations, ultimately deteriorating banks' asset quality and undermining overall financial stability.

People's Credit Banks (BPRs) generally exhibit lower profitability and bear higher risk levels compared to conventional banks. The ability of banks to maintain consistent operations and fulfill financial obligations amid economic shocks triggered by exchange rate fluctuations and interest rate dynamics is critically important. These efforts are essential to protect client funds and uphold financial system stability, particularly in navigating global market uncertainties (Trinh et al., 2020). Moreover, transparency and accountability in bank governance play pivotal roles in curbing excessive risk-taking by management. The implementation of strict internal controls can enhance operational stability, preserve client trust, and bolster bank resilience against economic uncertainties (D.T. Nguyen et al., 2024).

Maintaining stability is the responsibility of the Financial Services Authority (OJK), as stipulated in OJK Regulation No. 4/POJK.03/2015 on the Health Assessment of People's Credit Banks (BPRs). This regulation mandates periodic risk-based evaluations and supervision of BPRs. BPRs are required to conduct internal assessments of their financial health based on risk exposure, governance mechanisms, operational profitability, and capital structure under the Risk-Based Bank Rating (RBBR) framework. The goal is to safeguard financial stability by detecting credit risks early and implementing mitigation measures. Additionally, OJK Regulation No. 5/POJK.03/2015 on Minimum Capital Adequacy Requirements (KPMM) establishes

the minimum capital thresholds BPRs must maintain as a buffer against potential losses, particularly credit risk. The KPMM level is calculated based on the BPR's risk profile and serves as a critical instrument for ensuring financial stability.

Prior research has revealed significant relationships between credit risk, profitability, and financial stability, particularly in People's Credit Banks (BPRs). Studies by My & Quoc (2022) and Nabella et al. (2023) found that credit risk exerts a significant negative impact on bank financial stability. Further, Serly (2020) demonstrated that credit risk positively and significantly influences profitability and financial stability. Conversely, studies by Pranata et al. (2020), Ujang Suherman et al. (2024), and Zournatzidou et al. (2025) concluded that profitability and financial stability exhibit a direct positive relationship. When banks generate consistent profits, their capacity to withstand financial shocks and sustain operations improves. However, Ketaren & Haryanto (2020), Bagale (2025), and Anh & Phuong (2021) found that credit risk negatively impacts financial stability, while profitability does not mediate this relationship. High profitability can mitigate the negative effects of credit risk, particularly in stable economic conditions where banks effectively mediate the relationship between credit risk and financial stability (Saadaoui & Chouchene, 2024).

Based on the background analysis, this study investigates the influence of profitability on the financial stability of People's Credit Banks (BPRs) in West Java during the 2019–2023 period, focusing on the mediating role of credit risk. The research examines how credit risk affects financial stability, with profitability represented by the ROA (Return on Assets) variable, credit quality measured by NPL (Non-Performing Loan), and financial stability assessed through the Z-score metric.

By using panel data regression, this study aims:

1. To determine the influence of credit risk on the financial stability of Rural Credit Banks (BPRs) in West Java for the period 2019–2023.
2. To determine the effect of profitability on the financial stability of West Java Rural Credit Banks for the period 2019–2023.
3. To examine the role of profitability as a mediating variable in the relationship between credit risk and financial stability of West Java Rural Credit Banks (BPRs) for the period 2019–2023.

2. Theoretical Background

Intermediation: Believing that intermediation plays an important role, in connecting diverse stakeholders and optimizing fund distribution, as emphasized in the principles of financial intermediation (Stuart I. Greenbaum et al., 2019). Intermediation illustrates the mechanisms of fund allocation in financial markets, highlighting how intermediaries enhance the effectiveness and quality of economic decision-making (Kithandi, 2025). It provides a clear framework for understanding the role of intermediaries in optimizing fund distribution, ensuring productive utilization of

financial resources, and minimizing systemic imbalances within the economy (Uchegbu Basil Chibueze et al., 2024).

Bank intermediation is often influenced by bank financial stability. Findings from (Azolibe & Azolibe, 2021), reveal that intermediation plays a critical role in shaping banking sector stability decisions to drive economic growth. Additionally, (Ding et al., 2019) note that the use of formal financial institutions does not reduce reliance on the informal financial sector but instead increases the use of informal intermediation as a complementary mechanism. This occurs because credit risk and profitability influence banks' financial stability decisions.

Financial Stability: Bank financial stability describes a condition where core economic functions—such as resource distribution, risk allocation, and uncertainty management—operate optimally. This enables banks to withstand external shocks, including exchange rate fluctuations and interest rate movements, while efficiently managing financial risks and distributing resources (Abdu, 2022). Banking financial stability reflects the financial sector's capacity to adapt, mitigate potential losses, and reduce crisis risks. Instability may arise from bank inefficiencies, leading to liquidity risks and heightened financial turmoil, which in turn reduce economic efficiency (Mamonov et al., 2024). When assessing bank financial stability, the Z-Score is widely used as a primary indicator. A higher Z-Score signifies greater bank stability, as it measures resilience against insolvency risks (Rengga Pranata et al., 2023).

These findings align with studies by (Saleh & Afifa, 2020), who emphasize the importance of financial stability. Extensive research has been conducted to identify signs of instability as part of mitigation efforts. Financial stability tends to improve during crises, though banks with robust management strategies are better positioned to withstand such conditions. Additionally, financial stability exerts a negative influence on profitability, measured by banks' profit margins. Banks with significant funding gaps tend to experience declining profitability, as they must allocate liquid assets to meet financial obligations (Huan & Parbonetti, 2019).

Credit Risk: Credit risk encompasses the potential for changes in bank profits and market value due to borrower defaults or payment delays. This risk represents one of the greatest challenges in bank accounting and can weaken financial conditions if not managed effectively (Pranata et al., 2020). Credit risk also reflects the financial health of a financial institution, particularly banks (Akande & Salawu, 2025). Consequently, it is a critical factor in banking activities, as it can influence other financial aspects such as income, net profits, and capital stability. The impact of credit risk on banks includes challenges in risk management and financial portfolio oversight (M. M. Alaa Ali Rahm, 2024). If borrowers fail to meet obligations promptly, bank financial stability may be compromised, underscoring the need for robust risk management strategies to maintain a healthy credit portfolio.

Credit risk is closely intertwined with bank profitability. Research indicates that during crises particularly those triggered by exchange rate instability and interest rate

volatility credit risk becomes a primary concern in the banking sector (Ramadhany et al., 2024). Economic crises marked by exchange rate fluctuations and interest rate movements amplify financial uncertainty, impacting the stability of banks, including People's Credit Banks (BPRs). Furthermore, studies reveal that credit risk affects the profitability of commercial banks in developing countries. For instance, non-performing loans contribute to declines in bank assets, measurable through profitability indicators such as net income margins (Suaidah et al., 2024).

Profitability: Profitability refers to a company's or business's capacity to generate revenue from its operational activities over a specific period (Badollahi, 2024). Profitability reflects how effectively a company manages assets, controls expenditures, and maximizes revenue. Beyond serving as a primary indicator of financial health, profitability also signals business sustainability and competitiveness. Furthermore, profitability acts as a metric for companies to assess their ability to generate profits, ensuring business continuity and delivering value to stakeholders (Ujang Suherman et al., 2023). Additionally, profitability plays a role in maintaining financial stability, as consistent profits can strengthen capital structure, enhance liquidity, and improve resilience against various financial risks (Quader et al., 2020).

Prior research has found that profitability contributes to corporate financial stability. When companies generate stable profits, capital strengthens, liquidity is maintained, and resilience to risks improves (T. D. Le & Le, 2020). Additionally, profitability influences bank financial stability. Higher profitability increases the capital buffer available to banks, which overall helps reduce credit risk and enhance financial stability (Hendrawan et al., 2023).

Research Framework

According to credit risk theory (Pranata et al., 2020), credit risk not only affects the profitability of People's Credit Banks (BPRs) but also impacts public trust in the institution. When non-performing loan (NPL) ratios rise, BPRs must allocate larger loan loss provisions, reducing their capacity to disburse new financing. This condition can slow economic growth in regions reliant on BPRs, particularly in West Java, where BPRs play a critical role in financing micro, small, and medium enterprises (MSMEs). Therefore, effective credit risk management is essential for sustaining business operations and ensuring long-term financial stability.

According to profitability theory (Hendrawan et al., 2023), profitability plays a critical role in maintaining bank financial stability and serves as a cornerstone for building long-term resilience in financial institutions. Banks with high profit levels have greater capacity to absorb potential losses stemming from economic uncertainties or non-performing loans. This is particularly relevant for People's Credit Banks (BPRs) in West Java, which heavily rely on small and medium-sized enterprises (SMEs). For these institutions, sustained profitability is a key determinant of operational continuity.

According to intermediation theory (Kithandi, 2025), banks act as intermediaries by allocating financial resources from surplus entities to borrowers or sectors requiring funding. Bank financial stability is influenced by credit risk, which reflects the potential for borrower defaults. Profitability serves as a mediator in this relationship, where a bank's financial performance can either strengthen or weaken the impact of credit risk on financial stability. Therefore, understanding the relationship between credit risk, profitability, and financial stability is critical, particularly for People's Credit Banks (BPRs) in West Java during the 2019–2023 period.

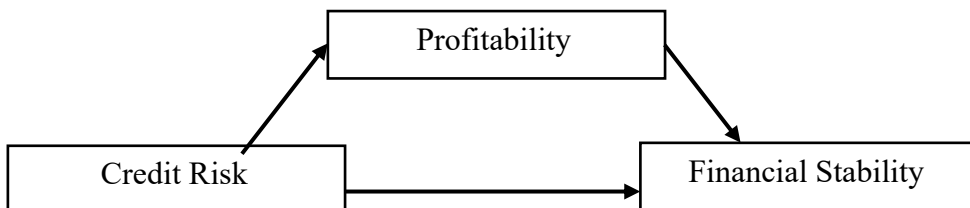


Figure 1. Research Framework

Hypothesis 1: Credit risk affects financial stability at BPR in West Java

Hypothesis 2: Profitability affects the financial stability of BPR in West Java

Hypothesis 3: Profitability mediates the relationship between credit risk and financial stability of BPR in West Java

3. Methodology

This study employs a quantitative methodology with descriptive and verificative approaches, adopting an explanatory research design that integrates descriptive analysis of the relationships between variables. To understand how this research was conducted, the following subsections provide detailed explanations. This study integrates descriptive and verificative approaches to analyze the influence of credit risk and profitability on the financial stability of conventional People's Credit Banks (BPR) in West Java registered with the Financial Services Authority (OJK). The descriptive component aims to characterize and illustrate patterns of the phenomena under study, providing insights into stakeholders' perspectives on credit risk and profitability (Sugiyono, 2023). Meanwhile, the verificative component focuses on testing the validity of existing concepts and hypotheses through data collection. The research employs an explanatory methodology, gathering information from a sample of the population to explore respondents' viewpoints on the subject (Muetya et al., 2025). Thus, this study is expected to contribute significantly to understanding financial stability in the banking sector, particularly for conventional BPRs in West Java Province. The research population comprises 94 conventional People's Credit Banks (BPR) in West Java registered on the official portal www.ojk.go.id during the 2019–2023 period. The sample was selected using nonprobability sampling, specifically purposive sampling, where criteria-based selection ensured data relevance. This approach yielded 94 companies observed over 5 years, resulting in a total of 470 annual financial reports analyzed. The sample criteria included Data collection was conducted using documentation methods, gathering secondary data

from the financial reports of People's Credit Banks (BPRs) in West Java officially published by the Financial Services Authority (OJK). The data covers the 2019–2023 period and was obtained from the OJK online portal and other trusted sources for analysis purposes. This study employs a panel data regression model that integrates time-series (temporal) and cross-sectional (entity-based) data characteristics. The analysis is designed to evaluate the causal relationships between independent variables (credit risk [X_1] and profitability [X_2]) and the dependent variable (financial stability [Y]) in People's Credit Banks (BPRs). The model is formulated as follows: $Y_{it} = \beta_0 + \beta_1 X_{1,it} + \beta_2 X_{2,it} + \alpha_{it} + u_{it}$. Data analysis was conducted using EViews 9 SV (x64) statistical software. Prior to panel regression testing, the following procedures were performed: descriptive statistics, multicollinearity test, Chow test, Hausman test, regression analysis, and Sobel test.

4. Empirical Findings/Result

Deskriptive Statistic Test

Descriptive statistical tests were conducted on all obtained data to understand the characteristics of the research data. Below are the results of the descriptive statistical test in Table 1, derived from data analysis.

Table 1. Descriptive Statistic Test

	Credit Risk	Profitability	Financial Stability
Mean	16.37926	0.131043	2.396234
Median	6.360000	2.180000	1.622619
Maximum	1559.000	489.0000	33.77481
Minimum	-60.61000	-999.9900	-3.011350
Std. Dev.	101.6232	57.10164	4.174793

Source: Eviews 9 (2025)

The descriptive statistical analysis of credit risk, profitability, and financial stability (Y) reveals significant variations across banks. The average credit risk (16.38) indicates a relatively low-risk level, while the average profitability (0.13) suggests that banks in the sample are less profitable. Financial stability, with an average of 2.40, signals that most banks are relatively stable. However, extreme maximum and minimum values across all three variables—such as credit risk reaching 1,559 and profitability dropping to -999.99—highlight substantial disparities between banks, including notable outliers requiring attention. High standard deviations for credit risk (101.62) and profitability (57.10) indicate significant variability across banks, whereas financial stability shows comparatively smaller variation. Overall, this analysis reveals significant differences in risk management, profitability, and financial stability among banks in West Java.

Multicollinearity Test

The multicollinearity test was conducted to ensure no significant linear correlation exists between independent variables in the panel data regression model. In this study,

multicollinearity was assessed using the correlation approach (correlation method) . The results of this test are presented in Table 2 below.

Table 2. Multicollinearity Test

	Credit Risk	Profitability
Credit Risk	1.000000	0.469690
Profitability	0.469690	1.000000

Source: EvIEWS 9 (2025)

Based on the multicollinearity test results in Table 2 , conducted using the correlation method, the correlation coefficient between credit risk and profitability is 0.469690 (less than 0.85). This indicates that no multicollinearity exists among the independent variables (Napitupulu et al., 2021).

Chow Test

The Chow test is a statistical procedure used to determine the appropriate model in panel data regression, specifically between the Fixed Effects Model (FEM) and the Common Effects Model (CEM) . The testing procedure is outlined as follows:

Table 3. Chow Test

Model 1 (2019 – 2023)			
Effect Test	Statistic	d.f	Prob.
<i>Cross-section F</i>	83.552605	(93,375)	0.0000
<i>Cross-section Chi-square</i>	1446.792377	93	0.0000
Model 2 (2019 – 2023)			
<i>Cross-section F</i>	85.61677	(93,374)	0.0000
<i>Cross-section Chi-square</i>	1458.939277	93	0.0000

Source: EvIEWS 9 (2025)

Based on Table 4 , the Chow test results show that the probability values for the Cross-section F and Chi-square tests in both models are 0.0000. Since these values are smaller than the significance level α (0.05), the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_a) is accepted. Consequently, the Fixed Effects Model (FEM) is selected as the optimal panel data regression estimator. The selection of FEM necessitates conducting the Hausman test as the next step.

Hausman Test

The Hausman test is used to determine whether a study should employ a Random Effects Model (REM) or Fixed Effects Model (FEM) . Below are the results of the Hausman test in this research:

Table 4. Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.827610	1	0.3630

Source: EvIEWS 9 data processing. Author 2025

Based on the Chow test results in Table 4, the p-value for the Cross-section Random test in Model 1 is 0.3630 , which exceeds the 5% significance threshold ($\alpha = 0.05$). This indicates that the null hypothesis (H_0) which posits no systematic difference between the Fixed Effects Model (FEM) and Random Effects Model (REM) cannot

be rejected . Consequently, the Random Effects Model (REM) is selected as the optimal model for panel data analysis in this study, consistent with model selection criteria.

Table 5. Hausman Test Model 2

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	3.667754	2	0.1598

Source: Eviews 9 (2025)

Based on the test results in Table 5, the significance (p-value) for the Cross-section Random test in Model 2 is 0.1598 . This value exceeds the 5% significance threshold ($\alpha = 0.05$), leading to the rejection of the null hypothesis (H_0), which posits no systematic differences between individuals in the model. Consequently, the alternative hypothesis (H_a) is accepted, and the Random Effects Model (REM) is selected as the optimal choice. The selection of REM requires proceeding to the subsequent testing phase, namely the panel data regression test.

Regresion Dated Panel

In the Panel Data Regression Test , using the Random Effects Model (REM), differences across models and temporal dynamics are reflected in the error component of the model. Since the error term in REM incorporates contributions from both individual-specific and time-specific sources, the random error must be decomposed into two components: error originating from the individual aspect (time-invariant unobserved heterogeneity) and idiosyncratic error (time-varying disturbances). Mathematically, the Random Effects Model (REM) is expressed as follows (Statovci & Balaj, 2024):

- a. Panel Data Regression Equation Analysis Model 1 (2019 – 2023)

Table 6. Panel Data Regression Results Model 1

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Financial Stability	2.382890	0.423323	5.629013	0.0000
Credit Risk	0.000815	0.000586	1.389914	0.1652

Source: Eviews 9 (2025)

- b. Panel Data Regression Equation Analysis Model 2 (2019 – 2023)

Table 7. Panel Data Regression Results Model 2

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Financial Stability	2.400429	0.417364	5.751399	0.0000
Credit Risk	-0.000290	0.000634	-0.456938	0.6479
Profitability	0.004191	0.001015	4.127548	0.0000

Source: Eviews 9 (2025)

The regression results reveal that the coefficient of credit risk on financial stability is 0.000815 , with a standard error of 0.000586 and a p-value (significance) of 0.1652. Meanwhile, profitability shows a coefficient of 0.004191, a standard error of 0.001015, and a p-value of 0.0000.

Sobel Test

$$Z = 1.32356688$$

The Sobel test results yield a Z statistic of 1.32356688 and a two-tailed probability (p-value) of 0.18564693 . Given that the Z value is less than the critical threshold of 1.96 and the p-value exceeds the 5% significance level ($\alpha = 0.05$), this indicates that profitability does not effectively mediate the relationship between credit risk and financial stability . In other words, the direct effect of credit risk on financial stability cannot be strengthened or weakened through profitability mechanisms in this study.

5. Discussion

The Influence of Credit Risk on Bank Financial Stability

Based on these findings, Model 2 yields a regression coefficient of -0.000290 with a p-value (probability) of 0.6479. Since the p-value exceeds the 5% significance threshold ($\alpha = 0.05$), this indicates that credit risk exerts a statistically insignificant negative impact on bank financial stability (measured by the Z-score). Consequently, the first hypothesis (H_1), which posits that credit risk has a negative and insignificant influence on financial stability, is rejected. In other words, fluctuations in credit risk do not produce a statistically reliable impact on bank financial stability in this study.

This implies that Model 2 demonstrates that an increase in credit risk, measured through credit risk indicators, has an insignificant impact on the decline in bank financial stability. Regarding the influence of credit risk on the financial stability of People's Credit Banks (BPRs) in West Java during the 2019–2023 period, market uncertainties, volatile exchange rates, and unstable interest rates have been key factors affecting the banking sector. These conditions, particularly amid global economic uncertainties, have reduced borrowers' capacity to meet their obligations, leading to declining credit quality and rising non-performing loans. This situation exacerbates the financial burden on BPRs through increased loan loss provisions and higher risk management costs, which in turn affect profitability—a critical factor in maintaining financial stability (Pranata et al., 2021). If credit disbursement activities are not accompanied by adequate risk mitigation, non-performing loans may continue to rise, potentially weakening profitability and adversely impacting the overall financial stability of BPRs.

Some recent findings align with studies by Addury & Ramadhani (2024), Wahidah et al. (2025), Aliffianti Safiria Ayu Ditta et al. (2024), and Beni (2023), which indicate that credit risk (NPL) has a significant negative impact on bank financial stability, based on panel data regression results with p-values < 0.05 . This is consistent with prior research showing a negative correlation between non-performing loans and the financial resilience of banking institutions. However, these results contradict findings by My & Quoc (2022), Cahyo et al. (2023), and Benachour et al. (2025), who argue that credit risk (NPL) has a significant positive influence on bank financial stability. They note that low credit risk coefficients during the study period reflect effective banking intermediation and minimal non-performing loans. This suggests that banks'

financial intermediation functions operate optimally in allocating funds, enabling effective management of default risks. Furthermore, studies by Rosalina & Lestari (2019), and Gultom & Sihombing (2023) found that credit risk has no significant effect on financial stability, likely due to the relatively homogeneous samples in these studies.

The Effect of Profitability on Bank Financial Stability

Based on this study, Model 2 yields a regression coefficient of 0.004191 with a p-value (probability) of 0.0000, which is far below the 5% significance threshold ($\alpha = 0.05$). This indicates that profitability exerts a statistically significant positive impact on bank financial stability (measured by the Z-score). Consequently, the second hypothesis (H_2), which posits that profitability has a positive and significant influence on financial stability, is accepted.

This indicates that increased profitability, proxied by profitability metrics, has a positive influence on bank financial stability, measured by the Z-score. Regarding the impact of profitability on the financial stability of People's Credit Banks (BPRs) in West Java during the 2019–2023 period, rising profitability reflects banks' ability to generate profits from managed assets, thereby contributing to enhanced financial stability. High profitability also signals that BPRs can maintain sufficient profit margins to cover various financial risks, including credit and liquidity risks. Furthermore, profits enable banks to strengthen their capital base, serving as a buffer against economic uncertainties. Amid exchange rate fluctuations and interest rate volatility, banks' ability to optimize operational efficiency and effectively convert deposits into loans becomes increasingly critical for maintaining financial stability.

These findings align with studies by Ummah (2024), Addainuri & Azizah (2024), as well as Suherman & Intan (2024), which confirm that profitability has a positive and significant relationship with bank financial stability. Research by Habib et al. (2021) and Sakshi Sharma (2025) further emphasizes that increased profitability strengthens banks' resilience to financial risks through optimized asset management and enhanced capital reserves. However, studies by Loc et al. (2024) and Yuan et al. (2022) reveal that not all profitability variables significantly influence financial stability. High profitability enables banks to absorb potential losses from credit risks and bolster depositor and investor confidence. In contrast, this study contradicts findings by Husni & Randi (2024) and Lasdao Mara & Munandar (2024), who argue that profitability negatively impacts financial stability but is not always the primary factor. Similarly, Sharma et al. (2024) and Daghsni & Henchiri (2025) assert that profitability positively influences financial stability but does not universally serve as the dominant factor.

The Effect of Profitability as a Mediator between Credit Risk and Financial Stability

Based on this study, the Sobel test yields a Z-value of 1.32356688 and a two-tailed probability (p-value) of 0.18564693. Since the Z-value is below the critical threshold

of 1.96 and the p-value exceeds the 5% significance level ($\alpha = 0.05$), the results confirm that profitability does not mediate the relationship between credit risk and financial stability. This finding supports Hypothesis 3 (H_3), which posits the inability of profitability to mediate the impact of credit risk on financial stability.

This indicates that profitability, proxied by profitability metrics, fails to mediate the relationship between credit risk and financial stability in People's Credit Banks (BPRs) in West Java during the 2019–2023 period. Although profitability plays a critical role in supporting financial stability, these results suggest that the impact of credit risk on financial stability is more dominant and cannot be fully offset by banks' profit-generating capabilities. High credit risk, reflected in rising non-performing loans, directly pressures financial stability by increasing loan loss provisions and eroding depositor confidence. While profitability positively influences financial stability, its contribution remains insufficient to counterbalance the negative effects of elevated credit risk. Other aspects, particularly the quality of credit risk management, demonstrate a more critical role in strengthening bank financial stability compared to reliance on profitability alone. Amid economic challenges such as exchange rate volatility and interest rate fluctuations, banks' ability to implement holistic credit risk management practices—rather than depending solely on profits as a buffer—becomes increasingly relevant.

These findings are reinforced by prior studies such as those by Silvia Chandrawati Susoni Basri et al. (2021), Bagale (2025), Andiansyah (2020), and Saadaoui & Chouchene (2024), which state that profitability fails to mediate the relationship between credit risk and bank financial stability. Conversely, research by Salem (2025) and Yurida et al. (2023) argues that profitability does mediate this relationship. These results indicate that although profitability supports financial stability, the influence of credit risk on stability remains dominant and cannot be fully mediated by profitability levels.

However, these conclusions contrast with earlier studies by My & Quoc (2022) and Jonathan et al. (2024), who found evidence that optimal profitability acts as a buffer to mitigate losses from non-performing loans, particularly during phases of consistent economic growth. In such contexts, banks can effectively mediate the relationship between credit risk and financial stability. Similarly, Pribadi et al. (2025) and Anh & Phuong (2021) emphasize that low profitability cannot offset the negative impacts of credit risk, especially in unstable economic conditions where banks struggle to mediate the credit risk–stability relationship.

6. Conclusions

Based on the study's findings, it can be concluded that while credit risk poses a threat to the financial stability of People's Credit Banks (BPRs) in West Java, its impact is

statistically insignificant during periods of external shocks such as exchange rate volatility and interest rate fluctuations. This suggests that external macroeconomic variables may dilute the effect of credit risk on financial resilience, placing greater emphasis on internal banking operations and risk management practices. Conversely, profitability plays a crucial and statistically significant role in enhancing financial stability. BPRs with strong profitability, reflected in healthy Return on Assets (ROA), are more capable of withstanding economic turbulence, preserving liquidity, and maintaining public trust—factors essential to navigating financial uncertainty.

For future research, it is recommended to expand the study by incorporating additional mediating variables such as capital adequacy, liquidity ratios, or operational efficiency to gain a more comprehensive understanding of the factors influencing financial stability. Additionally, extending the analysis across different regions or comparing BPRs with other banking institutions could offer broader insights into how institutional characteristics and market environments shape the dynamics between credit risk, profitability, and financial stability. Longitudinal studies incorporating post-2023 data could also capture evolving economic trends, especially in response to ongoing global financial developments and regulatory shifts.

References:

- Abdu, E. (2022). Financial distress situation of financial sectors in Ethiopia: A review paper. *Cogent Economics and Finance*, 10(1). <https://doi.org/10.1080/23322039.2021.1996020>
- Addainuri, M. I., & Azizah, A. N. (2024). *Determinants of Financial Stability of Islamic Commercial Banks*. 1(1), 1–16.
- Addury, M. M., & Ramadhani, A. K. P. (2024). the Influence of Financing Model and Credit Risk on Financial Stability (Study of Islamic Rural Banks in Java Island). *Journal of Islamic Monetary Economics and Finance*, 10(3), 427–444. <https://doi.org/10.21098/jimf.v10i3.1788>
- Akande, F. I., & Salawu, R. O. (2025). Risk Management and Financial Performance of Listed Deposit Money Banks in Nigeria. *The International Journal of Business & Management*, 7(11). <https://doi.org/10.24940/theijbm/2019/v7/i11/bm1910-016>
- Albart, N., Paramadina, U., Purnomo, H., Bangsa, U. M., Suherman, U., Buana, U., Karawang, P., & Judijanto, L. (2023). *The Effects of Net Profit Margin , Debt Ratio , Total Assets Turnover , and Current Ratio on the Stock Prices of IDX 30 Companies within 2018-2022. November*. <https://doi.org/10.54783/ijisoc.v5i5.907>
- Aliffianti Safiria Ayu Ditta, Ditasari, R. A., & Ardianingsih, A. (2024). Efficiency, Credit Risk and Financial Stability In National Banking Sector In Indonesia. *JAK (Jurnal Akuntansi) Kajian Ilmiah Akuntansi*, 11(1), 77–88. <https://doi.org/10.30656/jak.v11i1.6454>
- Andiansyah, G. dkk. (2020). The Effect of CAR, NPL, BOPO, and LDR on ROA with NIM as an Intervening Variable (Study on Banks that Go Public on the Indonesia Stock Exchange for the 2015-2018 Period). *Proceeding SENDIU 2020*, 560–

- 567.
- Anh, N. Q., & Phuong, D. N. T. (2021). The impact of credit risk on the financial stability of commercial banks in Vietnam. *Ho Chi Minh City Open University Journal of Science - Economics and Business Administration*, 11(2), 67–80. <https://doi.org/10.46223/hcmcoujs.econ.en.11.2.1421>.2021
- Azolibe, C. B., & Azolibe, C. B. (2021). Banking Sector Intermediation Development and Economic Growth : Evidence from Nigeria Banking Sector Intermediation Development and Economic Growth : Evidence from Nigeria. *Journal of African Business*, 00(00), 1–18. <https://doi.org/10.1080/15228916.2021.1926857>
- Badollahi, I. (2024). Profitability and Solvency Ratio Analysis in Measuring Financial Performance at PT. Bank Rakyat Indonesia Tbk., TAHUN 2018-2022. *Jurnal Media Akademik (JMA)*, 2(2).
- Bagale S. (2025). Credit risk management and profitability of commercial banks in Nepal. *International Journal of Finance and Commerce*, 5(1), 60–67.
- Benachour, A., Abdlemalek, H., & Tarhlissia, L. (2025). *Credit Risk Management Through Stress Testing During The Covid-19 Crisis : Case Of Banque Exterieur D ' Algerie*. X(18), 9–29.
- Beni, A. (2023). The Effect of Profitability, Liquidity and Dividend Policy on Stock Prices of Banking Companies Listed on the Indonesia Stock Exchange. *JEM: Jurnal Equilibrium Manajemen*, 9(1), 1–15.
- Bian, C. (2023). Investment screening put to the test of the Covid-19 Pandemic: typology, legality and externality. *Asia Pacific Law Review*, 31(2), 380–401. <https://doi.org/10.1080/10192557.2023.2181784>
- Cahyo Cahyo, Sri Harjanto, & Putu Sulastri. (2023). Analysis of the Influence of Non Performing Loans (NPL) and Capital Structure on Profitability Mediated by Credit Growth (Study on BPR in Central Java Province, Period 2019-2021). *Jurnal Akuntan Publik*, 1(1), 66–89. <https://doi.org/10.59581/jap-widyakarya.v1i1.272>
- Daghnsni, O., & Henchiri, J. E. (2025). *The Attitude of the SME Towards Islamic Banking : The Case of Smes in the South-West Region of Tunisia*. 6798, 1888–1915.
- Ding, N., Fung, H., & Jia, J. (2019). Shadow Banking , Bank Ownership , and Bank Efficiency in China Shadow Banking , Bank Ownership , and Bank Efficiency in. *Emerging Markets Finance and Trade*, 0(0), 1–20. <https://doi.org/10.1080/1540496X.2019.1579710>
- Doddy Ariefianto, M., Trinugroho, I., & Yustika, A. E. (2024). Diversification, capital buffer, ownership and credit risk management in microfinance: An investigation on Indonesian rural banks. *Research in International Business and Finance*, 69, 102268. <https://doi.org/10.1016/j.ribaf.2024.102268>
- Fabio, M., Ho, M. H. C., & Tsai, T. (2024). Asia Pacific Management Review Drivers of customer satisfaction with restaurants during COVID-19 . A survey of young adults in Taiwan and Indonesia. *Asia Pacific Management Review*, 29(3), 251–262. <https://doi.org/10.1016/j.apmr.2023.08.001>
- Gultom, H. M., & Sihombing, P. (2023). The Influence of Macroeconomics and Bank Performance on Non Performing Loans of Core Capital Banks III in Indonesia. *Journal of Management*, 14(2), 202–219. <https://doi.org/10.32832/jm->

- uika.v14i2.11654
- Habib, A., Bhatti, M. I., Khan, M. A., & Azam, Z. (2021). Cash Holding and Firm Value in the Presence of Managerial Optimism. *Journal of Risk and Financial Management*, 14(8). <https://doi.org/10.3390/jrfm14080356>
- Hendrawan, M. H., Defung, F., & Wardhani, W. (2023). Un / desired impact of capital buffers : Evidence from Indonesian bank profitability and risk-taking Un / desired impact of capital buffers : Evidence from Indonesian bank profitability and. *Cogent Economics & Finance*, 11(2). <https://doi.org/10.1080/23322039.2023.2245217>
- Huan, X., & Parbonetti, A. (2019). Financial derivatives and bank risk : evidence from eighteen developed markets Financial derivatives and bank risk : evidence from eighteen developed markets. *Accounting and Business Research*, 0(0), 1–28. <https://doi.org/10.1080/00014788.2019.1618695>
- Husni, A dan Randi, M. (2024). The Influence of Non Performing Loan, Third Party Fund Growth and Loan to Deposit Ratio on Interest Margin of State-Owned Banks in Indonesia. *Jurnal Inovasi Global*, 2(3), 543–551.
- HUTAGAOL, Z. I. (2024). *Analysis of the Application of the Altman Z-Score Method to Detect Bankruptcy Risk at Bank BPR Usaha Madina Karya Mulia Central Java in 2019 2019-2023*.
- Ispriyarso, B., & Wibawa, K. C. S. (2023). Reconstruction of the national economy post-covid-19 pandemic: Critical study of tax reforms in Indonesia. *Cogent Social Sciences*, 9(1). <https://doi.org/10.1080/23311886.2023.2174517>
- Jamaludin, A., Savitri, C., & Pranata, R. M. (2023). *Post-Pandemic Textile and Garment Company Resilience in Indonesia*. 4(2), 821–829.
- Jonathan, B., Ariani, M., Budiarto, B., & Siswoyo, A. (2024). Financial Distress Analysis at Bank Perekonomian Rakyat in Surabaya in the Period 2015-2023. *Scientific Journal of Management, Economics, & Accounting (MEA)*, 8(2), 782–794. <https://doi.org/10.31955/mea.v8i2.4039>
- Ketaren, E. V., & Haryanto, A. M. (2020). The Influence of Financial Performance on the Financial Stability of Banks Listed on the Indonesia Stock Exchange (Case Study on Banks Listed on the IDX in 2014-2018). *Diponegoro Journal of Management*, 9(2), 1–13. <http://ejournal-s1.undip.ac.id/index.php/dbr>
- Kithandi, C. K. (2025). *Theory Of Financial Intermediation : A Millenial Perspective OF Theory And*. 12(1), 1–12. <https://doi.org/https://doi.org/10.5281/zenodo.14677499>
- Lasdao Mara, U., & Munandar, A. (2024). With Capital Structure as a Mediating Variable. *Scientific Journal Of Reflection: Economic, Accounting, Management and Business*, 7(1), 148–163.
- Le, T. D., & Le, T. D. (2020). *Cogent Economics & Finance Multimarket contacts and bank profitability : do diversification and bank ownership matter ? Multimarket contacts and bank profitability : do diversification and bank ownership matter ?* <https://doi.org/10.1080/23322039.2020.1849981>
- Le, T. D. Q. (2020). *Cogent Business & Management The interrelationship among bank profitability , bank stability , and loan growth : Evidence from Vietnam The interrelationship among bank profitability , bank stability , and loan growth : Evidence from*. <https://doi.org/10.1080/23311975.2020.1840488>
- Loc, T. B., Kieu, V. T. T., & Tien, L. T. (2024). *Effect of Oil Price on Return on*

- Assets and Z-Score of Commercial Banks in Vietnam: A Bayesian Random-Effect Panel Data Model BT - Partial Identification in Econometrics and Related Topics* (N. Ngoc Thach, N. D. Trung, D. T. Ha, & V. Kreinovich (eds.); pp. 343–361). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-59110-5_24
- M. M. Alaa Ali Rahm, M. M. S. J. H. (2024). *The impact of regulating bank credit risks on the value of commercial banks / An analytic study of the commercial banks listed on the Iraqi Stock Exchange for the period (2020-2024)* (pp. 2706–6894). University of Thi-Qar Journal. <https://jutq.utq.edu.iq/index.php/main/article/download/367/278>
- Mamonov, M., Parmeter, C., & Prokhorov, A. (2024). *Bank Cost Efficiency and Credit Market Structure Under a Volatile Exchange Rate*. <https://doi.org/10.1016/j.jbankfin.2024.107285>
- Muetya, sena G., Rifai, M., & santoso, teguh, panji, M. (2025). The Effect of Working Capital Turnover and Fixed Asset Turnover on Profitability. *Nusantara: Journal of Social Sciences*, 9(4), 410–418. <https://doi.org/http://dx.doi.org/10.31604/jips.v12i1.2025.410-418>
- My, S. T., & Quoc, A. N. (2022). The Relationship between Credit Risk and Bank Financial Stability: The Mediating Role of Bank Profitability. *Journal of Hunan University Natural Sciences*, 49(1), 263–271. <https://doi.org/10.55463/issn.1674-2974.49.1.32>
- Nabella, S., Humanita, A., Haryono, S., & Putri, A. Z. (2023). *Does Macroeconomic Moderate the Effect of Risk and Diversification on Financial Stability ?* 12(1), 1–32.
- Napitupulu, R. B., Simanjuntak, T. P., Hutabarat, L., Damanik, H., Harianja, H., Sirait, R. T. M., & Lumban Tobing, C. E. R. (2021). *Business Research, Engineering and Analysis with SPSS-STATA-Eviews*. Madenatera.
- Nguyen, D. T., Le, T. D. Q., Nguyen, D. T., & Le, T. D. Q. (2022). *Cogent Business & Management The interrelationships between bank profitability , bank stability and loan growth in Southeast Asia The interrelationships between bank profitability , bank stability and loan growth in Southeast Asia*. <https://doi.org/10.1080/23311975.2022.2084977>
- Nguyen, D. T., Le, T. D. Q., & Tran, S. (2024). *Competition and bank financial stability : evidence from an emerging economy*. <https://doi.org/10.1080/23311975.2024.2365422>
- Pranata, R. M., Waspada, I., Pranata, R. M., Waspada, I., & Indonesia, U. P. (2020). *BAGAIMANA RISIKO KREDIT PADA MASA AWAL PANDEMIC ?* 6(1), 36–48. <https://doi.org/https://doi.org/10.36805/bi.v6i1.1985>
- Pribadi, M. I., Anshari, R., Of, F., Economics, B., & Kalimantan, U. M. (2025). *The Influence Of Credit Risk and Profitability On The Finnancial Stability Of Banks In Indonesia For The Period 2019-2023*. 2023(2024), 1–13.
- Quader, S. M., Shamsi, N. I., & Abdullah, M. N. (2020). Economies Expansion and profitability of bank branches : a study on selected rural branches of Bangladesh. *Macroeconomics and Finance in Emerging Market Economies*, 00(00), 1–21. <https://doi.org/10.1080/17520843.2020.1746679>
- Ramadhany, F., Nurhasanah, N., & Darajat, T. A. (2024). *SEIKO : Journal of Management & Business Dampak Kematian Covid-19 Terhadap Risiko Kredit*

- Perbankan : Studi Kasus Pada BPR di Priangan Timur Provinsi Jawa Barat.* 7(2), 1018–1026.
- Rengga Madya Pranata, Ujang Suherman, A. R. (2024). Al-Kharaj : Jurnal Ekonomi , Keuangan & Bisnis Syariah Al-Kharaj : Jurnal Ekonomi , Keuangan & Bisnis Syariah. *Al-Kharaj : Jurnal Ekonomi , Keuangan & Bisnis Syariah*, 6(2), 2547–2562. <https://doi.org/10.47467/alkharaj.v6i10.2712>
- Rosalina, R., & Lestari, M. N. (2019). The Influence of Non Performing Loans (NPL) on Credit Distribution (A Study on PT. Bank Negara Indonesia Listed on the Indonesia Stock Exchange Period 2007-2017). *Jurnal Bisnis Manajemen*, 1, 24.
- Saadaoui, A., & Chouchene, I. (2024). Digitalization and bank performance: the mediator effect of financial stability and moderator effect of nonperforming loans. *Competitiveness Review: An International Business Journal*, ahead-of-p(ahead-of-print). <https://doi.org/10.1108/CR-01-2024-0012>
- Sakshi Sharma, P. A. K. M. (2025). *View of Evolution of Financial, Non-Financial, and Macroeconomic Predictors in Corporate Bankruptcy_ A Comprehensive Review.pdf* (pp. 70–83). <https://economic-sciences.com/index.php/journal/article/view/75/44>
- Saleh, I., & Afifa, M. A. (2020). Cogent Economics & Finance The effect of credit risk , liquidity risk and bank capital on bank profitability : Evidence from an emerging market The effect of credit risk , liquidity risk and bank capital on bank profitability : Evidence from an emerging m. *Cogent Economics & Finance*, 8(1). <https://doi.org/10.1080/23322039.2020.1814509>
- Salem, R. A. (2025). *Assessing the Impact of Country Risk on Banks' Stability in Egypt: An Empirical Study Using Z-Score Analysis Rania Abdelfattah Salem (ORCID 0000-0002-7106-3848).*
- Serly, kurniawan edi. (2020). The influence of credit risk management on the profitability of rural credit banks in Central Java. *Global, Financial Journal, Accounting Accounting, Batam Study Program, International University*, 4(2), 90–99.
- Sharma, V., Gupta, M., & Jangir, K. (2024). Exploring the impact of risk factors on profitability in commercial banking in India: a PLS-SEM analysis approach. In *The framework for resilient industry: A holistic approach for developing economies* (pp. 89–107). Emerald Publishing Limited.
- Silvia Chandrawati Susoni Basri & Elizabeth Sugiarto Dermawan. (2021). The Influence of NPL and LDR on Banking Company Profitability with CAR as a Mediator. In *Journal GEEJ* (Vol. 7, Issue 2).
- Statovci, B., & Balaj, D. (2024). The impact of macroeconomic and bank internal factors on banking stability: Evidence from Kosovo banking sector. *International Journal of Applied Economics, Finance and Accounting*, 19(2), 242–249. <https://doi.org/10.33094/ijaefa.v19i2.1697>
- Stuart I. Greenbaum, Anjan V. Thakor, A. W. A. B. (2019). *Contemporary Financial Intermediation* (S. Ikeda (ed.); 4th ed.). Candice Janco.
- Suaidah, Y. M., Pramiana, O., Hidayat, A. T., & Afifah, K. A. (2024). *The Influence of Credit Risk , Capital Adequacy Level and Operating Expense Ratio on Profitability at Rural Credit Banks in East Java.* 1(1), 1112–1123.
- Sugiyono. (2023). *Metode penelitian kuantitatif, kualitatif dan R&D.* ALFABETA. <https://elibrary.nusamandiri.ac.id>

- Suhaedi, S., & Rinaldo, D. (2023). Comparative Analysis of Financial Performance Before and After Merger (Case Study of Bpr Nusumma Cisalak and Nusumma Singaparna). *SEIKO: Journal of Management & ...*, 6(2), 256–269. <https://journal.stieamkop.ac.id/index.php/seiko/article/view/6166>
- Suherman, A., & Intan, A. N. (2024). Analysis of Profitability and Financial Stability in the Banking Sector Indonesia. *As-Syirkah: Islamic Economics & Financial Journal*, 1(1), 39–56. <https://doi.org/10.56672/assyirkah.v3i4.342>
- Trinh, V. Q., Elnahass, M., Salama, A., & Izzeldin, M. (2020). Board busyness, performance and financial stability: does bank type matter? *European Journal of Finance*, 26(7–8), 774–801. <https://doi.org/10.1080/1351847X.2019.1636842>
- Uchegbu Basil Chibueze, Anyanwu, Hyginus Chukwuemeka, Ejike, J. N. (2024). Financial Intermediation and Economic Growth in Nigeria. *World Journal of Finance and Investment Research*, 6(2), 1–15. <https://doi.org/10.56201/wjfir.v6.no2.2022.pg1.15>
- Ummah, F. K. (2024). Analisis tingkat akurasi model Altman Z-Score, Springate, Grover dan Zmijewski dalam memprediksi potensi financial distress Bank Umum Syariah di Indonesia Tahun 2018-2022. Universitas Islam Negeri Maulana Malik Ibrahim.
- Wahidah, N. R., Lutfi, A. M., & Andhani, D. (2025). Non Performing Loan (NPL) Analysis in Determining the Level of Credit Collectibility in PT Bank Permata Tbk Tahun 2015-2023. 12(1), 57–70.
- Yuan, D., Gazi, M. A. I., Harymawan, I., Dhar, B. K., & Hossain, A. I. (2022). Profitability determining factors of banking sector: Panel data analysis of commercial banks in South Asian countries. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1000412>
- Yurida, Siregar, S., & Harahap, R. D. (2023). The Influence of Liquidity Risk and Credit Risk on Bank Stability with Operational Efficiency as an Intervening Variable in Islamic Commercial Banks di Indonesia. *Jurnal Ekonomi Dan Perbankan Syariah*, 8(3), 605–624. <https://doi.org/10.30651/jms.v8i3.20787>
- Zournatzidou, G., Ragazou, K., & Sklavos, G. (2025). Examining the Impact of Environmental , Social , and Corporate Governance Factors on Long-Term Financial Stability of the European Financial Institutions : Dynamic Panel Data Models with Fixed Effects.