

Research Paper

Corporate Governance and Financial Performance in Rural Banks: Evidence from Indonesia

I Gede Cahyadi Putra^{a,1*}, I Kadek Bagiana^{a,2}, Ida Ayu Nyoman Yuliastuti^{a,3}, Made Edy Septian Santosa^{a,4}, I Nyoman Putra Yasa^{b,5}

^a Faculty of Economics and Business, Universitas Mahasaraswati Denpasar, Indonesia

^b Faculty of Economics, Universitas Pendidikan Ganesha, Indonesia

¹ gdcahyadi@unmas.ac.id, ² ikadekbagiana@unmas.ac.id, ³ ia.yuliastuti@unmas.ac.id,

⁴ edysantosa@unmas.ac.id, ⁵ putrayasainym@undiksha.ac.id

*Corresponding author

ARTICLE INFO	ABSTRACT
Keywords Corporate Governance; Financial Performance; Financial Technology; Rural Banks Article history Received: 21 May 2026 Revised: 02 August 2026 Accepted: 06 August 2026 Available online: 24 August 2026: To cite in APA style Putra, I. G. C., Bagiana, I. K., Yuliastuti, I. A. N., Santosa, M. E. S. & Yasa, I. N. P. (2026). Corporate governance and financial performance in rural banks: Evidence from Indonesia. <i>Shirkah: Journal of Economics and Business</i>, 11(2), 303-322.	Rural banks face increasing financial and digital risks, yet limited evidence exists on how fintech adoption, risk management, and corporate governance affect their financial performance. This study aims to fill the gap in the existing literature by examining the role of corporate governance in rural banks as one of the organizational mechanisms that can convert the banks' internal capacities to financial performances. A cross-sectional quantitative survey was conducted among 129 rural banks in Bali, Indonesia, by purposively adopting a saturated sampling technique. Each bank was requested to provide one director and one commissioner. Based on the sampling frame of 129 banks, 258 surveys were distributed. Of those, 242 surveys were file completed. Using PLS-SEM, the data received were analyzed. The results revealed that needs-based risk management positively impacts financial performance. On the contrary, fintech adoption did not exhibit a significant impact on financial performance. Corporate governance systems positively impact the relationships between risk management and financial performance, but do not moderate fintech adoption. This study contributes to the existing literature by adopting the Resource-Based View to demonstrate the asymmetric impact of corporate governance on rural banks' risk-management systems to financial performances, but not positively impact fintech adoption. From a practical viewpoint, rural banks should perceive risk oversight from a governance-based perspective and embrace a combination of adequate digital infrastructure, workforce, integrated systems, and digital-risk governance.

Copyright © 2026 Authors

This is an open access article under [CC-BY-NC 4.0](https://creativecommons.org/licenses/by-nc/4.0/) license



Introduction

Small-scale borrower-focused financial institutions play a role in both financial inclusion and local economic development, though this likely depends on several factors, including institutional quality, the business climate, and the quality of internal management (Farooq et al., 2026; Fisseha, 2025). This is particularly evident in Bali, where rural banks help to finance tourism, trade, services, and small business economic activities. Their proximity to their customer base means rural banks play a role not only in providing access to finance but also in sustaining regional economic activities. However, rural banks in Bali are beginning to struggle to maintain their financial performance to fulfill this role due to the various challenges posed by credit, liquidity, operational efficiency, and profitability issues in the post-pandemic economy. As reported in Table 1, for the period 2021 to 2024, NPLs worsened from 6.72% to 8.58%, LDR deteriorated from 73.67% to 93.46%, and ROA declined from 1.78% to 1.28%. This underscores the need for rural banks to balance their role as financial intermediaries with productive credit, liquidity, and operational risk management. This further reinforces existing evidence that risk management and credit policies significantly affect the financial performance of rural banks in Bali (Rondonuwu et al., 2024).

Table 1. Financial Performance Ratios of Rural Banks in Bali, 2021–2024

No	Indicator	2021	2022	2023	2024
1	LDR (%)	73.67	76.63	88.42	93.46
2	NPL (%)	6.72	8.49	7.80	8.58
3	ROA (%)	1.78	1.74	0.93	1.28
4	ROE (%)	15.77	15.06	14.93	15.17

(Source: Otoritas Jasa Keuangan, Indonesian Banking Statistics, 2025)

In rural banking, risk management plays an important role. Rural banks can identify credit, liquidity, operational, legal, and managerial risks. The Resource-Based View (RBV) focuses on risk-management routines embedded in the decision-making process and built using firm-specific intelligence and internal resources (Barney, 1991; Nocco & Stulz, 2022). Locate risk management within the context of operational and financial performance and sustainability of the institution, and the evidence generally demonstrates the effectiveness of risk management practices (Lestari et al., 2023; Maulana et al., 2024; Saeed & Donkoh, 2026). Evidence from microfinance institutions demonstrates that, under limited resources, risk management practices sustain financial performance and organizational stability (Andryushchenko et al., 2015; Mutamimah et al., 2022). Both risk management practices and technology adoption are crucial mechanisms to harness the performance impact of organizational resources in Bali (Jananuraga et al., 2026). Based on the case studies, performance through risk management is not solely determined by systems and processes. However, it is achieved when firms realize the importance of risk management and integrate it into their day-to-day decision-making.

Digital innovation is also problematic for rural banks. Adopting technology may speed up transactions, expand the range of services, and improve operational efficiency. In addition, process innovation and product innovation may be possible (Baker et al., 2023;

Mohammad et al., 2025). Fintech is also reported to enhance the performance of banks and financial institutions with improved service delivery and automated financial services (Baker et al., 2023). Digitalization and fintech have also been shown to affect the social performance of microfinance institutions (Khanchel et al., 2025; Umba et al., 2024). As in the case studies of rural banks, technology does not automatically achieve financial goals and solvency. An adequate strategy for integrating services and innovation is a prerequisite (Adiguzel et al., 2026; Judijanto et al., 2025). The discrepancy in study outcomes may be attributed to different definitions of the same concepts. While some studies (Alabdullah, 2023; Baker et al., 2023; Permata & Albab, 2024) found positive financial impacts of fintech, others (Tanjung & Aulia, 2022; Muttaqin, 2023) did not find positive financial impacts of digital innovation or fintech. The discrepancy may be attributed to the level and degree of maturity and integration of fintech in the organizations. Higher integration maturity may propel fintech to become a strategic capability, while lower maturity and integration may keep it an operational capability.

Corporate governance can help explain these cases because it provides systems for monitoring, accountability, and decision-making in deploying organizational resources. In microfinance institutions, governance structures are essential because they determine the level of managerial oversight and the strategic direction and balance between financial and institutional goals (Cardillo et al., 2026; Gohar & Batool, 2015). Good governance strives to improve the transparency of risk information, enhance risk management, and curtail risk-taking. Empirical evidence also indicates that governance systems affect financial performance, set the context, and determine the optimal level of internal control and risk management systems (Fatima et al., 2026; Oppong et al., 2024; Raja et al., 2026). However, the impact of corporate governance is not constant. According to Mardiana and Dianata (2018) and Nazariyah et al. (2021), governance can affect the relationship between risk management and financial performance. However, the impact can vary based on governance quality and the type of institution.

These gaps in the literature are not only discrete but also interconnected. The literature also has theoretical gaps, as risk management, fintech adoption, and corporate governance are often analyzed individually as determinants of financial performance. Although some studies have analyzed the role of governance in risk-related relationships (Fatima et al., 2026; Mardiana & Dianata, 2018; Raja et al., 2026), they have generally paid little attention to whether the same governance mechanisms operate differently in fully developed versus developing organizational capabilities. Risk management is a banking regulation and oversight concern. In contrast, fintech adoption involves having the right technology, digital infrastructure, and system integration, as well as an adequate level of cybersecurity. Thus, corporate governance likely may add value to performance in the context of risk management while possibly doing so in fintech adoption.

Some research exists on governance and technology within microfinance institutions (Cardillo et al., 2026; Khanchel et al., 2025; Umba et al., 2024), but it remains dispersed across regions and institutional and regulatory contexts. Research on Bali has focused on rural banks and has studied credit policy and risk management (Rondonuwu et al., 2024) and the interaction of risk management, technology, and human capital (Jananuraga et al., 2026). Nevertheless, little or no research examines risk management, fintech, corporate governance, and financial performance in rural banks in Indonesia. This is significant because rural banks operate under different constraints than commercial banks and

microfinance institutions, with different governance systems and customer types ([Cardillo et al., 2026](#); [Farooq et al., 2026](#); [Fisseha, 2025](#)).

This study advances the literature by positioning corporate governance as a strategic boundary condition in the RBV, rather than as a direct measure of financial performance. According to RBV, the performance benefits of resources and capabilities depend on an organization's ability to employ an effective structure ([Barney, 1991](#)). Thus, this study assesses whether corporate governance creates a performance gap between risk management and fintech adoption. This approach aims to determine the role of governance in relation to an established organizational capability, risk management, and an emerging organizational capability, fintech adoption, within an institutional context. This study analyzes the intersection of risk management, fintech adoption, and the financial performance of rural banks in Bali, Indonesia. It also evaluate the role of corporate governance in these interactions.

Literature Review and Hypothesis Development

Resource-Based View Theory

The Resource-Based View (RBV) suggests that differences in performance among organizations relate to how firms create, leverage, and deploy internal resources and capabilities. Resources become valuable, rare, difficult to imitate, and organized in an appropriate way that grants the organization a competitive edge ([Barney, 1991](#)). Organizational dimensions are a top priority, as valuable resources alone do not improve performance. Institutions must adopt coordination mechanisms and management structures that focus on the purposeful use of resources.

In rural banks, risk management and fintech adoption are different organizational capabilities. Risk management is a mature capability, and banks can manage, assess, and control the degree of uncertainty they face. Meanwhile, fintech adoption is evolving as banks integrate digital technologies to automate and modernize financial and internal business processes. Studies in the financial and microfinance sectors show that both risk management and technology adoption positively affect institutional performance. However, their impact depends on the institution's readiness and available resources ([Jananuraga et al., 2026](#); [Khanchel et al., 2025](#); [Mutamimah et al., 2022](#)).

Corporate governance provides oversight, accountability, and direction for organizing capabilities. Governance structures define how resources are overseen, distributed, and strategic choices are made ([Cardillo et al., 2026](#); [Gohar & Batool, 2015](#)). From the resource-based view of the firm (RBV) perspective, corporate governance is one of the organizational mechanisms through which rural banks can realize the value of their capabilities in risk management and technology.

Risk Management and Financial Performance

Risk management includes identifying, assessing, and continuously evaluating risks that might impede an organization from attaining its goals. For rural banks, risk management is an essential capability given their operational activities of lending, collecting public funds, managing liquidity, and exposure to credit, operational, legal, and managerial risks. Poor risk management leads to higher loan losses, liquidity risk, operational

disruption, and deteriorating financial performance ([Andryushchenko et al., 2015](#); [Omidiji et al., 2025](#)).

From an RBV perspective, risk management is more than just having policies. The value of risk management lies in the bank's ability to integrate risk information into its lending, liquidity, and operational decisions. Additionally, when integrated into assessing creditworthiness, evaluating and managing risk exposure, and deploying financial resources, knowledge of a bank's borrowers, local markets, and payment patterns becomes an important competitive advantage. Rural banks with effective risk management routines lose less money and maintain greater operational stability.

Data generally corroborate this perspective. [Lestari et al. \(2023\)](#) showed that having an enterprise risk management system positively impacts a bank's financial performance, and [Saeed and Donkoh \(2026\)](#) showed the positive impact of managing credit risk on bank performance. In microfinance, [Mutamimah et al. \(2022\)](#) showed that risk management practices affected financial performance and sustainability. For rural banks in Bali, [Rondonuwu et al. \(2024\)](#) showed that risk management and credit policies are positively associated with financial performance. [Jananuraga et al. \(2026\)](#) also viewed risk management as a critical element of strengthening the performance contribution of organizational resources in Balinese financial institutions. Thus, financial performance is expected to increase when risk management is a dedicated and integrated organizational capability rather than merely a compliance obligation. Based on the above, we propose the following hypothesis:

H1: Risk management has a positive effect on financial performance.

Financial Technology and Financial Performance

Fintech adoption means integrating technologies to offer financial services, facilitate transactions, and create new business models. For rural banks, fintech may include digital payment systems, mobile banking, digital transaction systems, and even technology-enabled internal processes ([Marcella & Zulfikar, 2024](#)). These technologies are expected to lower transaction costs, accelerate service delivery, expand the client base, and improve the delivery of financial services and systems ([Baker et al., 2023](#); [Mohammad et al., 2025](#)).

Within the Resource-Based View (RBV) perspective, technology is not necessarily a strategic resource because similar or competing organizations can acquire the same technology. Its strategic value emerges from an organization's ability to integrate the technology with its business processes, workforce, customer care, and management ([Adiguzel et al., 2026](#)). Innovation and the organization's readiness to integrate the new technology efficiently determine its financial and market outcomes ([Adiguzel et al., 2026](#)). The value chain of fintech is realized only with adequate supporting infrastructure, integrated and secure systems, and acceptance by target customers ([Al Hammadi & Nobanee, 2019](#)).

These considerations are important. [Baker et al. \(2023\)](#), [Alabdullah \(2023\)](#), and [Permata and Albab \(2024\)](#) indicated that financial technology improves banks' financial performance. Meanwhile, [Khanchel et al. \(2025\)](#) and [Umba et al. \(2024\)](#) asserted the importance of fintech and digitalization to the financial and social performance of microfinance institutions. However, [Tanjung and Aulia \(2022\)](#) and [Muttaqin \(2023\)](#) mentioned that fintech and digital innovations do not always lead to improved financial performance. In particular, [Judijanto et al. \(2025\)](#) showed that adopting fintech may lead to

business growth through risk management. This indicates that, to operate efficiently, technology needs to be complemented by other organizational mechanisms. When fintech is integrated into the organization's systems and processes, it can also improve financial performance, and the following hypothesis shall be set:

H2: Financial technology has a positive effect on financial performance.

Corporate Governance as a Moderator of Risk Management and Financial Performance

Corporate governance systems encompass the systems organizations use to direct, monitor, and control themselves (Cadbury, 1992). Principles of transparency, accountability, responsibility, independence, and fairness provide the basis for decision-making authority and broader control over management. In microfinance, governance plays a substantial role in the strategic direction and discipline of management, as well as the balance of risk, organizational objectives, and financial and institutional results (Cardillo et al., 2026; Gohar & Batool, 2015).

In the Resource-Based View of the firm (RBV), corporate governance is the structure that converts internal resources into firm capabilities and performance. Governance may strengthen the firm's risk management value. Board oversight may ensure that the firm's risk policies align with its goals. Accountability may shift the firm's responsibility for credit, liquidity, and operational risks. Transparency in risk management facilitates the flow of clear decision-making information. Independent oversight may control risk-taking and manage the firm's risk. Thus, risk management governance may shift from a compliance-based function to a firm capability embedded in strategic and operational decisions.

Evidence suggests that governance plays a conditioning role. Mardiana and Dianata (2018) and Nazariyah et al. (2021) analyzed corporate governance as a moderator of the relationship between risk management and financial performance. Fatima et al. (2026) also analyzed the moderating role of corporate governance on financial risks and financial performance. In addition, Raja et al. (2026) argued that governance conditions the relationship between risk management, financial performance, and firm value. Oppong et al. (2024) also found that corporate governance strengthens internal control systems to enhance bank performance. These studies suggest that governance can strengthen the value-added performance of internal control and risk-related capabilities. From an RBV standpoint, strong governance processes can help rural banks better organize and deploy their risk-related capabilities. Therefore, the following hypothesis is proposed:

H3: Corporate governance strengthens the effect of risk management on financial performance.

Corporate Governance as a Moderator of Financial Technology and Financial Performance

Several factors affect the performance of fintech adoption beyond the high purchasing power of digital technologies. Rural banks must make optimal technology investments, integrate new systems, protect customer information and data, manage operational and cyber risks, and follow banking regulations. Fintech adoption would also change rural banks' exposure to credit and operational risks, increasing the importance of strong and effective risk governance (Das & Pati, 2026; Liu et al., 2026).

Integrating technologies and tools designed to complement a fintech solution can significantly contribute to achieving institutions' stated goals. Governance helps prioritize

investments and digital risks and ensures solutions comply with customer protection and regulatory requirements. Governance helps integrate business processes. These mechanisms are likely to facilitate seamless integration of digital technology into banking operations. Quality governance is reported to be vital in translating business strategies and internal resources into financial performance within an organization (Hoai et al., 2026; Pathak et al., 2026).

According to the RBV, these mechanisms represent the necessary organizational capacity to deploy and harness the potential of technologies. Without strategies and oversight, fintech may remain an imitable operational tool. However, through effective governance mechanisms, fintech may be integrated with organization-specific knowledge, employee abilities, customer relationships, and internal processes, becoming more valuable and difficult to imitate. While existing studies have examined fintech and governance performance in isolation, very few studies have examined whether governance improves the financial impact of fintech adoption in rural banks. This gap in the literature forms the basis of this research, and the following hypothesis is proposed:

H4: Corporate governance strengthens the effect of financial technology on financial performance.

The Resource-Based View (RBV) and the hypotheses derived from it lead this study to propose an integrative research framework. Risk management and fintech integration are expected to affect financial performance, while corporate governance moderates both relationships. The integrated research framework is displayed in Figure 1.

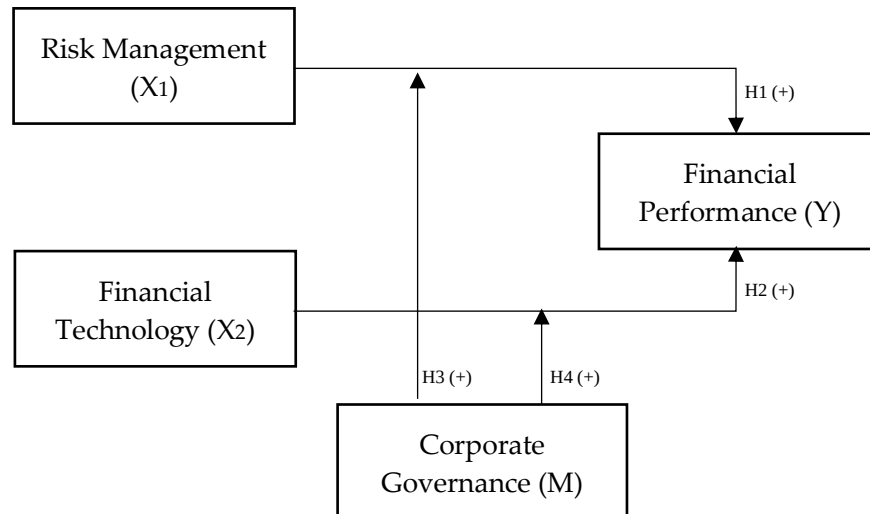


Figure 1. Research Framework

Method

This study adopted a quantitative and cross-sectional approach. This study assessed risk management and fintech adoption, along with corporate governance, in relation to the financial performance of rural banks in Bali, Indonesia. Corporate governance was assessed

as a moderator of the relationship between risk management, fintech adoption, and financial performance.

Population, Sample, and Respondents

All 129 rural banks in Bali at the time of data collection comprised the institutional population (refer to Table 2). Given that the entire institutional population was included, this study used a saturated sampling approach. We selected one director and one commissioner from each rural bank as respondents because they participate in strategic decision-making, risk management oversight, technology implementation, and corporate governance. Thus, 258 respondents were targeted. We collected 242 completed questionnaires, representing a response rate of 93.8%. The unit of analysis was the director or commissioner who filled in the questionnaire.

Table 2. Number of Research Samples and Respondents

Rural banks	Respondents per bank	Targeted respondents	Valid Respondents	Response Rate
129	2	258	242	93.8%

Data collection was conducted through a closed-ended, structured questionnaire. The measurement items were constructed using the existing literature on risk management, fintech adoption, corporate governance, and financial performance. We then modified the items to reflect the corporate characteristics of Indonesian rural banks. The risk management measures encompassed five dimensions: liquidity risk, credit risk, legal risk, ownership and management risk, and operational risk. These dimensions assess rural banks' capacity to identify, monitor, and manage the risks faced in running their operations and ensuring the bank's sustainability. The measurement was informed by literature on enterprise risk and microfinance risk management, which advocates integrating risk identification and control into the institution's decision-making (Andryushchenko et al., 2015; Mutamimah et al., 2022; Nocco & Stulz, 2022).

Factors influencing the level of FinTech adoption were assessed by measuring dimensions of usability, responsiveness, innovation, and security. These dimensions indicate how technology supports banking services and internal processes, makes banking services easily accessible to customers, and supports the innovation of banking services. The measurement was informed by studies on the influence of Fintech adoption and digitalization on the financial performance of banking and microfinance institutions (Baker et al., 2023; Khanchel et al., 2025; Mohammad et al., 2025; Umba et al., 2024). Corporate governance was observed through transparency, accountability, responsibility, independence, and fairness. These dimensions provide control and assessment mechanisms for an organization's governance (Cadbury, 1992). The application of these dimensions to the rural banking sector was informed by the literature on the governance and sustainability of microfinance institutions (Cardillo et al., 2026; Gohar & Batool, 2015).

Respondents evaluated financial performance by measuring profitability, efficiency, asset quality, liquidity, intermediation, and net interest margin. These components assess the intricacies of financial performance in banking and microfinance operations and incorporate the ability to achieve a given level of return, manage costs, preserve asset

quality, and sustain financial intermediation (Farooq et al., 2026; Fisseha, 2025; Ting et al., 2025). The questionnaire items were measured on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). Higher scores indicated better risk management and corporate governance practices, greater adoption of fintech, and an improved perception of financial performance.

Prior to the PLS-SEM analysis, item validity was assessed by evaluating item-total correlations. Coefficients of at least 0.30 were considered acceptable. Initially, Cronbach's alpha was used to assess internal consistency. Adequate preliminary validity and internal consistency were achieved since all item-total correlations were greater than 0.30, and Cronbach's alpha coefficients were greater than 0.70. The subsequent PLS-SEM measurement model evaluated construct reliability and validity.

Data Collection and Ethical Considerations

Direct or electronic questionnaires were distributed to targeted directors and commissioners. Respondents were not obligated to answer; in fact, they were asked to participate after learning about the research goals. Respondents were asked to complete the questionnaires voluntarily, and it was stated that the information would be used for academic research only. No names were associated with any answers, and each answer was kept confidential and presented as summary data. Respondents could withdraw their consent at any time without penalty. Completing and returning the questionnaire was regarded as explicit, informed consent. These procedures safeguarded voluntary participation, confidentiality, and appropriate research data.

Data Analysis: PLS-SEM Procedures

According to Ghozali (2021), Partial Least Squares Structural Equation Modeling (PLS-SEM) was the appropriate choice for analyzing the proposed model because the research involves multiple latent constructs, interaction effects, and a predictive research model. The analysis was carried out in two steps: the measurement model and the structural model, respectively. In the measurement model, indicator reliability was assessed using outer loadings, while Cronbach's alpha and composite reliability (minimum threshold of 0.70) were used to assess construct reliability. For convergent validity, the average variance extracted (AVE) was utilized, and values greater than 0.50 indicated that the construct explained a greater percentage of the variance of its indicators. Discriminant validity was assessed using the heterotrait-monotrait ratio (HTMT), where values less than 0.90 were considered satisfactory. The moderating influence of corporate governance was assessed by estimating the interaction terms between corporate governance and risk management and between corporate governance and fintech adoption. A positive and statistically significant interaction term indicates a stronger relationship between corporate governance and financial performance. We used a 5% significance level.

Results

Respondent Characteristics

Table 3 presents the demographic characteristics of the 242 directors and commissioners of rural banks who participated in this study.

Table 3. Respondent Characteristics

Characteristic	Category	Frequency	Percentage (%)
Gender	Male	176	72.7
	Female	66	27.3
	Total	242	100
Age	20–30 years	13	5.4
	31–40 years	29	12
	41–50 years	58	24
	More than 50 years	142	58.7
	Total	242	100
Education	Senior secondary/vocational school or diploma	65	26.9
	Bachelor's degree	129	53.3
	Postgraduate degree	48	19.8
	Total	242	100
Work experience	10 years or less	97	40.1
	More than 10 years	145	59.9
	Total	242	100

As presented in Table 3, male respondents (72.7%) numbered 176, and female respondents (27.3%) numbered 66. Most respondents (58.7%) were over 50, followed by those aged 41–50 (24.0%), 31–40 (12.0%), and 20–30 (5.4%). Among respondents, 53.3% had a bachelor's degree, and 19.8% had postgraduate degrees. This means that 73.1% of respondents had at least a bachelor's degree, while the rest had a diploma or senior secondary/vocational degree. Regarding work experience, 59.9% had more than 10 years of work experience, while the rest (40.1%) had 10 years or less. In general, surveyed respondents had appropriate educational and professional backgrounds to evaluate risk management, fintech adoption, corporate governance, and financial performance of rural banks.

Construct Reliability and Convergent Validity

Having surveyed the respondent profiles, the measurement model was evaluated to ensure reliability and validity. Reliability was assessed at the first degree, while validity was studied at the second degree. Internal consistency was studied using Cronbach's alpha, rho_A, and Composite Reliability. The Average Variance Extracted (AVE) was used to assess convergent validity. As presented in Table 4, all constructs had Cronbach's alpha, rho_A, and Composite Reliability values exceeding 0.70. The above findings show that all constructs had adequate internal consistency reliability and convergent validity.

Table 4. Construct Reliability and Validity

Variable	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Corporate Governance	0.945	0.945	0.951	0.583

Variable	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Financial Performance	0.949	0.949	0.954	0.583
Financial Technology	0.925	0.925	0.937	0.597
Risk Management	0.947	0.948	0.953	0.594

Discriminant Validity

Discriminant validity was initially assessed using the Fornell–Larcker criterion. This criterion requires the square root of the Average Variance Extracted (AVE) of each construct, shown by the diagonal values, to be greater than its correlations with the other constructs. The results are presented in [Table 5](#).

Table 5. Fornell–Larcker Criterion

Variable	Corporate Governance	Financial Performance	Financial Technology	Risk Management
Corporate Governance	0.764			
Financial Performance	0.686	0.763		
Financial Technology	0.659	0.657	0.772	
Risk Management	0.673	0.672	0.661	0.771

As shown in [Table 5](#), the square root of the AVE for corporate governance (0.764), financial performance (0.763), financial technology (0.772), and risk management (0.771) exceeded the respective correlations with the other constructs. For example, the diagonal value of corporate governance (0.764) exceeded its correlations with financial performance (0.686), financial technology (0.659), and risk management (0.673). Similar patterns were observed for the other constructs. Therefore, the Fornell–Larcker criterion was satisfied, indicating adequate discriminant validity among the constructs. Discriminant validity was further examined using the Heterotrait–Monotrait ratio (HTMT), which assesses the empirical distinctiveness of the latent constructs. HTMT values below 0.90 indicate that the constructs measure conceptually distinct phenomena. [Table 6](#) presents the HTMT results.

[Table 6](#) shows that all HTMT values were below the recommended threshold of 0.90, ranging from 0.102 to 0.547. The highest HTMT value was observed between financial technology and corporate governance (0.547), whereas the lowest value was found between financial technology and financial performance (0.102). These results confirm that the correlations between indicators measuring different constructs were sufficiently low. Accordingly, the HTMT criterion provides additional evidence that discriminant validity was established for all constructs in the research model.

Table 6. Heterotrait–Monotrait Ratio (HTMT)

Relationship Between Variables	Heterotrait-monotrait ratio (HTMT)
Financial Performance <-> Corporate Governance	0.148
Financial Technology <-> Corporate Governance	0.547
Financial Technology <-> Financial Performance	0.102
Risk Management <-> Corporate Governance	0.108
Risk Management <-> Financial Performance	0.250
Risk Management <-> Financial Technology	0.265

Hypothesis Testing

Hypothesis testing shows that risk management improves financial performance, but financial technology has no discernible impact on financial performance. Regarding financial technology and financial performance, corporate governance has no moderating effect, but it does enhance the correlation between risk management and financial performance.

Table 7. Summary of Hypothesis Testing Results

No	Hypothesis	Path Coefficient	T-statistic	P-value	Decision
1	H1: RM → FP	0,179	3,530	0,000	Accepted
2	H2: FT → FP	0,065	1,301	0,097	Rejected
3	H3: CG x RM → FP	0,430	2,177	0,009	Accepted
4	H4: CG x FT → FP	0,026	0,519	0,302	Rejected

(Source: Primary Data Processed, 2026)

The following interprets the hypothesis testing results based on Table 7. To begin, a p-value of 0.000, a T-statistic of 3.530, and a path coefficient of 0.179 indicate that risk management affects financial success. The result shows that risk management significantly and positively affects financial performance, since the T-statistic is higher than the critical value of 1.645 and the p-value is less than 0.05. Hence, we accept H1. This finding provides further evidence that enhanced financial performance may result from more effective risk management techniques. Secondly, a p-value of 0.097, a T-statistic of 1.301, and a path coefficient of 0.065 indicate that financial technology affects financial performance. The p-value is larger than 0.05, and the T-statistic is smaller than 1.645. This proves that technological advancements in the banking sector do not substantially impact bottom-line results. We therefore reject H2. This finding suggests that the adoption or use of financial technology has not had a significant direct impact on financial performance improvement. Third, a p-value of 0.009, a T-statistic of 2.177, and a path coefficient of 0.430 indicate that corporate governance moderates the association between risk management and financial success. There is strong evidence that corporate governance moderates the association between risk management and financial performance, since the T-statistic is more than 1.645 and the p-value is lower than 0.05. Corporate governance amplifies the impact of risk management on financial performance, as shown by the positive coefficient.

Hence, we accept H3. This research provides more evidence that good corporate governance amplifies the impact of risk management on bottom-line results. Fourth, a p-

value of 0.302, a T-statistic of 0.519, and a path coefficient of 0.026 indicate that corporate governance does not moderate the association between financial technology and financial success. Corporate governance does not mitigate the relationship between financial technology and financial success, as indicated by the T-statistic being below 1.645 and the p-value being over 0.05. Consequently, we reject H4. This result suggests that corporate governance has failed to enhance the impact of financial technology on financial performance. In sum, Table 4 shows that financial performance is positively affected by risk management, but not directly by financial technology. Also, while corporate governance does little to reduce the correlation between financial technology and financial success, it does bolster the correlation between risk management and fintech.

Discussion

Risk Management and Financial Performance

According to our findings, the direction of the relationship between risk management and financial performance of rural banks in Bali confirms H1. Rural banks' ability to identify, evaluate, monitor, and control credit, liquidity, operational, legal, and managerial risks positively affects their financial performance. We believe risk management supports performance by controlling credit risk and losses, protecting the quality of the bank's assets, managing the bank's operational activities, and enabling management to use the bank's financial resources more prudently. Within the Resource-Based View (RBV), risk management adds value when integrated into the firm's routines and practices, rather than treated as a compliance matter. Rural banks have deep knowledge of the local economy and their clients' borrowing and repayment patterns. If this knowledge is integrated into the bank's assessment of credit, liquidity, and internal control, risk management becomes a unique capability that is relatively difficult for competitors to imitate. This supports the RBV that performance depends not only on the resources a bank owns but also on how effectively and efficiently a bank can deploy them.

The findings align with [Lestari et al. \(2023\)](#), [Maulana et al. \(2024\)](#), and [Saeed and Donkoh \(2026\)](#), who argue that effective risk management positively influences financial performance. This aligns with evidence from microfinance institutions, where risk management practices improve financial performance and sustainability ([Mutamimah et al., 2022](#)). In the local context, [Rondonuwu et al. \(2024\)](#) showed that credit policy and risk management affect the financial performance of rural banks in Bali, while [Jananuraga et al. \(2026\)](#) stated the importance of risk management for the performance resource contribution of organizational resources in Balinese Financial Institutions. These findings indicate that risk management performance has a greater impact on financial institutions that are increasingly customer-centric and relationship-focused. Rural banks in Bali predominantly serve small and medium enterprises, and because their clients' financial health largely depends on tourism and the economic conditions of neighboring regions, embedded risk management can better help rural banks manage credit risk, liquidity risk, and uncertainty in the operational environment.

Fintech Adoption and Financial Performance

H2 was not supported by the results as rural banks in Bali did not show a significant association between fintech adoption and financial performance. This should not be taken

to mean that fintech does not carry value for the banks. Rather, it means that the current level of fintech integration has not generated tangible improvement in financial performance. Digital technologies may be easily purchased or imitated and, from an RBV perspective, may lack value as a strategic capability. Value in performance may be achieved through complementary resources such as digital infrastructure, employees, system integration, customers, cybersecurity, and management. Although digital technologies may enhance service delivery and improve service convenience, financial returns may not be immediate. They may take time to be realized, as the process may involve substantial costs for banks. An appropriate innovation strategy help organizations transform technology adoption into fiscal and market results (Adiguzel et al., 2026).

This finding is consistent with Tanjung and Aulia (2022) and Muttaqin (2023), who suggest that fintech or digital innovation not increase fiscal performance if it is not adequately integrated into the organization's operational processes. This contrasts with Alabdullah (2023), Baker et al. (2023), and Permata and Albab (2024), who reported positive impacts of fintech on fiscal performance. Microfinance studies have also shown that fintech and digitalization increase fiscal and social performance (Khanchel et al., 2025; Umba et al., 2024). These differences may stem from variations in operational and digital resources, internet services, and customer bases. Large financial institutions can sustain, grow, and use the digital infrastructure required for fintech operations, given their sufficient customer base. Most rural banks operate with fewer financial and digital resources, and provide services that some clientele may still require via relationship banking and in-person services. Adopting digital technologies in these banks may improve services and geographic coverage, but is unlikely to improve profitability and the quality or efficiency of operations.

This finding is also consistent with the argument that technological adoption may spur improvements in certain operational outcomes within organizations. Judijanto et al. (2025) identified risk management as one of the fintech-related business growth catalysts. Therefore, the financial value of fintech in rural banks may depend on how technology is integrated with risk management, human resources, and business processes rather than on the level of adoption alone.

The Moderating Role of Corporate Governance in the Relationship Between Risk Management and Financial Performance

The findings support H₃ by showing that improving corporate governance reinforces the positive relationship between risk management and financial performance. This finding shows that rural banks' risk management yields more value when corporate governance mechanisms are more robust. Corporate governance may strengthen this relationship by clarifying management responsibilities, increasing transparency of risk information, aligning risk-taking with institutional objectives and purposes, and ensuring appropriate adjustments are made. This finding provides a greater understanding of the organizational aspect of the RBV. Valuable resources and capabilities are not fully beneficial unless the organization is designed to use them. Corporate governance supports this organizational aspect by developing oversight, accountability, and decision-making frameworks. Through board oversight and management accountability, corporate governance can shift the focus of risk management from a compliance-oriented, technical activity to a capability that informs lending, liquidity, and operational decision-making.

This finding is consistent with [Mardiana and Dianata \(2018\)](#), who studied corporate governance as a mechanism that influences the relationship between risk management and financial performance. This is also supported by [Fatima et al. \(2026\)](#), who identified the moderating function of corporate governance in the relationship between financial risks and financial performance. Similarly, [Oppong et al. \(2024\)](#) showed that corporate governance reinforces internal control mechanisms and performance, while [Raja et al. \(2026\)](#) focused on governance in the context of managing risk, financial performance, and firm value. The effect of governance may be context-dependent. [Nazariyah et al. \(2021\)](#) indicate that corporate governance structures may not have the same moderating effect across different banking systems. While governance structures may be crucial, risk information should be communicated and integrated into strategic choices. In Bali's rural banks, directors' and commissioners' participation in risk oversight may be particularly relevant, as lending should be balanced within prudential constraints and the economic fragility of tourism borrowers.

The Moderating Role of Corporate Governance in the Relationship Between Fintech Adoption and Financial Performance

H4 is not supported, as the combined effect of corporate governance and FinTech adoption is not statistically significant. The study thus provides no evidence that overall corporate governance practices affect the relationship between FinTech adoption and financial performance. Relegating governance to the realm of digital transformation is not warranted. General governance structures may be too broad and may not adequately address FinTech investments and risks. Governance in rural banks may be more oriented toward conventional internal credit control and oversight than toward digital governance. Creating value from fintech requires governance oversight of cyber safety, data protection, system integration, and investments, as well as relationships with service providers and legal protection for digital consumers. Adoption of fintech may alter a bank's risk profile and create credit risks that also require specialized governance ([Das & Pati, 2026](#); [Liu et al., 2026](#)).

From the RBV perspective, this finding suggests that the same organizational mechanism may not enhance all capabilities. For instance, corporate governance strengthens risk management because traditional banking governance closely incorporates risk oversight. On the other hand, fintech capability requires deeper knowledge of technology, its infrastructure, and its implementation. While transparency and accountability may be necessary, they may not be sufficient when the directors and commissioners lack technology knowledge and when digital systems are not fully integrated into the bank's operational practices. This finding expands the governance literature in microfinance institutions. Previous studies showed the importance of governance in overseeing management and institutional performance ([Cardillo et al., 2026](#); [Gohar & Batool, 2015](#)), while this finding suggests that overall governance quality may not automatically enhance the financial impact of the digital domain. Previous publications showed that corporate governance can serve as the foundation for assessing an organization's financial performance and making strategic decisions. Nevertheless, digital evolution may require more sophisticated and complex governance oversight, along with the integration of digital risk management.

The insignificant interaction may also be interpreted as a contextual explanation of the absence of a direct relationship between fintech and performance. Rural banks in Bali may have adopted some digital services but may not have fully incorporated digital transformation into their governance strategies and business practices. In that case, strengthening general corporate governance may not improve financial outcomes because of a lack of digital knowledge and systems and a lack of technology-related aspect.

Conclusion

This study assessed the relationships between risk management, fintech adoption, corporate governance, and financial performance, using 242 valid responses collected from directors and commissioners of rural banks in Bali. Our results indicate that risk management practices are tied to positive financial outcomes. Fintech use is not related to financial outcomes. Corporate governance strengthens the positive relationship between risk management and financial outcomes, but it does not affect the relationship between fintech and financial outcomes. This research extends the Resource-Based View by positioning corporate governance as an asymmetric strategic boundary condition that sustains risk-management capability but is not sufficient to translate fintech into better financial outcomes. Rural banks need to improve governance-related risk management practices, as well as digital infrastructure, capabilities, system integration, cybersecurity, and technology governance.

The limitations of this study include its cross-sectional design and reliance on self-reported data collected from rural banks in Bali. This limits the ability to draw causal conclusions and generalize the findings. Self-reported data collected from bank directors and commissioners may introduce perceptual and common method biases. The financial benefits of fintech may take longer to become apparent. Future research should utilize a longitudinal research design and include rural banks in other regions of Indonesia. Research could also focus on banks' readiness to use digital technology, prevailing regulatory and competitive conditions, organizational culture, and digital governance and regulation.

Authors' Declaration

The authors declare no conflict of interest in the conduct or publication of this study. All findings and interpretations presented in this article are based on scientific analysis of the data obtained and are consistent with the research objectives. If any potential conflict of interest arises in the future, it will be disclosed transparently in accordance with applicable academic ethics.

Acknowledgements

The authors express their appreciation to the directors and commissioners of BPRs in Bali who participated in this study. The authors also thank the Faculty of Economics and Business, Universitas Mahasaraswati Denpasar, for its academic support and facilities. Appreciation is also extended to all parties who provided support, motivation, and valuable input during the preparation of this research.

ORCID

I Gede Cahyadi Putra  <https://orcid.org/0000-0002-0665-8802>

I Kadek Bagiana  <https://orcid.org/0000-0003-3528-005X>

Ida Ayu Nyoman Yuliastuti  <https://orcid.org/0000-0002-2878-2505>

Made Edy Septian Santosa  <https://orcid.org/0000-0003-4496-6846>

I Nyoman Putra Yasa  <https://orcid.org/0000-0003-2260-6823>

References

- Adiguzel, Z., Sonmez Cakir, F., & Karaaslan, N. (2026). How innovation behavior and technology innovation strategy mediate the effect of competitor orientation on financial and market performance. *foresight*, 28(2), 241–275. <https://doi.org/10.1108/FS-01-2025-0002>
- Al Hammadi, T., & Nobanee, H. (2019). FinTech and sustainability: a mini-review. *Available at SSRN 3500873*. <https://doi.org/10.2139/ssrn.3500873>
- Alabdullah, T.T.Y. (2023). The impact of financial technology and risk management practices on corporate financial system profitability: evidence from Kuwait. *SocioEconomic Challenges*, 7(3), 141–151. [https://doi.org/10.61093/sec.7\(3\).141-151.2023](https://doi.org/10.61093/sec.7(3).141-151.2023)
- Andryushchenko, G. Ī., Savina, M. V., Stepanov, Ī. A., Zaritova, K. G., & Tanatova, D. K. (2015). Risk management problems of microfinance institutions. *International Journal of Economics and Financial Issues*, 5(3), 151–158. <https://izlik.org/JA22HH43UP>
- Baker, H., Kaddumi, T. A., Nassar, M. D., & Muqattash, R. S. (2023). Impact of financial technology on improvement of banks' financial performance. *Journal of Risk and Financial Management*, 16(4), 230. <https://doi.org/10.3390/jrfm16040230>
- Barney, J. B. (1991). Firm Resources and Sustained Competitive Advantage. *Journal Of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Cadbury, A. (1992). *Report of the Committee on the Financial Aspects of Corporate Governance*. London: Gee & Co. Ltd
- Cardillo, G., Cavallo, A., & Torluccio, G. (2026). Corporate governance in microfinance institutions: A systematic review of theoretical perspectives, methodological approaches, and empirical evidence. *World Development*, 206, 107455. <https://doi.org/10.1016/j.worlddev.2026.107455>
- Das, S., & Pati, A. P. (2026). Moderating effect of fintech adoption on market power and bank stability Nexus: Indian evidence. *Managerial Finance*, 52(7), 1158–1174. <https://doi.org/10.1108/MF-05-2025-0320>
- Farooq, S., Ahmad, A., Liaqat, F., & Ali, F. H. (2026). Understanding relevance of business environment for financial performance: The case of Asian non-banking microfinance institutions. *Vision*, 30(1), 42–52. <https://doi.org/10.1177/09722629221081915>
- Fatima, M., Audi, M., & Ali, A. (2026). Nexus Among Financial Risks and Financial Performance: A Moderating Role of Corporate Governance. *Policy Journal of Social Science Review*, 4(1), 295–322. <https://www.policyjssr.com/index.php/PJSSR/article/view/903>
- Fisseha, F. L. (2025). The effect of institutional quality and financial development on the performance of microfinance institutions: evidence from selected African

- countries. *Cogent Business & Management*, 12(1), 2446707. <https://doi.org/10.1080/23311975.2024.2446707>
- Ghozali, I. (2021). *Partial least squares: Konsep, teknik, dan aplikasi menggunakan program SmartPLS 3.2.9 untuk penelitian empiris* (Edisi 3). Badan Penerbit Universitas Diponegoro.
- Gohar, R., & Batool, A. (2015). Effect of corporate governance on performance of microfinance institutions: A case from Pakistan. *Emerging Markets Finance and Trade*, 51(sup6), S94-S106. <https://doi.org/10.1080/1540496X.2015.1080559>
- Hoai, T. T. T., Thu, H. N. T., & Anh, T. D. (2026). The Impact of Corporate Governance on Financial Performance: The Mediating Role of Real Earnings Management. *Journal of Risk and Financial Management*, 19(6), 451. <https://doi.org/10.3390/jrfm19060451>
- Jananuraga, I. G., Wiagustini, N. L. P., Darmayanti, N. P. A., & Sudirman, I. M. S. N. (2026). The role of risk management and technology adoption in enhancing the effect of human capital on financial performance: Evidence from village credit institutions in Bali, Indonesia. *International Journal of Economic Perspectives*, 20(6), 705–739. <https://ijeponline.org/index.php/journal/article/view/1353>
- Judijanto, L., Dewi, Y., Dewi, A. P., Barus, I., & Firdaus, A. (2025). The Mediating Role of Risk Management in the Relationship Between Financial Technology Adoption and Business Growth in Indonesian MSMEs. *West Science Journal Economic and Entrepreneurship*, 3(01), 33–41. <https://doi.org/10.58812/wsjee.v3i01.1667>
- Khanchel, I., Lassoued, N., & Khiari, C. (2025). Untangling the skein: The impact of FinTech on social and financial performance in microfinance institutions. *Regional Science Policy & Practice*, 17(8), 100208. <https://doi.org/10.1016/j.rspp.2025.100208>
- Lestari, F., Karina, R., & Ivone. (2023). The effect of enterprise risk management on financial performance and firm value: The role of environmental, social and governance performance. *Global Financial Accounting Journal*, 7(2), 213–229. <https://doi.org/10.37253/gfa.v7i2.8706>
- Liu, Y., Tong, A., & Nourani, P. (2026). FinTech adoption and credit risk dynamics: evidence from China's A-share banking sector. *Journal of Banking Regulation*, 27(2), 25. <https://doi.org/10.1057/s41261-026-00327-z>
- Marcella, A., & Zulfikar, Z. (2024). Pengaruh *Financial technology* Terhadap Kinerja Keuangan Perbankan Syariah Dengan Online Service Information Sebagai Variabel Moderasi. *Jurnal Akuntansi Stie Muhammadiyah Palopo*, 10 (2), 202–213. <https://doi.org/10.35906/jurakun.v10i2.2068>
- Mardiana, M., & Dianata, A. W. M. (2018). The effect of risk management on financial performance with good corporate governance as a moderation variable. *Management and Economic Journal (MEC-J)*, 2(3), 257–268. <https://doi.org/10.18860/mec-j.v0i0.5223>
- Maulana, A., Dwita, M., Fitriyani, M., Sunaryo, D., & Adiyanto, Y. (2024). Risk Management as A Determinant of Indonesian Banking Financial Performance: A Systematic Literature Approach. *Indo-Fintech Intellectuals Journal of Economics and Business*, 4(5), 2523–2537. <https://doi.org/10.54373/ifiheb.v4i5.2120>
- Mohammad, A. A. S., Salinas, L., Muzrapova, S., Baxriddinov, N., Ahrorov, Z., & Boronov, B. (2025). The impact of online accounting through the expansion of financial technologies on improving the performance of financial institutions and banks. *Economic Annals-XXI*, 215(5–6), 16–21. <https://doi.org/10.21003/ea.V215-03>

-
- Mutamimah, M., Zaenudin, Z., & Bin Mislan Cokrohadisumarto, W. (2022). Risk management practices of Islamic microfinance institutions to improve their financial performance and sustainability: a study on Baitut Tamwil Muhammadiyah, Indonesia. *Qualitative Research in Financial Markets*, 14(5), 679–696. <https://doi.org/10.1108/QRFM-06-2021-0099>
- Muttaqin, I. (2023). The effect of digital innovation, fintech and sustainability report on the financial performance of Tegal City SMEs. *Jurnal Ekonomi*, 12(3), 561–573. <https://ejournal.seaninstitute.or.id/index.php/Ekonomi/article/view/2103>
- Nazariyah, S., Roni, M., & Kusriani, N. A. R. (2021). Pengaruh Manajemen Risiko Dengan Good Corporate Governance Sebagai Variabel Moderating Terhadap Kinerja Keuangan BRI Syariah Periode 2015–2019. *Journal of Islamic Banking*, 2(1), 24–54. <https://journal.uaindonesia.ac.id/JIB/article/view/204>
- Nocco, B. W., & Stulz, R. M. (2022). Enterprise Risk Management: Theory and Practice. *Journal Of Applied Corporate Finance*, 34(1), 81–94. <https://doi.org/10.1111/jacf.12490>
- Omidiji, A., Ehalaiye, D., Gyapong, E., & Botica Redmayne, N. (2025). Internal audit, loan losses, and financial performance in microfinance institutions: a global evidence. *China Accounting and Finance Review*, 27(3), 364–396. <https://doi.org/10.1108/CAFR-05-2024-0063>
- Oppong, C., Atchulo, A. S., Dargaud Fofack, A., & Afonope, D. E. (2024). Internal control mechanisms and financial performance of Ghanaian banks: the moderating role of corporate governance. *African Journal of Economic and Management Studies*, 15(1), 88–103. <https://doi.org/10.1108/AJEMS-03-2023-0101>
- Otoritas Jasa Keuangan. (2025). *Indonesian banking statistics 2025*. <https://ojk.go.id/id/kanal/perbankan/data-dan-statistik/statistik-perbankan-indonesia/Pages/Statistik-Perbankan-Indonesia---Juni-2025.aspx>
- Pathak, M., Chandani, A., Ubarhande, P., & Bagade, S. (2026). Unveiling corporate governance dynamics: a qualitative analysis of financial performance. *Qualitative Research in Financial Markets*, 18(4), 1044–1067. <https://doi.org/10.1108/QRFM-05-2024-0115>
- Permata, N. A., & Albab, U. (2024). Dampak Fintech Terhadap Performa Kinerja Keuangan Bank Umum Syariah di Indonesia (Studi Empiris Pada OJK Periode 2020–2023). *SYIRKAH: Jurnal Ekonomi Syariah*, 1(1), 39–54. <https://doi.org/10.36269/jes.v1i01.2730>
- Raja, A., Hidayat, K., Worokinasih, S., & Darmawan, A. (2026). Dynamic Interaction of Company Size, Risk Management, and Financial Performance on Company Value: The Moderating Role of Corporate Governance in Indonesian Conventional Banks (2012–2017). *OIDA International Journal of Sustainable Development*, 19(06), 49–66. <https://doi.org/10.64211/oidaijsd190604>
- Rondonuwu, J. M., Artaningrum, R. G., & Trimurti, C. P. (2024). Pengaruh Manajemen Risiko dan Kebijakan Kredit terhadap Kinerja Keuangan pada BPR di Seluruh Kecamatan Mengwi Badung. *Jakadara: Jurnal Ekonomika, Bisnis, Dan Humaniora*, 3(1). <https://doi.org/10.36002/jd.v3i1.2914>
- Saeed, M. M., & Donkoh, E. (2026). Credit risk management, bank-specific factors, and financial performance of banks: Insights from an emerging economy. *Social Sciences & Humanities Open*, 13, 102523. <https://doi.org/10.1016/j.ssaho.2026.102523>
-

-
- Tanjung, M. F., & Aulia, D. (2022). Dampak financial technology (Fintech) dan intellectual capital terhadap kinerja keuangan perbankan komersial di Indonesia. *SEIKO: Journal of Management & Business*, 4(3), 413–426. <https://doi.org/10.37531/sejaman.v4i3.2634>
- Ting, T., Mia, M. A., Hossain, M. I., & Wah, K. K. (2025). Predicting the financial performance of microfinance institutions with machine learning techniques. *Journal of Modeling in Management*, 20(2), 322–347. <https://doi.org/10.1108/JM2-10-2023-0254>
- Umba, D. N., Croquet, M., & Godfroid, C. (2024). Does Digitization Affect Social and Financial Performance in Microfinance Institutions?. *Journal of Alternative Finance*, 1(3), 236–251. <https://doi.org/10.1177/27533743241290280>
-