

MEASURING THE RESILIENCE OF RURAL BANKS AGAINST COVID-19 PANDEMIC: EVIDENCE FROM WEST JAVA, INDONESIA

Wanda Kharisa Ristyanti^{*1}, Noer Azam Achسانی^{*}, Tony Irawan^{**}

^{*}School of Business, IPB University
Jl. Pajajaran, Bogor 16151, Indonesia

^{**}Department Economics, Faculty of Economics and Management, IPB University
Jl. Agatis, IPB Dramaga Campus, Bogor 16680, Indonesia

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Abstract: The quality of credit and financing provided by rural banks plays a crucial role in determining the continuity of income and interest, ultimately impacting profitability. This study aims to analyse the financial performance dynamics and the factors influencing the profitability of rural banks in West Java, Indonesia during the COVID-19 pandemic by examining the financial reports for the period March 2019 to December 2020 from 26 sampled rural banks. The research employed a multiple linear regression method with REM estimation. Despite the challenging circumstances of the pandemic, the ROA, CAR, and equity values of the rural banks analysed still met the minimum standards set by Bank Indonesia at 1.5%, 8%, and IDR 6 billion, respectively, while the NPL values exceeded the maximum standard of 5%, whereas the NPL values exceeded the maximum standards. The combined factors of CAR, NPL, equity, net income, and the COVID-19 pandemic collectively influence profitability. Specifically, NPL and the COVID-19 pandemic have a significantly negative effect, while net income has a significantly positive effect on profitability. The policy implication that can be implemented to support the resilience of rural banks during crisis are strengthening capital buffer, tightening credit policies, implementing good governance practices, and improving operational cost efficiency.

Keywords: rural banks, financial performances, COVID-19 pandemic, profitability

Abstrak: Kualitas kredit dan pembiayaan yang diberikan oleh BPR memainkan peran penting dalam menentukan kelangsungan pendapatan dan bunga, yang pada akhirnya mempengaruhi profitabilitas. Studi ini bertujuan untuk menganalisis dinamika kinerja keuangan dan faktor-faktor yang memengaruhi profitabilitas BPR di Jawa Barat, Indonesia selama pandemi COVID-19 dengan meneliti laporan keuangan periode Maret 2019-Desember 2020 dari 26 sampel BPR. Penelitian ini menggunakan metode regresi linear berganda dengan estimasi REM. Meskipun dalam situasi yang menantang akibat pandemi, nilai ROA, CAR, dan ekuitas BPR yang diteliti masih memenuhi standar minimum yang ditetapkan Bank Indonesia sebesar 1,5%, 8%, dan 6 milyar rupiah, sementara nilai NPL melampaui standar maksimum sebesar 5%. Faktor gabungan CAR, NPL, ekuitas, laba bersih, dan pandemi COVID-19 secara simultan memengaruhi profitabilitas. Secara khusus, NPL dan pandemi COVID-19 memiliki pengaruh negatif yang signifikan, sementara laba bersih memiliki pengaruh positif yang signifikan terhadap profitabilitas. Implikasi kebijakan yang dapat diterapkan untuk mendukung ketahanan BPR pada masa krisis adalah memperkuat cadangan modal, memperketat kebijakan kredit, menerapkan praktik tata kelola yang baik, serta meningkatkan efisiensi biaya operasional.

Kata kunci: BPR, kinerja keuangan, pandemi COVID-19, profitabilitas

¹ Corresponding author:
Email: kharisawanda@gmail.com

INTRODUCTION

Rural banks are financial institutions that play a crucial role in mobilizing funds and providing credit services to the public, with a particular focus on micro, small, and medium enterprises (MSMEs). MSMEs are known for their resilience and significant contribution to the national economy, making rural banks essential partners in supporting this sector. Indonesia has experienced various crises, such as the 1998 Asian monetary crisis triggered by a sharp depreciation of the Indonesian rupiah (IDR) against the United States dollar (USD) and the accumulation of foreign debt (Tambunan, 2021). Additionally, the 2008 global financial crisis, stemming from credit imbalances in the US financial sector, had a ripple effect, especially on banking institutions (Nezky, 2013). Lestari (2017) highlighted the adverse impact of the 1998 and 2008 crises on the credit performance and deposit collection of rural banks. When a crisis negatively affects the gross regional domestic product, it can disrupt the lending activities and deposit collection of rural banks.

Drawing from past crisis patterns, it was anticipated that the world would face another global crisis in 2020, stemming from the lingering effects of the 2007-2009 crisis (Poruchnyk et al. 2021). In 2019, global growth was predicted to be at its lowest level since 2008, with household debt, corporate debt, trade wars, and declining interest rates identified as primary factors contributing to the anticipated recession in 2020 (Balbaa, 2020). The projected economic crisis for 2020 was further accelerated and intensified by the extraordinary events surrounding the COVID-19 pandemic. The COVID-19 pandemic had a significant impact on economic growth, resulting in a decline of -5,32% in the second quarter of 2020 (BPS, 2021). In the second quarter of 2020, there were observable signs of deteriorating performance, reflected in the decline of ROA and the increase in NPLs of rural banks in Indonesia compared to the previous year (OJK, 2020) that can be seen as concerning indicators of performance issues in rural banks. For a comprehensive overview of the general indicators of rural banks nationwide, please refer to Table 1.

Table 1. General indicators of rural banks in Indonesia

Indicators	June 2019	June 2020
CAR (%)	22.78	30.80
ROA (%)	2.37	1.98
NPL net (%)	5.58	6.58

As one of the provinces making a substantial contribution to the national economy, West Java also experienced a negative economic growth rate of -4,08% in the third quarter of 2020. The business and corporate services sector witnessed the most significant decline, with a contraction of -18.93%. The MSME sector in West Java encountered substantial risks of financial losses and closures due to the COVID-19 pandemic, impacting at least 80% of MSME players. Out of the two million debtors affected by COVID-19 in West Java, 1,8 million MSMEs received restructuring assistance, representing an outstanding nominal amount of IDR 54 trillion out of a total of IDR 102 trillion (BAPPEDA Jawa Barat, 2020). Based on the data from the annual financial reports of rural banks in West Java, it is evident that the NPL conditions of the 26 rural banks included in the West Java Regional Owned Enterprises indicate an average NPL value above 5% throughout 2020 and 2021 (OJK, 2022). These findings indicate an increase in NPLs that coincides with the onset of the COVID-19 pandemic. For a visual representation of the average NPL values of rural banks in West Java, please refer to Figure 1.

Rural banks were chosen as the objective of this research because they are close to communities and MSMEs in various regions. This research attempts to fill a gap where at the time of this study, there were not many examinations focusing on rural banks as the subject. Most of the available research findings were studies on conventional commercial banks and Islamic commercial banks. In other similar research conducted previously, the focus was on conventional rural banks and Islamic rural banks in aggregate (Sofyan, 2021). In another study, the focus was on other provincial-level rural banks (Raharjo et al. 2021), city-level rural banks (Wardhani and Ismunawan, 2021), and unit-level rural banks (Rahayu and Putra, 2021).

In this research, the dependent variable chosen is ROA, while the independent variables include NPL, CAR, equity, net income, and the COVID-19 pandemic. NPL, CAR, equity, and net income are financial ratio components found in the financial statements of rural banks. Preliminary research data indicates that rural banks in West Java are encountering issues reflected in the increasing NPL. Based on this observation, the researchers assume that there might be a problem with the profitability of rural banks, thereby necessitating this study.

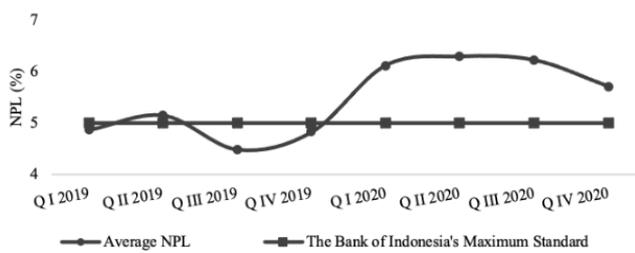


Figure 1. Chart of Average NPL of rural banks in West Java

The primary objective of this study is to examine the dynamics of financial performance and the factors that influence the profitability of rural banks in West Java during the COVID-19 pandemic. In Indonesia, the first COVID-19 case was reported in March 2020; therefore, this study considers the occurrence of the pandemic in the second quarter. By analyzing the dynamics of financial performance, this research aims to derive managerial implications and strategies for rural banks to enhance profitability through the utilization of financial ratio components. The approach to the problem solving of this research is hypothesis-driven approach. These steps can be instrumental in addressing the crisis, facilitating post-crisis recovery, and preparing for potential future crises.

METHODS

The panel data set comprises 26 samples of rural banks, covering the period from the first quarter to the fourth quarter of 2019 and 2020. The 26 samples used were secondary data selected based on the availability of their quarterly financial report data, which could be accessed through the Indonesia Financial Services Authority website. The samples consist of conventional rural banks that are categorized as West Java Regional Owned Enterprises. Table 2 provides an overview of the 26 rural banks selected as research samples.

This study employs descriptive and quantitative data analysis methods. Descriptive analysis is utilized to provide an overview of the financial ratios of rural banks, while quantitative analysis is employed to examine the impact of independent variables on the dependent variable. Descriptive methods are employed to calculate key values such as the minimum, maximum, average, median, and standard deviation for each variable. The quantitative analysis utilizes the multiple linear regression analysis method with panel

data. Microsoft Excel and STATA are the software applications used for this analysis.

In panel data analysis, two estimation model approaches can be used: the Fixed Effects Model (FEM) and the Random Effects Model (REM). The model in this is multiple linear regression referring to prior research by Almaqtari et al. (2018). The basic model of multiple linear regression is as follows:

$$Y_t = \alpha_i + X_{1t} + X_{2t} + X_{3t} + \dots + X_{nt} + \epsilon$$

the model used in this study is as follows:

$$ROA_{it} = \alpha_i + \beta CAR_{it} + \beta NPL_{it} + \beta E_{it} + \beta NI_{it} + \beta dCPT + \epsilon$$

where ROA_{it} is the level of ROA of banki at timet, α_i is intercept, CAR_{it} is the level of CAR of banki at timet, NPL_{it} is the level of NPL of banki at timet, E_{it} is the level of equity of banki at timet, NI_{it} is the level of net income of banki at timet, $dCPT$ is COVID-19 pandemic dummy at timet, and ϵ is residual.

The COVID-19 pandemic, which accelerated and exacerbated the crisis in the world, had a huge impact on various sectors including the banking sector. Rural banks as collectors of public funds and lenders are also affected. In conditions like this, rural banks are faced with the risk of loss, ROA is one indicator to measure the ability of rural bankss to generate profits through asset utilization. The framework of this research is presented in Figure 2.

Referring to the existing framework, this research will test the following hypotheses:

- H1.1: CAR has a positive effect on the profitability of rural banks in West Java.
- H1.2: NPL has a negative effect on the profitability of rural banks in West Java.
- H1.3: Equity has a positive effect on the profitability of rural banks in West Java.
- H1.4: Net income has a positive effect on the profitability of rural banks in West Java.
- H1.5: The COVID-19 pandemic has a negative effect on the profitability of rural banks in West Java.
- H1.6: CAR, NPL, equity, net income, and the COVID-19 pandemic have simultaneous effects on the profitability of rural banks in West Java.

Table 2. The samples consist of conventional rural banks that are categorized as West Java Regional Owned Enterprises

Code	Rural Bank	Regency/City	Code	Rural Bank	Regency/City
RB01	BPR LPK Parung Panjang	Bogor	RB14	BPR Kuningan	Kuningan
RB02	BPR Cianjur Jabar	Cianjur	RB15	BPR Kab. Cirebon	Cirebon
RB03	BPR Intan Jabar	Garut	RB16	BPR Majalengka	Majalengka
RB04	BPR Cipatujah Jabar	Tasikmalaya	RB17	BPR Sumedang	Sumedang
RB05	BPR Astanajapura	Cirebon	RB18	BPR Karya Remaja	Indramayu
RB06	BPR Majalengka Jabar	Majalengka	RB19	BPR Subang	Subang
RB07	BPR PK Balongan	Indramayu	RB20	BPR BKPD Pangandaran	Pangandaran
RB08	BPR Karya Utama Jabar	Subang	RB21	BPR BKPD Cijulang	Pangandaran
RB09	BPR Karawang Jabar	Karawang	RB22	BPR BKPD Larkok	Ciamis
RB10	BPR Wibawa Mukti Jabar	Bekasi	RB23	BPR Bank Kota Bogor	Bogor
RB11	BPR Kerta Raharja	Bandung	RB24	BPR Sukabumi	Sukabumi
RB12	BPR Garut	Garut	RB25	BPR Kota Sukabumi	Sukabumi
RB13	BPR Artha Sukapura	Tasikmalaya	RB26	BPR Kota Sukabumi	Bandung

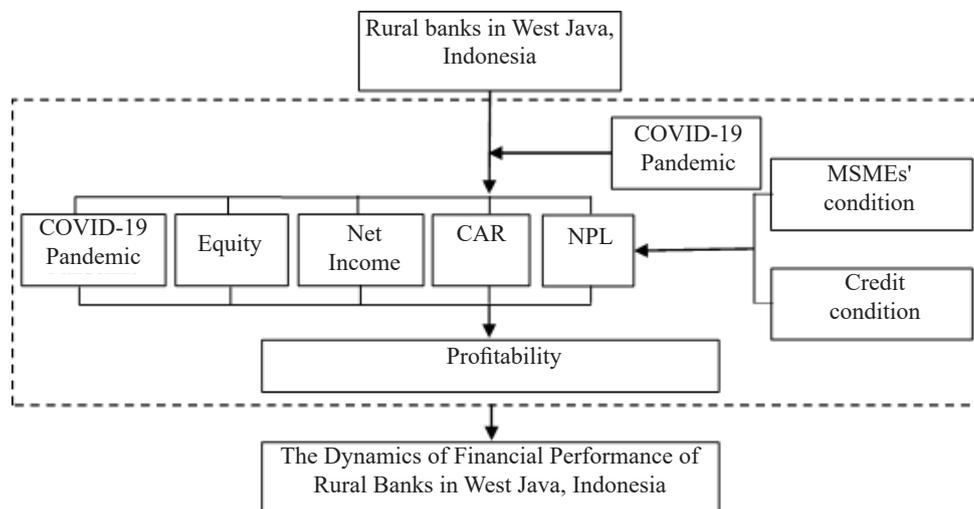


Figure 2. Framework of research measuring the resilience of rural banks against covid-19 pandemic: evidence from West Java, Indonesia

RESULTS

The mean values of ROA, CAR, and equity prior to the COVID-19 pandemic period have satisfied the standard, which are above 1,5% (BI, 2013), a minimum of 8% (BI, 2013), and a minimum of IDR 6 billion (OJK, 2015). However, the average NPL value has not met the standard, which specifies a maximum of 5% (BI, 2019). Table 3 displays the descriptive statistical values of the financial ratios of rural banks in West Java prior to the COVID-19 pandemic. According to Table 4, during the COVID-19 pandemic in 2020, the average values of ROA, CAR, and equity of rural banks in West Java met the established standards. However, the average NPL value did not meet the prescribed standard.

During the COVID-19 pandemic in 2020, the ROA experienced a decline starting from the second quarter and continued until the final quarter of 2020. The fluctuations in ROA for rural banks in West Java can be observed in Figure 3, illustrating the dynamic changes over the specified period.

Figure 3 illustrates a similar pattern in the movement of ROA between two groups of rural banks: those managed by provincial and district governments (Group 1) and those managed solely by district governments (Group 2). Throughout the COVID-19 pandemic, both groups experienced a decline in profitability, but Group 2 managed to maintain ROA values above the set standards. Most rural banks in West Java were able to maintain profitability above the established standards

during the pandemic. However, a few banks, specifically six in Group 1 and six in Group 2, recorded ROA values below 1,5% since the second quarter of 2020.

CAR experienced a decrease in the third quarter of 2019 but subsequently increased in the following quarters until the second quarter of 2020. During the pandemic, CAR declined in the third quarter of 2020 but rebounded in the subsequent quarter. Figure 4 provides an overview of the dynamics in the CAR of rural banks in West Java.

Figure 4 demonstrates a similar trend in the movement of CAR between Group 1 and Group 2. Throughout the COVID-19 pandemic, both groups experienced fluctuations in CAR performance, but they managed to maintain CAR values above the established standards. Furthermore, both groups displayed an upward movement in CAR compared to the previous year. All rural banks in West Java exhibited commendable CAR performance, surpassing the minimum standards consistently. In general, rural banks in West Java demonstrated resilience in maintaining robust CAR values.

The average NPL value initially declined in the third quarter of 2019, followed by a gradual increase until the second quarter of 2020. However, upon entering the COVID-19 pandemic, the average NPL value gradually decreased until the final period of 2020. Figure 5 depicts a similar pattern in the movement of NPLs between Group 1 and Group 2. Group 1 displayed a poorer performance with higher average NPL values and a more pronounced increase, particularly in the second quarter of 2020. Despite the pandemic, both groups recorded NPL values that exceeded the maximum standards. Only a limited number of rural banks, specifically six rural banks from Group 2, were able to maintain NPLs below 5% during the COVID-19 pandemic. On the other hand, several rural banks consistently reported NPLs above 5% throughout the pandemic, including eight rural banks from Group 1 and five rural banks from Group 2. Notably, in the second quarter of 2020, three rural banks from Group 1 witnessed a significant surge in NPLs, surpassing the average NPL levels.

Table 3. Financial ratio of rural bank in West Java before COVID-19 Pandemic (March 2019 - March 2020)

Financial Ratios	Min	Max	Mean	Median	Std. Dev.
ROA (%)	-3.90	7.40	2.63	2.63	2.05
CAR (%)	10.86	92.42	30.10	23.93	16.67
NPL (%)	0.30	18.66	5.65	5.03	3.86
Equity (IDR billion)	3.97	99.04	33.20	28.56	24.59
Net Income (IDR billion)	-2.78	8.24	1.24	0.80	1.50

Table 4. Financial ratio of rural bank in West Java during COVID-19 Pandemic (June 2020 - December 2020)

Financial Ratios	Min	Max	Mean	Median	Std. Dev.
ROA (%)	-1.00	6.59	2.21	1.65	1.89
CAR (%)	13.75	108.16	34.07	25.75	22.29
NPL (%)	0.82	21.58	7.39	6.43	5.00
Equity (IDR billion)	3.94	110.58	36.48	31.08	26.45
Net Income (IDR billion)	-2.00	6.47	0.94	0.51	1.50

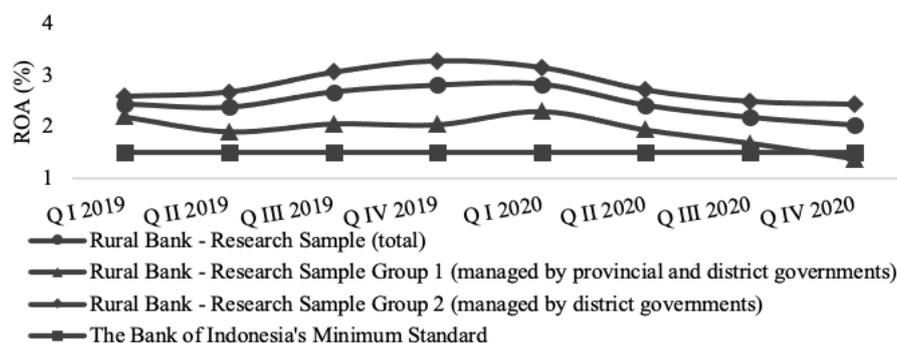


Figure 3. Chart of The ROA Dynamics of Rural Banks in West Java

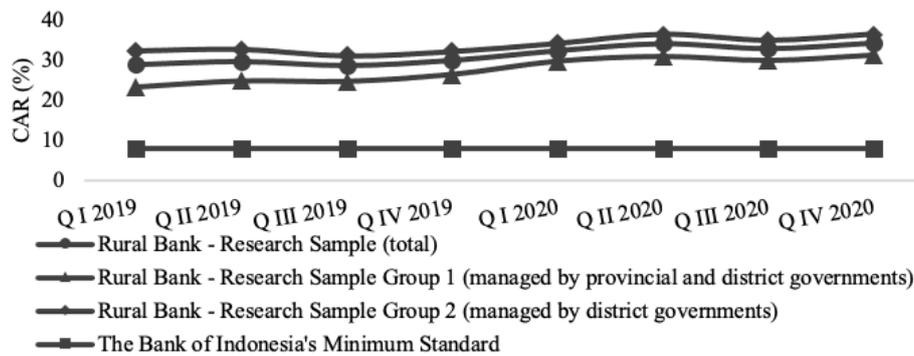


Figure 4. Chart of The CAR Dynamics of Rural Banks in West Java

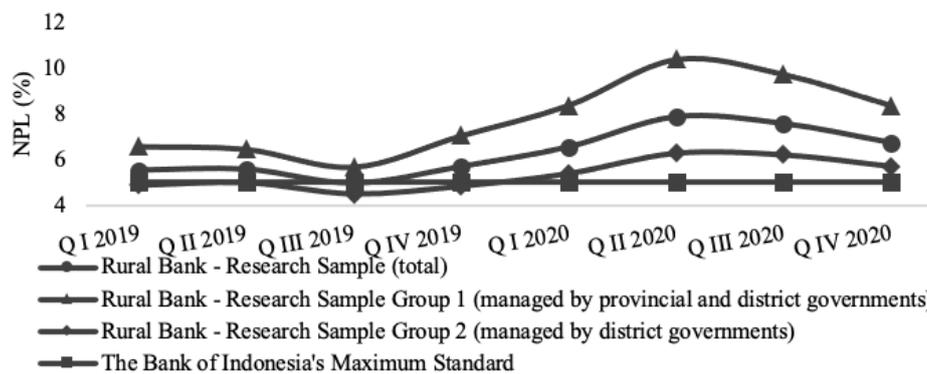


Figure 5. Chart of The NPL Dynamics of Rural Banks in West Java

As the COVID-19 pandemic emerged, equity movements tended to stabilize, with marginal changes, and the average equity value during the pandemic exceeded the previous year. Figure 6 indicates a similar trend in the movement of equity between Group 1 and Group 2 in rural banks. Throughout the COVID-19 pandemic, both groups witnessed marginal fluctuations in equity performance, yet they managed to maintain equity values above the established standards. Only one rural bank from Group 1 recorded an equity value below the minimum standards during the COVID-19 pandemic.

Figure 7 illustrates the dynamics of net income in rural banks located in West Java. The net income exhibited an upward trend from quarter I to quarter IV, indicating a positive movement. However, during the COVID-19 pandemic, the growth in net income was relatively lower compared to the previous year.

Figure 7 indicates a similar pattern in the movement of net income between Group 1 and Group 2 in rural banks. Throughout the COVID-19 pandemic, both groups experienced relatively stable net income with minimal fluctuations, as evidenced by the average values. It is worth noting that six rural banks in Group 1 reported

losses during the crisis, while seven rural banks in Group 2 managed to maintain net income levels above the average despite the challenging circumstances.

According to the Hausman test results presented in Table 5, the Prob>chi2 value is 0,522, indicating that REM is the appropriate estimation model. The REM approach suggests that the residual variation (ϵ) varies among individuals and/or over time, while the intercept (α_i) and slope (β) remain constant.

Based on Table 6, the Prob>chi2 value is 0.000. This implies that all independent variables collectively have a significant impact on the dependent variable. The $P>|z|$ values for CAR, NPL, and the COVID-19 pandemic variables are 0.042, 0.001, and 0.002. However, the $P>|z|$ values for the equity and net income variables are 0.108 and 0.061. Therefore, it can be concluded that CAR, NPL, and the COVID-19 pandemic significantly affect the ROA, while equity and net income do not have an impact on ROA. The overall R-squared value for the employed model is 0.421, indicating that all independent variables can explain 42.10% of the dependent variable. Consequently, 57.90% of the dependent variable is influenced by other factors not included in the model.

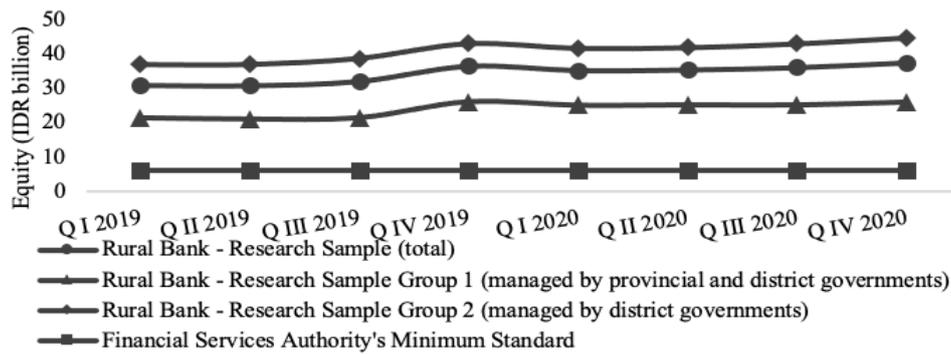


Figure 6. Chart of the equity dynamics of rural banks in West Java

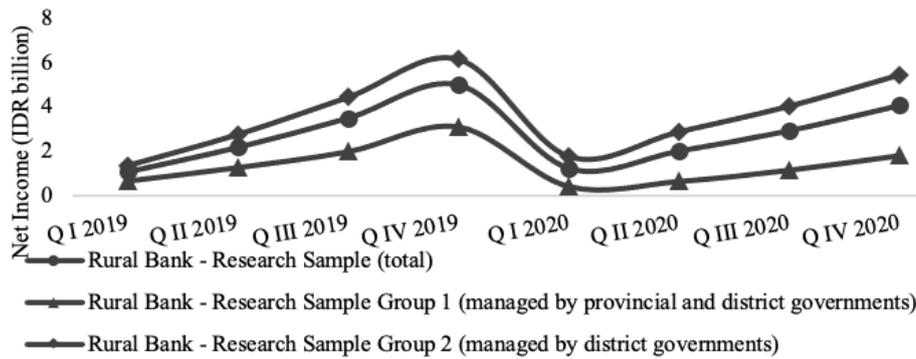


Figure 7. Chart of the net income dynamics of rural banks in West Java

Table 5. Hausman Test

Variables	Coefficients		(b-B) Difference	sqrt (diag(V _b -V _B)) S.E.
	(b) Fixed	(B) Random		
CAR	0.016	0.014	0.001	0.005
NPL	-0.041	-0.111	0.070	0.020
Equity	-0.297	0.320	-0.617	0.194
Net Income	0.068	0.145	-0.077	.
COVID-19 Pandemic	-0.538	-0.461	-0.078	.

chi2(5) = (b-B)'[(V_b-V_B)⁻¹](b-B) = 4.19 Prob>chi2 = 0.522

Table 6. REM Regression

Variables	Coef.	Robust Std. Error	z	P> z	[95% Conf. Interval]	
CAR	0.015	0.007	2.03	*0.042	0.000	0.029
NPL	-0.111	0.034	-3.26	*0.001	-0.177	-0.044
Equity	0.320	0.199	1.61	0.108	-0.070	0.711
Net Income	0.145	0.077	1.87	0.061	0.006	0.296
COVID-19 Pandemic	-0.460	0.149	-3.09	*0.002	-0.752	-0.168
Constant	-7.632	4.566	-1.67	0.095	-16.582	1.316

R-square:
 within = 0.124
 between = 0.528
 overall = 0.421

Wald chi2(5) = 47.140
 Prob>chi2 = 0.000
 Degree of Freedom = 753
 * = significant

The normality test results with a Prob>z value of 0,481, indicate that the residuals exhibit a normal distribution. The multicollinearity test results reveal that the correlation value between variables is <0.75, indicating the absence of multicollinearity problems. The autocorrelation test results show a Prob>F value of 0.000, suggesting the presence of autocorrelation. To address this issue, the Feasible Generalized Least Square (FGLS) method is employed, with a coefficient of 0.671 for all panels.

The decline in financial performance, particularly in terms of ROA, NPL, and net income, can be attributed to the economic downturn caused by the COVID-19 pandemic. The implementation of government policies such as Large-Scale Social Restrictions further hindered economic activity and affected the ability of borrowers to fulfill their obligations to rural banks. As loan products are a primary source of income for banks, the decline in credit quality and repayment difficulties have negatively impacted profitability. These challenges disrupt the asset turnover in banks, increase credit risk, and raise the costs of debt and equity financing. During the COVID-19 pandemic, rural banks in West Java experienced a significant decline in ROA and a notable increase in NPLs. However, CAR was successfully maintained and even exhibited a positive trend. This suggests that rural banks focused on maintaining capital adequacy to mitigate losses stemming from deteriorating credit quality.

The statistical significance of CAR indicates its influence on profitability in the studied rural banks. This finding is consistent with previous research by Ekinici and Poyraz (2019), which demonstrated a positive relationship between the capital ratio and ROA. Banks with a robust capital structure tend to generate higher profits as they rely less on external funding and have lower funding costs. The rural banks in West Java demonstrated sufficient capital adequacy to withstand the risks posed during the crisis, as their CAR ratios met the minimum standards set by the Central Bank before and during the COVID-19 pandemic.

In contrast, equity was found to have no statistically significant effect on ROA in the rural banks studied. This suggests that the management of equity by these banks may not have been efficient in generating profitability. Efficient banks, as identified by Widyasari and Nataherwin (2017), rely more on equity than leverage and tend to increase their equity in the business process. The positive effect of equity on ROA may result from

shareholders assessing the financial health of banks based on equity and net income. This factor encourages bank management to prioritize effective equity management to maintain investor confidence. However, in this study, equity did not demonstrate a significant impact on profitability.

NPL was found to have a statistically significant negative effect on profitability, aligning with the findings of previous studies by Ekinici and Poyraz (2019) which states that there is a significant negative effect between credit risk (NPL/total loan) on ROA. The increase in NPLs during a crisis is a common phenomenon, with a sharp upward movement followed by a gradual decline. The significant rise in NPLs during crises reflects unresolved NPL issues from the pre-crisis period, exacerbating their adverse impact on profitability in rural banks. Ineffective debtor supervision by the banks could also contribute to NPL issues.

Net income was not found to have a statistically significant effect on profitability in the studied rural banks. This contradicts the findings of Siswanti and Kharima (2016), which established a significant positive influence of net profit before tax on ROA. While net profit is a component of profitability, the specific conditions of the studied banks during the COVID-19 pandemic indicated that profitability was not solely dependent on net profit. Other factors, such as CAR, NPL, and the pandemic itself, played significant roles in shaping the profitability of rural banks in West Java. It is possible that the banks' asset management strategies were not optimized, resulting in low profitability despite generating high net profits.

The COVID-19 pandemic was found to have a statistically significant negative effect on profitability in the rural banks studied. This finding differs from the assertion by Ali and Puah (2018) that financial crises do not significantly impact bank stability or profitability. In this study, assumptions were made that the MSMEs partnered with the rural banks were facing difficulties in meeting their obligations, leading to problems in loan repayment. Despite countercyclical policies, the adverse effects of the COVID-19 pandemic on banks and debtors persisted. Restructuring of credit and financing was only provided to debtors deemed capable of withstanding the impact of the pandemic and with viable business prospects. Overall, the pandemic had a significant negative impact on the profitability of rural banks in West Java.

The financial crisis is a foreseeable event, and bank management should leverage their expertise and knowledge to analyze and track economic trends. It is crucial for banks to proactively prepare for capital adequacy based on forecasts, utilizing every opportunity to increase their capital. Rural banks should focus on strengthening their capital buffers during the post-crisis recovery period when economic activities gradually stabilize. The primary capital and capital buffers serve as a protective cushion during recessions, enabling rural banks to support MSMEs facing difficulties. Thus, rural banks should be ready to expand their loan products business.

Strict credit policies and regular supervision are imperative for rural banks. Prudent principles must be applied when disbursing credit, with specific criteria in place for selecting debtors. Regular supervision helps evaluate the eligibility of borrowers. While rural banks can aggressively increase loan disbursement to enhance profitability through interest income, such lending should be limited to debtors meeting the predefined criteria. The board of commissioners plays a vital role in improving management oversight. Implementing good corporate governance practices is a strategy to boost profitability in rural banks. By optimizing the board's supervisory function, risky capital structure decisions that deplete internal capital can be restrained.

Cost efficiency plays a crucial role in maximizing net profits. Excessive operating costs can erode profitability, as bank management must allocate profits to cover these expenses. Emphasizing cost efficiency during normal times helps banks reduce risks and the possibility of failure during financial crises, ultimately maintaining or even increasing profitability. Cost efficiency can be a superior strategy compared to profitability efficiency because high returns generated from high-risk investments tend to be temporary, while the benefits of cost efficiency are sustainable in the long term, even during future financial crises.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

This study demonstrates a decline in the financial performance of rural banks in West Java during the COVID-19 pandemic, characterized by a decrease in ROA and an increase in NPLs. However, CAR and

equity show a tendency to increase, while net income fluctuates. Despite the decline, the average ROA value remains above the minimum standards set by the Central Bank. Moreover, CAR and equity are also maintained at levels beyond the minimum requirements, although NPLs have risen sharply and do not meet the Central Bank's maximum standards.

The determinants of CAR, NPLs, equity, net income, and the COVID-19 pandemic collectively influence the profitability of rural banks in West Java. Specifically, CAR has a significant positive effect, while NPLs and the COVID-19 pandemic have significant negative effects. However, all independent variables can only explain less than half of the variance explained in the dependent variable, indicating that the majority of it is influenced by other factors.

Recommendations

To maintain and enhance profitability for rural banks in West Java, several strategies and policies can be implemented. These include increasing capital buffers during the post-crisis recovery period, enforcing strict credit policies with regular supervision, increasing the volume of credit disbursed, implementing good governance practices by optimizing the role of the board of commissioners in supervision, and limiting risky management decisions related to capital structures. Additionally, focusing on operational cost efficiency can help reduce burdensome expenses for the company.

REFERENCES

- Ali M, Puah CH. 2018. The internal determinants of bank profitability and stability: an insight from banking sector of Pakistan. *Management Research Review* 42(2): 49–67. <https://doi.org/10.1108/MRR-04-2017-0103>
- Almaqtari FA, Al-Homaidi EA, Tabash MI, Farhan NH. 2018. The determinants of profitability of Indian commercial banks: a panel data approach. *International Journal of Finance and Economics* 24(1): 1–18. <https://doi.org/10.1002/ijfe.1655>
- Ari A, Chen S, Ratnovski L. 2021. The dynamics of non-performing loans during banking crises: a new database with post COVID-19 implications. *Journal of Banking and Finance* 133: 1–22. <https://doi.org/10.1016/j.jbankfin.2021.106140>
- Assaf AG, Berger AN, Roman RA, Tsionas MG. 2019.

- Does efficiency help banks survive and thrive during financial crisis. *Journal of Banking and Finance* 106: 445–470. <https://doi.org/10.1016/j.jbankfin.2019.07.013>
- [BAPPEDA] Badan Perencanaan Pembangunan Daerah Jawa Barat. 2020. *Rencana Kerja Pemerintah Daerah Provinsi Jawa Barat Tahun 2021*. Bandung: Badan Perencanaan Pembangunan Daerah Jawa Barat.
- [BPS] Badan Pusat Statistik. 2021. *Pertumbuhan Ekonomi Indonesia Triwulan I-2021*. Jakarta: Badan Pusat Statistik.
- Balbaa ME. 2020. The predicted 2020 global economic crisis: causes and prospects. *The Light of Islam* 2: 182–192.
- [BI] Bank Indonesia. 2013. Peraturan Bank Indonesia Nomor 15/11/PBI/2013. *Prinsip Kehati-hatian dalam Kegiatan Penyertaan Modal*. Jakarta: Bank Indonesia.
- [BI] Bank Indonesia. 2019. Peraturan Bank Indonesia Nomor 21/12/PBI/2019. *Rasio Intermediasi Makroprudensial dan Penyangga Likuiditas Makroprudensial bagi Bank Umum Konvensional, Bank Umum Syariah, dan Unit Usaha Syariah*. Jakarta: Bank Indonesia.
- Ekinici R, Poyraz G. 2019. The effect of credit risk on financial performance of deposit banks in Turkey. *Procedia Computer Science* 158: 979–987. <https://doi.org/10.1016/j.procs.2019.09.139>
- Lestari M. 2014. Dampak krisis ekonomi dan masuknya bank umum pada dasar kredit usaha mikro kecil terhadap kinerja bank perkreditan rakyat (BPR) DIY. *KINERJA* 18(1): 45–63. <https://doi.org/10.24002/kinerja.v18i1.517>
- Nezky M. 2013. The impact of US Crisis on trade and stock market in Indonesia. *Buletin Ekonomi Moneter dan Perbankan* 15(3): 83–96. <https://doi.org/10.21098/bemp.v15i3.428>
- [OJK] Otoritas Jasa Keuangan. 2015. POJK Nomor 5/POJK.03/2015. *Kewajiban Penyediaan Modal Minimum dan Pemenuhan Modal Inti Minimum Bank Perkreditan Rakyat*. Jakarta: Otoritas Jasa Keuangan.
- [OJK] Otoritas Jasa Keuangan. 2020. *Laporan Profil Industri Perbankan Triwulan II 2020*. Jakarta: Otoritas Jasa Keuangan.
- [OJK] Otoritas Jasa Keuangan. 2022. Statistik BPR Konvensional. <https://www.ojk.go.id/id/kanal/perbankan/data-dan-statistik/Statistik-BPR-Konvensional/Default.aspx> [2022 Juni 25].
- Poruchnyk A, Kolot A, Mielcarek P, Stoliarchuk Y, Ilnytsky D. 2020. Global economic crisis of 2020 and a new paradigm of countercyclical management. *Business Perspectives* 19(1): 397–415. [https://doi.org/10.21511/ppm.19\(1\).2021.34](https://doi.org/10.21511/ppm.19(1).2021.34)
- Raharjo TH, Prasetyo I, Kristina L. 2021. Perbandingan kinerja keuangan BPR dan BPRS di Jawa Tengah selama masa pandemi COVID-19. *PERMANA: Jurnal Perpajakan, Manajemen, dan Akuntansi* 13(2): 233–250. <https://doi.org/10.24905/permana.v13i2.168>
- Rahayu NI, Putra S. 2021. Prosedur pemberian kredit macet di era pandemi pada PT BPR Tuah Negeri Mandiri Pekanbaru. *Economics, Accounting, and Business Journal* 1(1): 261–269.
- Siswanti T, Kharimsa. 2016. Analisis pengaruh laba bersih sebelum pajak dan total aset terhadap return on assets (ROA) pada perusahaan properti yang terdaftar di Bursa Efek Indonesia periode 2011-2015. *Jurnal Akuntansi & Bisnis UNSURYA* 1(1): 59-76. <https://doi.org/10.35968/jbau.v1i1.163>
- Sofyan M. 2021. Kinerja BPR dan BPRS pada masa pandemik COVID-19. The 2nd Seminar Nasional APDI Mengabdikan untuk Negeri; 2021 Jan 23–24; Indonesia. Indonesia: Asosiasi Dosen PkM Indonesia.
- Tambunan T. 2021. Micro, small and medium enterprises in times of crisis: Evidence from Indonesia. *Journal of the International Council for Small Business* 2(4): 278–302. <https://doi.org/10.1080/26437015.2021.1934754>
- Wardhani PS, Ismunawan. 2021. Impact pandemi COVID-19 terhadap rentabilitas bank perkreditan rakyat konvensional di Kabupaten Sukoharjo. *Jurnal Bisnis dan Akuntansi* 23(1): 165–178. <https://doi.org/10.34208/jba.v23i1.927>
- Widyasari, Nataherwin. 2016. Faktor-faktor yang mempengaruhi kinerja dan efisiensi bank perkreditan rakyat di Jakarta. *Jurnal Ekonomi* 21(3): 408–419. <https://doi.org/10.24912/je.v21i3.27>