Differences Between Liquidity, Capital, and Profitability of Small and Middle Rural Banks

I Nyoman Nugraha Ardana Putra[1*], *Elin Erlina* Sasanti[1], *Nengah* Sukendri[2], and *Ni Putu Ari* Aryawati[2]

[1] University of Mataram, Jl. Majapahit No. 62 Mataram, West Nusa Tenggara 83125 Indonesia
[2] Institut Agama Hindu Negeri Gde Pudja Mataram, Jl. Pancaka No. 7B Mataram, West Nusa Tenggara 83126, Indonesia

Abstract. This research aims to examine the differences between liquidity, capital, and profitability of small and middle rural banks (BPR). This quantitative research with a comparative research type compares small rural banks (BPR) and medium rural banks (BPR) in West Nusa Tenggara Province. Data for this research are secondary data from rural banks' financial reports and other publications. The data were analyzed with a comparative test (comparative analysis), namely the 2-sample independent t-test distinguishing the characteristics based on total assets, then compared in terms of liquidity, profitability, and capital. The result of the previous research with at-test revealed that the 29 rural banks in West Nusa Tenggara have two categories, i.e., small rural banks (23 banks) and middle rural banks (6 banks). The results of this study show there are no differences in bank soundness between small and middle rural banks in terms of liquidity, capital, and profitability.

1 Introduction

Rural banks (BPR) are one of several microfinance institutions that carry out both conventional and sharia business activities; nevertheless, they do not provide payment traffic services in their activities. The rural bank is classified as a micro-enterprise based on the capital range requirement, which is between Rp 500,000,000, - and Rp 1,000,000,000, - [1]. In terms of reporting standards, the rural bank is a unique finance institution in Indonesia since it's relatively small but uses standards applied by relatively larger size banks. Anderson and Ullah [2] suggest that the company maintains a small company size because it is feared that the company cannot guarantee its business sustainability if it becomes larger. The unique nature of these microfinance institutions motivates this study to examine the scope of small and medium enterprises in microfinance institutions in detail.

Abdel Megeid [3] performed an independent t-test to compare the liquidity of conventional banks and Islamic banking and found that there were liquidity differences between the banks, whereby cash availability in conventional banks was higher than in Islamic banks. This result contradicted Anderson and Ullah [2] and Rana *et al.* [4], who found

* Corresponding author: nyoman.nugraha@unram.ac.id

that the performance of Islamic banks, which are generally smaller, turned out to be better than that of conventional banks. In the Indonesian setting, where the size of conventional banks is generally larger than Islamic banks, there was a unique phenomenon between these two types of banks [5]. When the performance indicators in terms of risk of default payment, risk of interest rate, liquidity, capital, implicit return, opportunity cost, and management quality of conventional banks increase, the indicators of Islamic banks will decrease. This means that there are indications of a negative relationship between Islamic banks and conventional banks. This result supports Anderson and Ullah [2] and Hutapea and Kasri [5] as they had better indicators for small businesses rather than indicators for large businesses.

One of the eight constraints dealt with by microfinance is related to capital liquidity and profitability [6]. These two indicators represent bank soundness of microfinance institutions. The following data presented in Table 1 describes the liquidity, capital adequacy, and profitability of the Rural Bank in West Nusa Tenggara Province.

Table 1. Liquidity, Capital Adequacy, and Profitability of Rural Bank in West Nusa Tenggara Province Period 2015-2016

Indicator	Year		Standard
	2015	2016	
LDR (%)	84.10	84.48	92-110
CAR (%)	34.34	38.79	8
ROA (%)	4.76	4.20	1.22

Source: Bank of Indonesia [1]

Table 1 shows that the liquidity of the Rural Bank in West Nusa Tenggara Province, as indicated by the loan-to-deposit ratio (LDR) during 2015-2016, was lower than the standard of 92%. This indicated that the Rural Bank in West Nusa Tenggara Province was illiquid in 2016 and more illiquid in 2015. In terms of capital adequacy, the Capital Adequacy Ratio (CAR) was at 34.35% in 2015 and then decreased to 28.69% in 2016. Looking furthermore deeply at ROA and CAR during this period, there was an unusual tendency among the two ratios, whereby ROA decreased while CAR increased. ROA values were 4.76% in 2015 and then decreased to 4.14% in 2016. Meanwhile, the CAR has a positive trend, increasing to 4.34% in 2016. Based on the data presented in Table 1, rural banks in West Nusa Tenggara were in a sound state since they scored better than expected standards. The state of rural banks in 2015 was better than in 2016, except for CAR value, which was better in 2016 than in 2015. Overall, the focus that will be examined in this research is the differences between small and middle Rural banks in West Nusa Tenggara Province in terms of liquidity, capital adequacy, and profitability to address the contradictory results of previous studies comparing small and large companies.

Liquidity risk is the risk due to the inability of a bank to meet its maturing obligations from cash flow funding and/or from high-quality liquid assets as collateral without disturbing the activities and financial condition of the bank. Liquidity risk is caused by financial transactions or commitments. Thus, banks must identify every financial transaction that has implications for bank liquidity and maintain liquidity conditions carefully. Liquidity management is one of the most important activities carried out by banks. Lack of liquidity in one bank, apart from having an impact on the bank, can also have a wider effect on the banking system as a whole. Therefore, in managing liquidity risk, it is necessary to apply the right strategy and effective supervision, which is implemented through processes that have been validated in measuring liquidity risk. Several things can lead to unexpected liquidity needs, such as a decline in the reputation or rating of the company and declining economic conditions.

Capital is the most important resource owned by banks in ensuring the maintenance of solvability and financial resources that are ready to be used to absorb losses because they do not require repayment. Bank capital management must have a sound composition and be in accordance with the bank's strategic objectives to cover risks from bank activities [7]. One measurement that is very commonly used in evaluating bank capital is CAR (capital adequacy ratio), which compares capital to risk-weighted assets [8].

In this study, profitability means the company's ability to generate profits (profitability). The company's performance is the result of all management decisions that are carried out continuously. The company's performance appraisal requires a measure that can provide information about the company's performance to be used as a basis for management decision-making. The most used measure is financial ratios, which use information sourced from the company's financial statements, namely the balance sheet and profit and loss list. The use of financial ratios can help in interpreting the relationship between the numbers contained in the financial statements. Financial ratios can also be used as a tool to measure the success of the company's activities from a financial perspective.

Profitability is one of the performance indicators of Rural Banks (BPR) used to assess the soundness of the bank, whose standards are regulated by Bank Indonesia based on a Circular Letter of Bank Indonesia. Profitability is the net result of several policies and decisions within the company [9]. The performance appraisal used in this study is a measure of BPR performance in its ability to generate profits (profitability/earnings), which is based on the Circular Letter of Bank Indonesia [10]. Therefore, this study only uses one indicator, namely ROA, as an indicator of profitability, in contrast to commercial banks that use Net Interest Margin (NIM) and Return on Equity (ROE) in assessing company profitability. ROA shows the company's ability to generate revenue for business operations and is a measure of management effectiveness. Putra [1] tested differences in the ability to generate profits and non-performing loans before and after the merger of the Rural Credit Barn Rural Bank (BPR-LKP) in West Nusa Tenggara Province. The results showed that there were differences before and after the merger between BPR-LKP in terms of profits and non-performing loans.

Various previous studies have addressed the comparison of performance between small and large banks. Rana et al. [4] analyzed the differences between Islamic banks and conventional banks in Bangladesh from 2013 to 2014. The purpose of the study was to compare profitability and liquidity between the two banks. Profitability indicators used include ROAA, ROAE, and PEM, while liquidity uses CR, LDR, and NLTA measurements. The results indicate that Islamic banks in Bangladesh have a better performance than conventional banks, namely in terms of profitability, liquidity, and efficiency; Islamic banks are very superior. El Masah and Al-Sayed [11] conducted the same study in the United Arab Emirates (UAE), which used research data from all banks in the UAE during the period 2008 to 2014. The bank consisted of five Islamic banks and eleven conventional banks. In measuring the performance of these banks, they used measurements of profitability, liquidity, solvency, and credit risk. The results illustrate that conventional banks have superior conditions compared to Islamic banks compared to Islamic banks in terms of profitability, credit risk, and solvency.

Matthew and Esther [12] conducted a study by comparing the performance of larger foreign banks with smaller banks, namely local banks in Ghana. Several variables are used as comparisons, such as Return on Assets, Return on Equity, Asset Quality, Capital Adequacy, Management Efficiency, Earning Performance, Liquidity, and Bank Size. The results indicated that larger banks (foreign banks) have better performance in terms of capital adequacy, productive assets, earning power (generating profit before tax), and liquidity. However, the study indicated an unusual result whereby smaller local banks have the ability to generate higher profits (after tax) as indicated by ROA and ROE and are better in terms of efficiency compared to foreign banks.

Prabu and Chandrasekaran [13] conducted a comparative study on two banks in India, namely the State Bank of India (SBI), which is the largest bank in the banking industry, and ICICI, which is the second largest bank in India—using secondary data from 2009 to 2014. The results show that SBI has a better performance overall than ICICI. However, it turns out that ICICI is more efficient than SBI in terms of business efficiency. Mistri and Savani [14] also conducted the same test in India. The difference is that in this study, the first classification or classification of the size of the company is based on its characteristics based on assets and interest income. In the next stage, an assessment of the bank's performance is carried out. The results of the study show that the larger a bank, the more efficient its operations will be.

Ally [15] analyzes the financial performance of banks in Tanzania for a seven-year period from 2006 to 2012. The profitability measurement is used with indicators of Return on Assets (ROA), Return on Equity (ROE), and Net Interest Margin (NIM) in analyzing bank performance. The analytical tool used in analyzing these differences is the Analysis of Variance (ANOVA), which measures the average of the indicators used as a comparison for large banks, medium-sized banks, and regional banks (small banks). A total of 28 banks were used as samples, each of which consisted of eight large banks, thirteen medium-sized banks, and seven regional and small banks. The result is that there is no difference between large, medium, and small banks with the ROA indicator, and precisely with the ROE and NIM indicators, it turns out that there are differences between the three types of banks. This means that there is still controversy regarding the results of this profitability measurement. Menicucci and Paolucci [16] conducted research on several variables that affect profitability. The interesting thing from this research is that one of the independent variables is the size of the bank, and it turns out that the size of the bank has a positive effect on profitability. This means that the larger the size of the bank, the higher the ability to generate profits (profitability).

Helhel [17] conducted a comparative study of profitability between foreign banks and domestic banks in Georgia during the period 2009 to 2013. The indicators used included ROA, ROE, NIM, and PEM in fourteen banks. Nine of them were foreign banks, and the remaining six were local banks. The comparison results show that there is no difference between foreign banks and domestic banks. Divini and Schiniotakis [18] conducted a study to distinguish between profitable and unprofitable banks and to see the effect of variables on age, company location, education, amount of training, work experience, and performance evaluation using logit analysis (logistic regression). The results of this research show that profitable companies usually have the characteristics of having an older age (longer establishment), place of business (location), and performance evaluation.

From several theories and previous research, it can be stated and proposed a hypothesis statement as follows:

H_1: Medium Rural Banks (BPR) have a higher level of liquidity and are different from small Rural Bank (BPR).

H_2: Small Rural Bank (BPR) have a higher capital adequacy and are different from medium Rural Bank (BPR).

H_3: There is no difference between small Rural Bank (BPR)and medium Rural Bank (BPR) in terms of profitability.

2 Research Method

This research is quantitative research with a comparative research type, which compares small rural banks (BPR) and medium rural banks (BPR). This research starts by distinguishing the characteristics based on total assets and then comparing them in terms of

liquidity, profitability, and capital. This research was conducted at Microfinance Institutions, namely Rural Banks (BPR) in the West Nusa Tenggara Province (NTB), comparing Small Rural Bank (BPR) and Medium Rural Bank (BPR) in order to contribute ideas about the soundness of banks.

The population in this study were all rural banks in the West Nusa Tenggara Province. This means that the data collection method used is the census so that all companies or BPRs that report quarterly financial reports to Bank Indonesia during the period March, June, September, and December 2015 and 2016. Based on the data collection method, there were 29 companies. According to Putra et al. [19], there are 6 BPRs in the large category and 23 BPRs in the small category.

The measurement of the variables tested for differences is using the following indicators:

1. Liquidity is the ability of Rural Bank to perform the function of intermediary or intermediation by collecting public funds and then channeling them to third parties (the public) in the form of credit. Liquidity is measured by the ratio of Loan to Deposit Ratio (LDR). The LDR is calculated based on the following formula:

$$\text{LDR (Loan to Deposit Ratio)} = \frac{Loan\ Amount}{Amount\ of\ Deposit}$$

[20]

2. Capital is measured by the Capital Adequacy Ratio (CAR), which compares core and complementary capital with risk-weighted assets. The CAR is calculated based on the following formula:

$$\text{CAR (Capital Adequacy Ratio)} = \frac{\text{Core Capital + Supplementary Capital}}{ATMR}$$

[10]

3. Profitability is measured by the ratio of Return on Assets (ROA) of the banking sector, which shows the company's ability to generate revenue for business operations and becomes a measure of management effectiveness. The ROA is calculated based on the following formula:

$$\text{ROA (Return on Asset)} = \frac{Profit\ Before\ Tax}{Total\ Assets}$$

[20,21]

The test was carried out through a comparative test (comparative analysis), namely the two-sample independent t-test. Comparative analysis is usually used to average between or more groups of data samples. Only then was the statistical hypothesis tested. Ha is accepted if the significance is < 0.05, then H_0 is rejected, which means that in this condition, there is a difference between small Rural Banks and medium Rural Banks in terms of liquidity, capital adequacy, and profitability. Furthermore, Ha is rejected if the significance is > 0.05, then H_0 is accepted, i.e., there is no difference between small Rural Banks and medium Rural Banks in terms of liquidity, capital adequacy, and profitability. However, before carrying out the independent test, it is necessary to perform a normality test since the independent t-test requires that the dependent variable is approximately normally distributed within each group. The independent t-test also assumes the variances of the two groups being measured are equal in the population. A Levene's Test for Equality of Variances is needed in order to meet this

assumption. The statistical hypothesis used to test the difference between small and medium rural banks is:

H_0: There is no difference between small and medium-sized rural banks in terms of liquidity, capital adequacy, and profitability.

Ha: There are differences between small and medium-sized rural banks in terms of liquidity, capital adequacy, and profitability.

3 Results and Discussion

The data used in this study is panel data (pooled data), which means that this research combines time series data with cross-section data. Time series data is data according to sequential time series (one company but many periods), while cross-section data is data discussed in a certain period, but with more than one object (one period, many companies). So, this research uses many periods and many companies. There were 29 rural banks analyzed with quarterly data, namely September 2015 and September 2016, and this study took place in 2 periods, 2015 and 2016, so there were 58 research samples (n) used in the analysis. Six medium rural banks and 23 small rural banks are used in this study. Since the research period is two years, the total number of observations is 58. Table 2 presents the descriptive statistics for LDR, ROA, and CAR.

LDR or Loan to Deposit Ratio is a comparison between the amount of credit extended by banks to the public and the amount of deposits in the form of savings, time deposits, or demand deposits so that it can provide an overview of the banking intermediary function. The LDR for medium rural banks is 80.75 and for small rural banks is 85.21, which means that small rural banks are relatively more capable of disbursing credit than medium rural banks. ROA and CAR proxies are transformed into data so that a natural log (LN) is used with the aim that the data can be normally distributed. ROA for medium rural banks is more capable of generating profits than for small rural banks. Finally, Small rural banks have a higher capital adequacy ratio than Medium rural banks, which means that small rural banks use more of their own capital (main and supplementary capital) than Medium rural banks distribute back in the form of loans.

Table 2. Descriptive Statistics

VAR	SIZE	N	Mean	Std. Deviation	Std. Error Mean
LDR	MED	12	80.7500	14.80863	4.27488
	SMALL	46	85.2174	15.31000	2.25734
LNROA	MED	12	1.5285	.74839	.21604
	SMALL	42	1.3610	.72303	.11157
LNCAR	MED	12	3.1791	.64222	.18539
	SMALL	46	3.4854	.57851	.08530

Sources: Results of data analysis

One of the basic assumptions that generally needs to be fulfilled before carrying out data analysis with inductive statistics is that the data should have a normal distribution. There are many ways to test the normality of data, for example, with the Kolmogorov-Smirnov one-sample test or with a method that usually uses normal probability plot graphs and normal curves. The Kolmogorov-Smirnov test uses a non-parametric test to calculate the spread of the analyzed data. In the graphical method, judgments are used based on judgment or image ratings from the data being analyzed. Both methods have their respective strengths and weaknesses, but in general, the Kolmogorov-Smirnov method is more objective in assessing the data, while the graphical method is easier to interpret but seems to have a subjective element.

The results of the normality test for the proxies analyzed in the context of carrying out the differential test on small and medium rural banks are:

Table 3. Results of the Normality Test

		LDR	ROA	CAR
N		58	58	58
Normal Parameters[a,b]	Mean	84.2931	4.4828	36.5690
	Std. Deviation	15.18888	4.13475	22.96612
Most Extreme Differences	Absolute	.060	.140	.148
	Positive	.060	.140	.148
	Negative	-.044	-.131	-.135
Test Statistic		.060	.140	.148
Asymp. Sig. (2-tailed)		.200[c,d]	.006[c]	.003[c]

Sources: Results of data analysis

Table 3 shows that most of the data from these proxies are not normally distributed. This is illustrated by the significance value, which is smaller (<) than 0.05, which means that the data is not normally distributed. The results of the Kolmogorov-Smirnov test for the three proxies showed that ROA and CAR each showed smaller significance, namely 0.006 and 0.003, which means that the data for the two proxies was not normally distributed. Only one proxy has a normal distribution because its significance value is greater (>) than 0.05, which is LDR with a significance value of 0.2.

Based on the results of the Kolmogorov-Smirnov test, a different test using the independent t-test cannot be carried out since the normal assumptions have not been fulfilled by the two proxies. The implementation of the different tests can only be carried out when the three proxies are normally distributed. The method taken so that the data can meet the data normality assumption is to transform the data using Ln (Natural Logarithm) so that it is expected that extreme data ranges can be avoided. The results of the data normality test with the Kolmogorov-Smirnov test after data transformation are as follows:

Table 4. Normality Test after Data Transformation

		LDR	LNROA	LNCAR
N		58	54	58
Normal Parameters[a,b]	Mean	84.2931	1.3982	3.4221
	Std. Deviation	15.18888	.72498	.59956
Most Extreme Differences	Absolute	.060	.132	.098
	Positive	.060	.123	.098
	Negative	-.044	-.132	-.086
Test Statistic		.060	.132	.098
Asymp. Sig. (2-tailed)		.200	.019[c]	.200

Sources: Results of data analysis

Based on Table 4, the LNROA proxy is still not normally distributed after data transformation, with a significance of 0.019. Thus, it is necessary to carry out a normality test using the graphical method. The results of the normality test for the LNROA variable with the graphical method are as follows:

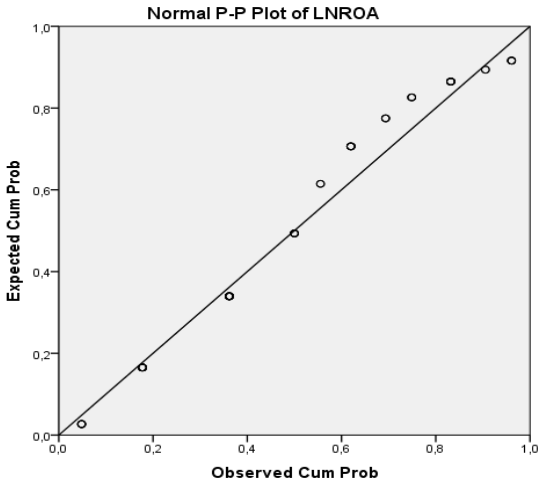

Fig 1. Normality Test with graphical method

Based on the results of the normality test using the normal probability plot, the dots are getting closer to the prediction line. Thus, Figure 1 gives an indication of the presence of normally distributed data.

The next analysis after fulfilling the normality test is to carry out the Difference test. This test is often referred to as a comparative test, which in this study used an analysis of two independent-sample t-tests. This test compares the means of two independent data sample groups. The point between the two things being compared is that each is an object that is different from one another. The use of the independent t-test is because the average being compared only consists of two things; when there are more than two, it is recommended to use an analysis of variance (ANOVA).

The results of Levene's Test for Equality of Variances and the independent t-test are presented in Table 4. Through Levene's test, it is known that the data is heterogeneous or homogeneous so that the decision-making in the difference test becomes more accurate because if it is homogeneous, it means that the independent difference test must refer to the level of significance at equal variance assumed and if heterogeneous it is seen at equal variance not assumed. Based on the results in Table 4, LDR, ROA, and CAR show a significant level of Levene's test of 0.883, 0.957, and 0.704, which means that all proxy data have a level of homogeneity so that it must be analyzed based on equal variances assumed.

Table 5. Independent t-test results

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	Upper
LDR	Equal variances assumed	.022	.883	-1.123	56	.266	-5.51449	4.91226	-15.35493	4.32594
	Equal variances are not assumed.			-1.027	15.521	.320	-5.51449	5.37059	-16.92825	5.89927
ROA	Equal variances assumed	.003	.957	.584	52	.562	.14395	.24650	-.35068	.63858
	Equal variances are not assumed.			.591	15.750	.563	.14395	.24375	-.37343	.66134
CAR	Equal variances assumed	.145	.704	.656	56	.515	.12805	.19533	-.26324	.51933
	Equal variances are not assumed.			.623	16.171	.542	.12805	.20562	-.30747	.56357

Source: Results of data analysis

The LDR indicator has a significant level of 0.266, which indicates there is no difference between the liquidity of small rural banks and medium rural banks. Thus, H_0 is accepted. Small rural banks have the same LDR ratio value as medium rural banks. Both types of Rural banks are equally illiquid and do not have good liquidity because they have LDR values below 92%. Therefore, although they differ in size based on total assets, these Rural Banks have one thing in common, namely, they are less able to channel credit as a form of intermediary function for the banking industry. This is due to the higher interest rates for savings applied by Rural Banks than conventional banks, which motivate people to save their money at rural banks. Especially after third-party deposits in Rural Banks have been guaranteed by LPS with a nominal value of Rp. 2,000,000,000, -. Thus, the impact is that the savings in the Rural Bank are greater than the lending distribution.

The LNROA proxy also has a greater significance (>) 0.05, which is 0.562. Thus, H_0 is accepted. The meaning of this statistic is that there is no difference between small rural banks and medium rural banks in terms of the companies' ability to generate profits (profitability). The ability of rural banks to generate profits is classified as good in this study since the overall assets of rural banks are able to earn a net profit before tax, which is higher than the Bank Indonesia standard of 1.22. It was also emphasized that small rural banks and medium rural banks have similarities in their ability to generate profits.

The last is the LNCAR proxy, which produces a significance of 0.515, which is greater than 0.05, which indicates the rejection of H_a and H_0 is accepted. This result is in line with the other three proxies in that there is no difference in the capital adequacy ratio of Small and Medium Rural Bank (BPR). There are similarities between small rural banks and medium rural banks in meeting their capital adequacy above 8%. This is certainly a very good thing because of the risks faced by rural banks when large amounts of public funds are withdrawn; the condition of the rural bank concerned is not at risk. This means that rural banks not only

get funds from the community to be channeled in the form of credit but also have their own capital to be given to the community so that the risk of default is small. There is no difference in the capital conditions of small rural banks and medium rural banks. Both types of rural banks show good performance; even the lowest CAR value for Rural Banks is still above the standard of 9%. The results of these four variables further strengthen that there is no difference in performance standards between small rural banks and medium rural banks.

4 Conclusion

This study aimed to compare the performance of rural banks by focusing on liquidity, capital adequacy, and profitability to assess the soundness of small rural banks and medium rural banks in West Nusa Tenggara Province. Based on the results of the analysis, it can be concluded that in terms of liquidity, there are no significant differences between small rural banks and medium rural banks. The same results also applied to the other two indicators, namely capital adequacy and profitability. Both types of rural banks showed that there were no significant differences among them. Although the results indicated that both types of rural banks were in a sound state, as shown by their CAR and ROA, the results imply that rural bank in West Nusa Tenggara Province needs to pay attention to their liquidity since the LDR was below the applicable standards. In order to be able to further increase their liquidity capabilities in channeling credit to the public, rural banks in West Nusa Tenggara Province need to apply interest rates for savings accounts that are not too high so as to attract potential customers to take credit at the rural bank in question.

Despite revealing theoretical and practical implications, this study is not prone to limitations. First, this study only focuses on the rural banks in West Nusa Tenggara Province. Thus, generalizations about rural banks in other geographical areas of Indonesia need to be made with caution. Second, the relatively small sample size also limits the generalization of this study. We suggest further study could use a longitudinal design, especially after the issuance of POJK Number 5/POJK.03/2015 concerning Minimum Capital Adequacy Requirements and BPR Minimum Core Capital Requirements, to compare the rural bank performance before and after the issuance of new POJK.

References

1. Putra, I. N. N. A. Perbedaan Profitabilitas dan Tingkat Pengawasan Sebelum dan Sesudah Merger pada Bank Perkreditan Rakyat. Jurnal Keuangan Dan Perbankan, **17**, 2, pp.302–309, (2013).
2. A.R. Anderson, & F. Ullah, Management Decision, **52**, 2, pp.326–349, (2014).
3. N. S. A Megeid, J. of Islamic Acc.and Busi. Re. 8, 1, (2017).
4. M. Rana, M. Hossain, & R. Rekha, Int. J. of App. Re., **2**, 9, pp.318–327, (2016).
5. E. G. Hutapea & R. A. Kasri, Int. J. of Islamic and Mddl E. Fnnc. and Mng, **3**, 1, pp.65–82, (2010).
6. I. N. N. A. Putra, *Jurnal Keuangan Dan Perbankan*, *16*(3), 437–444, (2012).
7. Rambey, S. Indonesia Certificate in Banking Risk and Regulation Level 2 Module 1. School of Banking and Finance, (2012).
8. Kasmir. Pengantar Manajemen Keuangan: Edisi Kedua (2nd ed.), Kencana, (2016).
9. E. F. Brigham, & P. R. Daves, *Intermediate financial management* (8. ed., internat. student ed). Thomson/South-Western, (2004).

10. S. Sembiring, Himpunan Peraturan Perundang-undangan Republik Indonesia "Bank Perkreditan Rakyat" (BPR). Penerbit Nuansa Aulia, (2010).
11. S. El Massah, & O. Al Sayed, Int. J.of Inf.Tech. and Bssns. Mngmnt, **36**, 1, pp. 69–81, (2015).
12. N.-G. Matthew, & L. A. Esther, Int. J. of Bsnss. and So. Scie., **3**, 21, pp.82–87, (2012).
13. G. G. Prabhu & G. Chandrasekaran, Int. J. of Re. in B. M. **3**, 4, pp. 19–26, (2015).
14. D. Mistri, & V. A Savani, Comparative Study of The Profitability Performance In The Banking Sector: Evidence From Indian Private Sector Bank (2015).
15. Z. Ally, Re. J. of Finance & Acc., **4**, 19, pp. 133–143, (2013).
16. E. Menicucci and G. Paolucci, J. of Fi. Rep. and Acc., **14**, 1, pp. 86-115, 2016.
17. Y. Helhel, Int.J. of Fnnc. and Acco., **4**, 1, pp. 52–59, (2015).
18. A. Divini & N. Schiniotakis, Team Performance Management, **21,** 1/2,pp. 51–64. (2015).
19. I. N. N. A. Putra, D. P. B. Sakti, I. G. Mandra, I. D. G. Bisma, & G. S. Oktaryani, J. of M. and B., **6**, 2, pp.24–34, (2018).
20. I. N. N. A. Putra, S. S. A. Mannan, T. A. Gumanti, & N. Sukendri, The Effect of Managerial Ownership on Liquidity, Agency Cost and Performance of Credit Society Banks in West Nusa Tenggara Province of Indonesia (I. Trinugroho & E. Lau, Eds.; 1st ed.), (2019).
21. Taswan. Manajemen Perbankan, Konsep, Teknik dan Aplikasi. UPP STIM YKPN, (2010).