
Factors Affecting Performance And Efficiency Of Rural Banks In Jakarta

Widyasari*Fakultas Ekonomi Universitas Tarumanagara*

*Corresponding Author

Email : nawawina@yahoo.co.id

Abstract

This study aims to examine the influence of various factors that affect the performance and efficiency of Bank Perkreditan Rakyat (BPR). The analysis of this study is focused on the Bank Perkreditan Rakyat in Jakarta. Sample size was 72 firms-years during 2010-2012. The findings of this study show the influence of market forces, the intensity of bank loans, bank size, risk, quality of management and shareholder value simultaneously to the performance of BPR as follows for ROA was 67.51%, ROE of 64.96%, NII / TA amounted to 71.27%. Based on the results of the regression to examine the effect of market forces, the intensity of bank loans, bank size, risk, quality of management and shareholder value simultaneously to the efficiency of the bank amounted to 82.75% of BPR. Partially LNDEPO, LOANS_TA, NIE_TA negative and significant effect, and to influence LNTA positive and significant effect on efficiency, while for variable LLP_TL and EQUITY_TA not significant.

Keywords: *Bank Perkreditan Rakyat, Performance, efficiency.*

INTRODUCTION

Rural Bank (BPR) as one type of bank known to serve Micro, Small and medium entrepreneurs with locations that are generally close with a community place in need. BPR specifically serve the needs communities in rural areas and small micro enterprises (MSEs) in the form of deposits (savings and deposits) and credit. BPR cannot issue checks and bilyet giro like a commercial bank. The operational area of BPR is limited to only one province. Therefore, the study in this study will support the MSME development program by looking at the performance of BPR running the financial intermediation function. To can compete in the banking industry, BPR in running its business should be more efficient and effective. Therefore, we need a healthy BPR, strong, and trusted where BPR needs to improve its performance. In this study, researchers are interested to know the various factors that affect the performance of banks BPR and factors affecting the efficiency of the bank BPR. Indeed various factors poor Macroeconomics can affect performance. Achievement of performance both required an approach in which the creation of a sustainability bank BPR which can improve efficiency.

This study aims to determine the influence of factors affect the performance and efficiency of Rural Banks. While The Benefits Research to provide confirmation, support, response to research results previously, assist in providing considerations about the rules banking, including whether Bank Indonesia provides protection to customers / community. The results of this study is expected to be used as one of the guidelines for improvement of regulations and company policies and is expected to be information in making investment decisions in banking.

RESEARCH METHODS

This research is categorized as hypothesis testing. The population of this study are rural banks operating in DKI Jakarta during 2010- 2012. Samples were taken based on purposive sampling of rural banks registered during the observation year and have complete financial statement data. The dependent variable in this study is the performance (performance), efficiency. While the independent variables in this study are market forces, intensity bank lending, bank size, risk, management quality and shareholder value. Variable Performance is a measure of the success rate of Management in manage company resources, both financial and non-financial resources. In this study, we used financial measurements to assess performance companies, namely ROA (return on total assets), ROE (return on equity), net interest income to total assets (NII/TA). Efficiency variable is the level of how much utilization of total assets to achieve profitability using DEA. Second inputoriented (IOM) and output-oriented (OOM) versions of the DEA methodology have been applied to the data for the sake of efficiency score comparison. A model oriented output implies that efficiency is estimated by the output of the relative firm against the best practice level of output for the input level. To determine the formulation mathematically from this OOM, let's assume that we have a decision K makes unit (DMU) k uses n inputs to produce m outputs. Input notated with x_{jk} ($j = 1, 0o, n$) and the output represented by y_{ik} ($i = 1, o \dots, m$) for each km k ($k = 1, o \dots, K$). DMU efficiency can be measured as (Coelli, 1998). Variable Market power is to measure market power, LNDEPO, measured by bank deposits divided by total assets. The variable intensity of Bank lending is measurement intesitas bank loans, LOANS_TA, revealed a positive relationship and significant impact on efficiency and performance. Bank size variable is a proxy of the size bank (LNTA) to capture the cost advantage that may be associated with the size of (economies of scale). Risk variables are measured using the ratio llp_tl that provision loan losses divided by the total loan. Variable quality management is ratio of non-interest operating costs to total assets, NIE (Non interest expense) /TA, used to provide information about variations in operating costs throughout banking system. Variable shareholder value is measured by using EQUITY/TA ratio, which is the book value of equity divided by total assets.

Research Model used to test the hypothesis used regression analysis multiple linear using eviews 6, the research model is:

1. Performance

$$ROA = A1 + A2 LNDEPO + A3 LOANS_TA + A4 LLP_TL + A5 NIE_TA + A6 EQUITY_TA + A7 LNTA + e$$

$$ROE = A1 + A2 LNDEPO + A3 LOANS_TA + A4 LLP_TL + A5 NIE_TA + A6 EQUITY_TA + A7 LNTA + e$$

$$NII / TA = A1 + A2 LNDEPO + A3 LOANS_TA + A4 LLP_TL + A5 NIE_TA + A6 EQUITY_TA + A7 LNTA + e$$

2. Efficiency

$$DEA = A1 + A2 LNDEPO + A3 LOANS_TA + A4 LLP_TL + A5 NIE_TA + A6 EQUITY_TA + A7 LNTA + e$$

RESULTS AND DISCUSSION

During 2010-2012 the population of Rural Banks was 75 firmyears. Because the data is incomplete, the data issued as much as 3 firm-years, so that the total sample used in processing this study into 72 firmsyears. The following table descriptive analysis of the variables studied.

Table 1. Descriptive Statistics Of Research Results

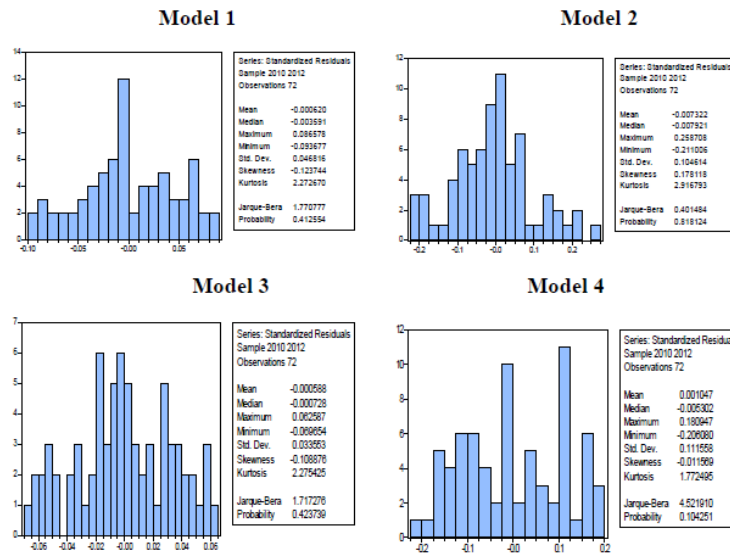
	ROA	ROE	NII/TA	DEA	LNDEPO
Mean	0.014444	0.051417	0.156557	0.713801	0.531721
Median	0.017	0.04	0.1499	0.6926	0.66569
Maximum	0.222	1	0.2706	1	0.922673
Minimum	-0.291	-0.24	0.0074	0.2525	0.030498
Std. Dev.	0.065324	0.143598	0.05263	0.227881	0.297769
Observations	72	72	72	72	72
	LOANS_TA	LLP_TL	NIE_TA	EQUITY_TA	LNTA
Mean	0.6868	0.0157	0.1192	0.3146	17.1856
Median	0.7224	0.0109	0.1080	0.1931	17.2967
Maximum	0.9703	0.2623	0.3030	0.9233	19.3809
Minimum	0.0034	0.0001	0.0460	-0.0057	14.8756
Std. Dev.	0.1960	0.0312	0.0507	0.2802	1.1392
Observations	72	72	72	72	72

Based on Table 1 variable market strength (LNDEPO) as measured by deposits, this shows most of the banks BPR get funds from deposits. Loans_ta variable indicates that the bank provides credit BPR quite high when compared interbank assets. Risk variables measured by loan loss provision ratio shows the average provision of losses suffered BPR bank is still small. The ratio of non-interest operating costs (NIE_TA) shows the average value the low. The value of the ratio of equity to total assets indicates that there is a bank BPR which still gets its main source of funds from its shareholders. To variable average financial performance of ROE and ROA are still relatively low, this prove that the BPR bank in Jakarta has largely not achieved performance good finance. While the average efficiency value of 0.71, this showing efficiency BPR bank in Jakarta showed high efficiency. Test This diagnostic is done to determine whether the estimation model has met econometric criteria, in the sense that there is no serious deviation from assumptions to be met in Ordinary Least Square (OLS) method (Gujarati and Down, 2009). Normality testing according to Nachrowi and Hardius (2006) is intended to detect whether the data to be used as a base reject hypothesis testing is an empirical data that meets the naturalistic reality. Naturalistic essence understand that the phenomenon (symptoms) that occur in this nature takes place natural and with a tendency to patterned. Jarque-Bera test results according to (Nachrowi and Hardius, 2006) with the following hypothesis testing:

Ho: the sample comes from a normally distributed population.

H1: the sample comes from an abnormally distributed population.

To determine the normality of residual results show the results of the value below 5% (p-value = 0.00), then H0 is rejected that the data is not normally distributed. presented on picture below.



One way to detect the presence or absence of multicollinearity according to (Nachrowi and Hardius, 2006) is the value of tolerance is greater than 0.1 and variance the inflation factor (VIF) is close to 1. VIF test results according to SPSS 20 in the table as follows:

Table 2. Hail test VIF

Variabel	Tolerance	VIF
LNDEPO	0.245	4.085
LOANS_TA	0.794	1.260
LLP_TL	0.807	1.239
NIE_TA	0.780	1.281

Variabel	Tolerance	VIF
EQUITY_TA	0.142	7.054
LNTA	0.313	3.191

LNDEPO: market strength, LOANS_TA: bank lending intensity, LLP_TL: risk, NIE_TA: quality management, EQUITY_TA: shareholder value, LNTA: size Bank.

From the table above can be seen exogenous variables in this study have VIF which is close to 1 and greater tolerance is far from 0.1 and only one variable EQUITY_TA and LNDEPO which have tolerances close to 0,1.

RESULT AND DISCUSSION

Influence of market forces, intesitas bank lending, bank size, risk, quality management and shareholder value to the performance of BPR. The following table presents first to third hypothesis regression results:

Table 3. Regression Results

Panel A : $ROA = \alpha_1 + \alpha_2 LNDEPO + \alpha_3 LOANS_TA + \alpha_4 LLP_TL + \alpha_5 NIE_TA + \alpha_6 EQUITY_TA + \alpha_7 LNTA + \epsilon$

Variabel	Coef.	Prob.
C	-0.3170	0.0069***
LNDEPO	-0.0783	0.0011***
LOANS_TA	0.1188	0.0000***
LLP_TL	-0.1869	0.0512*
NIE_TA	-0.3721	0.0000***
EQUITY_TA	0.0420	0.1822
LNTA	0.0191	0.0015***

R Square 0.702613
Adjusted R Square 0.675162
F test 0.000000***

LNDEPO: market strength, LOANS_TA: bank lending intensity, LLP_TL: risk, NIE_TA: management quality, EQUITY_TA: shareholder value, LNTA: bank size

*** significance level 1%

** significance level 5%

* significance level 10%

Panel B: $ROE = \alpha_1 + \alpha_2 LNDEPO + \alpha_3 LOANS_TA + \alpha_4 LLP_TL + \alpha_5 NIE_TA + \alpha_6 EQUITY_TA + \alpha_7 LNTA + \epsilon$

Variabel	Coef.	Prob.
C	-0.3984	0.0413**
LNDEPO	-0.2224	0.0000***
LOANS_TA	0.0375	0.3268
LLP_TL	-0.1665	0.6191
NIE_TA	-0.3088	0.0848*
EQUITY_TA	-0.1143	0.0665*
LNTA	0.0359	0.0003***

R Square 0.679212
Adjusted R Square 0.649601
F test 0.000000***

LNDEPO: market strength, LOANS_TA: bank lending intensity, LLP_TL: risk, NIE_TA: management quality, EQUITY_TA: shareholder value, LNTA: bank size

*** significance level 1%

** significance level 5%

* significance level 10%

Panel C: $NII/TA = \alpha_1 + \alpha_2 LNDEPO + \alpha_3 LOANS_TA + \alpha_4 LLP_TL + \alpha_5 NIE_TA + \alpha_6 EQUITY_TA + \alpha_7 LNTA + \epsilon$

Variabel	Coef.	Prob.
C	-0.2092	0.0469**
LNDEPO	-0.0665	0.0017***
LOANS_TA	0.1126	0.0000***
LLP_TL	-0.2219	0.0191**
NIE_TA	0.4642	0.0000***
EQUITY_TA	0.0290	0.3314
LNTA	0.0153	0.0042***

R Square 0.736956
Adjusted R Square 0.712675
F test 0.000000***

LNDEPO: market strength, LOANS_TA: bank lending intensity, LLP_TL: risk, NIE_TA: management quality, EQUITY_TA: shareholder value, LNTA: bank size

*** significance level 1%

** significance level 5%

* significance level 10%

Based on Table 3 F value statistics and Prob (F-statistic) panel A, B and C show significant value. This shows the dependent variable together influenced by the independent variables of the model. Adjusted value R2 used to see how much variation of the value of the dependent variable can be described by variation of the value of the independent variables. R2 value for Panel A of 67.51%,

Panel B amounted to 64.96%, Panel C amounted to 71.27%. The table above shows : LNDEPO (market forces) negatively affect financial performance (ROA, ROE and NII/TA) and significant at a rate of 1%. This shows that market forces the higher, the lower the financial performance, meaning semakin low ability of banks to make a profit. This may

happen if the interest rate deposits increased, giving rise to an increase in bank interest charges. Intensity bank loans (LOANS_TA) showed a positive and significant influence on financial performance as measured by ROA and NII/TA, while the positive influence and it is not significant for ROE. This indicates the higher the bank gives credit, the higher the profit generated by the bank and the higher the interest income derived from the loan. In addition, the results are not significant terhadap ROE due to the different scale of ROE with bank loan intensity measurement (LOANS_TA). Results of the influence of bank risk measured by LLP_TL on financial performance (ROA and NII/TA) shows negative and significant influence, while the negative and insignificant influence on ROE. This is in accordance with existing theory, if the bank has problem loans high enough, then the bank will bear the loss of credit that can not be collected, so it will lower profits. Variable results Quality Management (NIE_TA) which reflect the operating costs of a bank showed a negative result and signifikan ROA and ROE, while the positive and significant influence on NII/TA. High nie_ta ratio negatively impacts performance due to efficient banks expected to operate at a lower cost. Therefore, the ratio of NIE_TA low may affect performance positively. While the influence of NII/TA that the higher the costs that management may generate for expansion market share so that interest income from loans is also increasing. Based on proxy table shareholder value (EQUITY_TA) has a negative influence and significant to ROE at the level of 10% and positive and not significant to ROA and NII / TA. This shows, if a bank has capital that tends increase of shareholders, tend to have low performance. In addition shows the size of the bank has a positive and significant influence on performance. These results show that the Greater an asset (LNTA), the bank will enlarge the scale of its business so that its performance can increase. Influence Of Force market, intensitas bank loans, bank size, risk, quality of management and value shareholders on the efficiency of bank BPR.

Here is a table that presents the results of the fourth hypothesis regression:

Table 4. Regression Results

$DEA = \alpha_1 + \alpha_2 LNDEPO + \alpha_3 LOANS_TA + \alpha_4 LLP_TL + \alpha_5 NIE_TA + \alpha_6 EQUITY_TA + \alpha_7 LNTA + \epsilon$		
Variabel	Coef.	Prob.
C	0.828	0.010***
LNDEPO	-0.167	0.006***
LOANS_TA	-0.299	0.001***
LLP_TL	-0.559	0.113
NIE_TA	-3.768	0.000***
EQUITY_TA	0.013	0.325
LNTA	0.036	0.038**
R Square	0.842059	
Adjusted R Square	0.82748	
F test	0.00000***	

LNDEPO: market strength, LOANS_TA: bank lending intensity, LLP_TL: risk, NIE_TA: quality of management, EQUITY_TA: shareholder value,

LNTA: Bank size

*** significance level 1%

** significance level 5%

* significance level 10%

Based on Table 4 values F statistics and Prob (F-statistic) panel D shows significant value ($p=0.00 > 0.05$). This shows the dependent variable together influenced by the independent variables of the model. Adjusted value R2 used to see how much variation of the value of the dependent variable can be described by variation of the value of the independent variables. R2 value for Panel D is 82.75%. Table 4 reports the results obtained from the regression analysis. Findings show that all explanatory variables are statistically significant, except is the coefficient LLP_TL and EQUITY_TA, which are statistically insignificant. Thus, variables are not significant determinants of any efficiency measure. The results show that the relationship of market forces (LNDEPO) to the efficiency of the bank BPR negative and

significant at the rate of 1%. It shows that banks are more efficiently associated with banks with a lower market share, thereby reducing the market leadership argument. Proxy intesitas bank loans (loans granted), LOANS_TA, express negative and statistically significant relationship with a significance level of 1%. This finding implies that banks with a ratio of loans to assets higher tend to have lower efficiency scores. Thus, bank loans seem to be rated lower than alternative bank output namely investments, deposits, etc. (Sathye, M., 2003). For risk proxy, LLP_TL, showed a negative relationship with efficiency scores that show increased inefficiency. These findings are consistent with previous findings by others, Kwan and Eisenbeis (1995), Resti (1997) and Barr et al. (2002) found negative relationship between problem loans and bank efficiency. In addition, most research conducted to explain the causes of failure of the bank industry that the bank failed to settle most of the problem loans in their finances before the failure occurred (Barr and Siems, 1994). These findings show that management quality, as measured by NIE_TA, appears to have a consistently negative impact and significantly to the estimated efficiency. In addition, the elasticity of technical efficiency with respect to NIE_TA is namely -3768 quite high in the case of DEA (significant at a rate of 1%). These findings are in tune with the "management hypothesis bad" from Berger and DeYoung (1997). A measure of low technical efficiency is signal management practices are weak, which applies to the use of inputs, operations day-to-day and manage the loan portfolio. This means the main risks facing banks BPR in Jakarta can be caused by internal problems.

Proxy EQUITY_TA has a positive relationship with the level of efficiency (not significant), which contradicts the findings of Akhigbe and McNulty (2005). These findings shows that, more efficient banks, ceteris paribus, do not use leverage (more equity) compared to similar companies. Results seem shows that efficient banks involved in the process tend to add to its equity, voluntarily or not, that is, because maybe the bank wants to raise funding, or perhaps the only regulatory pressure mandating banks is not at risk if it continues increase its equity. LNTA, as a proxy of the size of the bank, shows the coefficient positive and significant at the rate of 1%, indicating that the larger the bank, will the more more efficient the bank, this is due to the argument of economies of scale. Thus, assumption there is a new growth policy for BPR bank with cost minimization. Overall influence of market forces, intesitas bank lending, bank size, risk, management quality and shareholder value to the efficiency of bank BPR amounted to 84.2% with a significance level of 1%, ceteris paribus.

CONCLUSSION

Based on the results concluded that the regression results to test influence of market forces, intesitas bank lending, bank size, risk, quality management and shareholder value simultaneously on the performance of BPR as the following LNDEPO (market forces) negatively affect financial performance (ROA, ROE and NII / TA) and significant. The intensity of bank lending (LOANS_TA) shows positive and significant influence on financial performance as measured by ROA and NII/TA, while the positive and insignificant influence on ROE. Results effect of bank risk as measured by LLP_TL on financial performance (ROA and NII/TA) shows a negative and significant influence, while the negative influence and it is not significant for ROE. Variable quality management results (NIE_TA) showed negative results and signifikan against ROA and ROE, while positive and significant influence on NII / TA. High nie_ta ratio negatively affects on the performance of bank BPR. For shareholder value (EQUITY_TA) has negative and significant influence on ROE and positive and insignificant to ROA and NII / TA. Partially LNDEPO, LOANS_TA, NIE_TA negative effect and significant. While LLP_TL effect is negative and insignificant. To variable EQUITY_TA

positive and insignificant effect. For Inta influence positive and significant effect on efficiency.

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