


AN EMPIRICAL STUDY ON REGIONAL GOVERNMENT-OWNED BANK AND LOCAL GOVERNMENT FUND IN INDONESIA

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ARTICLE INFO	ABSTRACT
<p>Article history:</p> <p>Received 20 January 2023</p> <p>Accepted 17 March 2023</p>	<p>Purpose: The aim of this study is to examine which factors give impact on BPD performance as Regional Development Bank that still relies on Local Government Fund.</p>
<p>Keywords:</p> <p>Asset Quality; Capital Adequacy Ratio; Loan to Deposit Ratio; Non-Performing Loan; Profitability; Return on Assets; Third Party Fund Growth.</p>	<p>Theoretical framework: Research on BPD performance so far without looking at special conditions where the bank's performance is experiencing very good performance and without mentioning the dependence of BPD on local government funds, so this research was conducted</p> <p>Design/methodology/approach: The study collects data from 25 Indonesian Regional Development Banks (BPD) in period 2013-2017. Data analysis technique in this research uses multilinear regression.</p> <p>Findings: The results of this research show that Growth of Third Party Fund (GTPF) has no effect on ROA. CAR and LDR have a positive and significant effect on ROA. Meanwhile, NPL and QAP have a negative and significant effect on ROA.</p> <p>Research, Practical & Social implications: The implication of this study indicates that management of bank needs to conduct a better strategy to maximize the profit from third party funds. Also, local government should consider other private bank as an alternative to deposit their fund. So that, Regional Government-owned bank may compete to other banks and it becomes independent.</p>
	<p>Originality/value: This study highlights the performance of BPD banks specifically in periods where the bank's performance is still very dependent on local government funds.</p> <p>Doi: https://doi.org/10.26668/businessreview/2023.v8i3.660</p>

UM ESTUDO EMPÍRICO SOBRE O BANCO REGIONAL E O FUNDO DO GOVERNO LOCAL NA INDONÉSIA

RESUMO

Objetivo: O objetivo deste estudo é examinar quais fatores causam impacto no desempenho do BPD como Banco de Desenvolvimento Regional que ainda depende do Fundo do Governo Local.

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Estrutura teórica: Pesquisa sobre o desempenho do BPD até agora sem olhar para condições especiais onde o desempenho do banco está experimentando um desempenho muito bom e sem mencionar a dependência do BPD dos fundos do governo local, então esta pesquisa foi conduzida.

Design/metodologia/abordagem: O estudo coleta dados de 25 Bancos Regionais de Desenvolvimento da Indonésia (BPD) no período de 2013-2017. A técnica de análise de dados nesta pesquisa utiliza a regressão multilinear.

Descobertas: Os resultados desta pesquisa mostram que o Growth of Third Party Fund (GTPF) não tem efeito sobre o ROA. CAR e LDR têm um efeito positivo e significativo sobre o ROA. Enquanto isso, NPL e QAP têm um efeito negativo e significativo sobre o ROA.

Pesquisa, implicações práticas e sociais: A implicação deste estudo indica que a administração do banco precisa conduzir uma melhor estratégia para maximizar o lucro de fundos de terceiros. Além disso, o governo local deve considerar outros bancos privados como uma alternativa para depositar seu fundo. Para que o banco regional de propriedade do governo possa competir com outros bancos e se torne independente.

Originalidade/valor: Este estudo destaca o desempenho dos bancos BPD especificamente nos períodos em que o desempenho do banco ainda é muito dependente dos fundos do governo local.

Palavras-chave: Qualidade dos Ativos, Relação de Adequação de Capital, Relação Empréstimo/Depósito, Empréstimo Improdutivo, Rentabilidade, Retorno sobre os Ativos, Crescimento dos Fundos de Terceiros.

UN ESTUDIO EMPÍRICO SOBRE EL BANCO REGIONAL PROPIEDAD DEL GOBIERNO Y EL FONDO DEL GOBIERNO LOCAL EN INDONESIA

RESUMEN

Objetivo: El objetivo de este estudio es examinar qué factores influyen en los resultados del BPD como banco de desarrollo regional que sigue dependiendo de los fondos de los gobiernos locales.

Marco teórico: La investigación sobre el rendimiento del BPD hasta ahora no se ha centrado en las condiciones especiales en las que el rendimiento del banco es muy bueno y sin mencionar la dependencia del BPD de los fondos de los gobiernos locales, por lo que se llevó a cabo esta investigación.

Diseño/metodología/enfoque: El estudio recoge datos de 25 Bancos de Desarrollo Regional de Indonesia (BPD) en el período 2013-2017. La técnica de análisis de datos en esta investigación utiliza la regresión multilinear.

Resultados: Los resultados de esta investigación muestran que el Crecimiento del Fondo de Terceros (GTPF) no tiene efecto sobre el ROA. CAR y LDR tienen un efecto positivo y significativo en el ROA. Mientras tanto, NPL y QAP tienen un efecto negativo y significativo en el ROA.

Implicaciones sociales, prácticas y de investigación: La implicación de este estudio indica que la dirección del banco necesita llevar a cabo una mejor estrategia para maximizar el beneficio de los fondos de terceros. Además, los gobiernos locales deberían considerar otros bancos privados como alternativa para depositar sus fondos. De este modo, el banco propiedad del gobierno regional puede competir con otros bancos y convertirse en independiente.

Originalidad/valor: Este estudio pone de relieve el rendimiento de los bancos BPD específicamente en periodos en los que el rendimiento del banco sigue siendo muy dependiente de los fondos del gobierno local.

Palabras clave: Calidad de los Activos, Ratio de Adequación del Capital, Ratio Préstamos/Depósitos, Morosidad, Rentabilidad, Rendimiento de los Activos, Crecimiento de los Fondos de Terceiros.

INTRODUCTION

All companies have the main goal to achieve maximum profit which it underlies all business activities in a company. Besides, profit is deemed as an index for measuring the performance of a business (Ogbadu, 2009). Meanwhile, profitability refers to the generated company's fund action by utilizing its own resources. It can be said that profitability describes the management efficiency in converting company resources to be a profit (Muya & Gathogo, 2016). In the banking sector industry, profitability is also the measurement of the ability of a

company to generate profit in a certain period. Therefore, profitability is very vital because profitability is one of the benchmarks or performance evaluation for the continuity and development of company included banks (Nguyen & Nguyen, 2020).

Bank has an important role in economic development and growth. It is because bank is an institution that acts as a financial intermediary between those who have funds and those who need funds and banks also act as institution that can facilitate the payment traffic flows. Bank's functions can help to accelerate economic activity (Buchory, 2014). The bank health and stability, therefore, are very important for the country's economy and the business sector. The bank's level of health can be assessed through the various banking financial ratios. Bank Indonesia, which is the bank central in Indonesia, measures profitability using total assets that dominantly comes from third party funds or public saving funds (Dendawijaya, 2009). Thus, bank seeks to attract new customers or investors, increase their funds, credit distribution, and services provided in order to maximize the profit (Tariq et al., 2014).

Return on Asset (ROA) is one of financial ratios which is usually employed to represent the degree of bank profitability. This ratio shows the company's ability to generate profit by utilizing its assets. The value of ROA is considered to increase from year to year. It is because the management has a better performance than previous period. However, this phenomenon has not happened in all banks. Bank Pembangunan Daerah or Regional Development Bank (hereafter, BPD), during the 2013-2017 period, experienced the decline of ROA value even though the total of the revenue was still high (Otoritas Jasa Keuangan (OJK), 2017). It can be deemed that BPD performance is not good so that the impact is BPD has a lower profit. The possible reason underlying this phenomenon is BPD strongly depends on local government funds with the lower cost which demotivates management to generate the higher profit (Satyagraha et al., 2022). On the other hand, another banks have been forced by circumstances to grab as many customers as possible in order to generate profit, and the most important is to its survival.

Optimizing profitability is the goal of commercial banks including BPD. BPD is a financial institution, which is part of commercial banks, operates commonly in a province and owned significantly by local government where it operates. There are several studies investigating the determinants to the profitability of bank. However, these research result inconsistent findings. For instance, the Capital Adequacy Ratio (CAR) variable studied by Sudiyatno & Suroso (2010) and Sudarwanto (2014) in Indonesia; Trujillo-Ponce (2013) in Spain; Ongore & Kusa (2013) in Kenya; and Zaharum et al. (2022) in Malaysia show that CAR has a significant and positive effect on bank performance as measured by ROA, while

Hutagalung et al. (2013); Suhardi & Altin (2013); Ahmad (2015); Harun (2016); Soares & Yunanto (2018); and Tangngisalu et al. (2020) found that CAR has no effect on ROA in Indonesian context.

Further, the Loan to Deposit Ratio (LDR) variable studied by Sudiyatno & Suroso (2010); Hutagalung et al. (2013); Ahmad (2015); and Harun (2016) in Indonesia; Ongore & Kusa (2013) in Kenya and Silaban et al. (2022) in Indonesia show that LDR does not have a significant effect on ROA. However, these findings contradict to study conducted by Suhardi & Altin (2013); Petria et al. (2015) in Europe and Kusmana & Sumilir (2019) *in Indonesia* found that LDR has a significant and positive effect on ROA while Soares & Yunanto (2018) and Yuan et al. (2022) found the negative and significant effect on ROA.

In addition, the Non-Performing Loan (NPL) variable studied by Hutagalung et al. (2013); Ahmad (2015) in Indonesia; Petria et al. (2015) in Europe; Serwadda (2018); Tabash et al. (2019); Tangngisalu et al. (2020); Islam & Bhuiyan (2021) and Zaharum et al. (2022) found that NPL have a significant and negative effect on bank profitability as measured by ROA. Contradict to this, Suhardi & Altin (2013); Sudarwanto (2014); Harun (2016); Soares & Yunanto (2018); Kusmana & Sumilir (2019) *and Silaban et al. (2022)* found that NPL has no effect on bank profitability which is also measured by ROA.

The Third-Party Fund Growth (TPFG) variable which was studied by Sudiyatno & Suroso (2010); Sudarwanto (2014); Wulandari & Shofawati (2017); and Pradana et al. (2022) showed that TPFG has a positive and significant effect on ROA. Meanwhile, Nurhasanah (2014); *Silaban et al. (2022)* and Sehany & Nurhidayati (2022) found that TPFG has no significant effect on bank profitability (ROA).

Earning Asset Quality (AQ), as another independent variable, was also studied by Trujillo-Ponce (2013) in Spain; Ongore & Kusa (2013) in Kenya; Aini (2013) in Indonesia; Salike & Ao (2018) in Asia; Tolangga & Ulpah (2019); and Puteri (2021) show that AQ has a negative effect on earning changes. However, it is different from the research finding of Heffernan & Fu (2008) which state that the quality of earning assets has a positive relationship to profitability.

Our research is conducted based on the various studies that show these inconsistent results and also the difference from previous studies is that this study is intended to reveal the fact from BPD which is considered having different characteristics of funding sources from other banks. Furthermore data was collected in between 2013 until 2017 because in that period the performance of BPD Banks in Indonesia have very good performance (Murdiyanto, 2018) even though credit inclusion is only focused on consumption credit so that it does not contribute

much to the business sector. Furthermore, funding source of BPD is still now depending on local government with the lower cost in operating the business (Satyagraha et al., 2022). This makes interesting to do research relating BPD performance in that period of time.

LITERATURE REVIEW

Signaling Theory and Profitability

Signaling Theory describes how a company should provide signals to users of financial and non-financial reports. This signal is an information regarding what management has done to realize the owner's expectation. Complete, relevant, accurate and timely information is an important element for investors and business people because it is indispensable as an analytical tool in making investment decisions. The signaling theory explains the reasons why companies emphasize the importance of disclosing information on investment decisions outside the company.

According to Morris (2012), signaling theory is the background of companies in presenting information to overcome information asymmetry problems. It is hoped that the provision of information signals regarding published financial ratios can signal the actual financial condition of the company and describe the possibilities that may occur in the future for the survival of the company and how it will affect the company. Users of financial reports can use the ratio of banking financial reports to determine the soundness of the bank, so that it is useful in making the best decisions or policies for the future.

In general, signaling theory is related to the availability of information. Important information such as ROA, which is a measurement of profitability that has been successfully achieved from assets management, can be a good signal for investors. It is because a high value of ROA shows a good company's performance where investors will be interested to invest their funds in this company. High profitability shows that the company has a good prospect so that investors will respond this signal positively. Thus, the value of company will increase.

Profitability is deemed as one of the essential requirements for the company's long-term survival and success. Following the profitability theory, profitability represents a surplus value which comes from all bank's operational revenues minus the expenses in certain period (Tariq et al., 2014). Therefore, the success of a bank is determined by the profit that has been earned in a period. Profitability is important for banking institutions to maintain their survival and a basis for generating dividend for shareholders (Trujillo-Ponce, 2013).

Profitability ratios are used to measure a company's earning capacity and are considered an indicator for company's growth and success. According to Kasmir (2009), both company

and stakeholders use profitability to measure the total value of profit which has been generated by company. Then, it is to measure and provide an assessment of company's performance in a year and the productivity of funds managed by company. Profitability is usually measured by accounting ratio namely ROA

ROA reflects the efficiency in which bank managers use its own resources, assets, or investment to generate income (Gul et al., 2011). A high ROA ratio indicates that the bank's performance or profitability is good (Setiawan & Kodratillah, 2017). It can be said that a high ROA ratio represents the good managerial performance and the company assets are efficiently used. On the other hand, a lower ratio shows the use of assets are not efficient. The value of ROA can be increased by the bank by increasing profit margins or asset turnover so that the ROA value looks higher and generate more profit.

Capital Adequacy Ratio and Profitability

The Capital Adequacy Ratio (CAR) is an important parameter to assess the strength and health of the banking system. This ratio reflects the banking company's capital in generating profits. If the CAR is getting bigger, the bank has a great opportunity to optimize its profits. With the larger of funds, bank's management can freely place its funds into investment activities that generate more fund for company.

CAR is a capital adequacy ratio that describes the ability of a banking company to provide the funds needed to bear the possible risk of losses in operational activities and in business development (Harun, 2016). A bank with a reasonable CAR will be able to absorb unexpected losses easily and reducing their funding costs. This will result a better performance of bank which increase bank profitability.

Ongore & Kusa (2013) showed that the CAR variable had a positive and significant effect on ROA. The result of this study is similar to research finding from other studies such as Sudyatno & Suroso (2010); Trujillo-Ponce (2013); Aini (2013) and Zaharum et al. (2022) which found that CAR had a positive and significant effect on bank performance measured by ROA. Based on the theory described above, the hypotheses of this research are developed as follows:

H1: Capital Adequacy Ratio has a positive effect on ROA.

Loan to Deposit Ratio and Profitability

Loan to Deposit Ratio (LDR) is a liquidity ratio that measures the amount of funds from third party funds channelled in the form of credit. The LDR is used to measure the level of a

bank's ability to pay public funds by relying on credit, which is a source of liquidity (Dendawijaya, 2009). It means that bank is able to deal with its short-term obligations such as repaying the withdrawals made by the depositors and fulfil the credit requests submitted by customer. If the value of LDR is low, it indicates that there is a lack of effectiveness of the bank in extending credit to customers.

The LDR ratio shows the level of the bank's ability to channel third party funds collected by the bank. The higher amount of funds channelled to customers in the form of credit represents the lower amount of idle funds at the bank so that bank can increase the amount of income. This, of course, will lead to increase LDR value and bank profitability will increase as well. Therefore, LDR will have a positive effect on company profits.

The result of research by Suhardi & Altin (2013) showed that LDR had a positive and significant effect on earnings. The result of this study is similar to other studies such as Petria et al. (2015); Harun (2016) and Kusmana & Sumilir (2019) who found that LDR has a positive and significant effect on ROA. Based on the theory described above, the hypotheses of this research are developed as follows:

H2: Loan to Deposit Ratio has a positive effect on ROA.

Non-Performing Loan and Profitability

Non-Performing Loan (NPL) is a ratio used to measure the extent to which banks are able to manage non-performing loans. NPL reflects the magnitude of the credit risk faced by a bank. The lower value of NPL indicates the lower credit risk. NPL is considered as a determinant of profitability where high level of non-performing loans will have a negative impact on bank net profits due to doubtful lending and elimination of bad loans, which usually affect profitability and capital levels (Ombaba, 2013).

NPL shows the ratio of non-performing loans with substandard, doubtful and bad quality to total credit loans. If the NPL value is higher, it will result in higher interest arrears from loans, which has the potential to reduce interest income and reduce the resulting profit Akter & Roy (2017). Thus, it can be concluded that the higher NPL value results the lower profit generated by a bank.

NPL has a negative effect on profitability which is supported by research from Petria et al. (2015). The result shows that NPL has a negative and significant effect on profitability (ROA). The result of this study is also supported by other research (i.e. Hutagalung et al. (2013); Ahmad (2015); Serwadda (2018); Tabash et al. (2019) and Islam & Bhuiyan (2021)) that

provide the evidence that NPL has a negative and significant effect on ROA. Based on the theory described above, the hypotheses of this research are developed as follows:

H3: Non Performing Loans have a negative effect on ROA.

Growth of Third Party Funds and Profitability

Third Party Funds (TPF) are the largest source of funds from several other sources of funds originating from the public. Funds collected from the public are the most reliable source of funds for a bank. Bank plays a role in providing services to the community that transfers money from people who have a lot of money to people who need the money.

Third party funds can be used by banks to be placed in various income generating posts such as credit distribution. The increase of third party funds will affect the addition of investment and also affect the credit growth as well. Then, it will have an impact on the increase in bank profitability. If the growth of third party funds is higher, there is a high level of public trust to the bank

Wulandari & Shofawati (2017) showed that the growth of third party funds had a significant effect on bank profitability. The result of this study is in line with other research conducted by Sudiyatno & Suroso (2010); Sudarwanto (2014) and Pradana et al. (2022) who found that the growth of third party funds had a positive and significant effect on ROA. Based on the theory described above, the hypotheses of this research are developed as follows:

H4: Growth of Third Party Funds has a positive effect on ROA.

Quality of Asset Productive and Profitability

Quality of Asset Productive (QAP) is a comparison between classified productive assets (CPA) to total earning assets. CPA is a productive asset, whether it is or has the potential not to generate income or result in losses. Total earning assets represent the total provision of bank funds in the form of credit, securities, interbank placement of funds and other forms of provision and investment aimed at generating income.

QAP shows the quality of assets with respect to credit risk faced by banks due to the provision of credit and bank fund placements at different posts, as well as the portion of the allowance to cover losses due to the write-off of earning assets. The smaller QAP value shows that the bank's performance is effective in suppressing CEA and enlarging the total productive assets which will result high profits (Syahyunan, 2002). Therefore, it can be concluded that KAP has an effect on profitability.

Trujillo-Ponce (2013) tested the QAP variable on ROA found that QAP had a negative and significant effect on ROA. This is consistent with the other research finding from Ongore & Kusa (2013); Aini (2013); Kadioglu et al. (2017); Salike & Ao (2018); Tolangga & Ulpah (2019); and Puteri (2021) which provide evidence that QAP had a negative effect on ROA. Based on the theory described above, the hypotheses of this research are developed as follows:

H5: Quality of Asset Productive has a negative effect on ROA.

METHOD

The population in this study are all Indonesian Regional Development Bank (BPD). Purposive sampling technique is applied to select the samples based on these criteria: (1) Registered in the Indonesian Banking Directory; and (2) The company has published complete and consistent annual report data and financial reports for 5 consecutive years from 2013 to 2017. Finally, this research collects the data from 25 banks.

The type of data used in this study is secondary data collected from financial report of Indonesian Regional Development Banks in 2013 – 2017 period. The data is gathered from official website of the Financial Services Authority and Regional Development Bank registered at Indonesian Banking Directory.

Return on Asset (ROA)

According to Bank Indonesia, the calculation of ROA value follows this equation:

$$\text{ROA} = \frac{\text{Earning before tax}}{\text{Total Assets}} \times 100\%$$

Capital Adequacy Ratio (CAR)

Following the Bank Indonesia's guideline No.13/24/DPNP/2011, the value of CAR ratio is calculated by this equation:

$$\text{CAR} = \frac{\text{Bank Equity}}{\text{ATMR}} \times 100\%$$

Loan to Deposit Ratio (LDR)

This ratio can be calculated following the instruction from Bank Indonesia as follow:

$$\text{LDR} = \frac{\text{Total Loans}}{\text{Total Third Party Funds}} \times 100\%$$

Non-Performing Loan (NPL)

According to Bank Indonesia, the calculation of NPL ratio follows this formulation:

$$\text{NPL} = \frac{\text{Non-Performing Loans}}{\text{Total Amount of Outstanding Loans}} \times 100\%$$

Growth of Third Party Funds (GTPF)

GTPF can be determined by calculating the difference between the current and the previous period of TPF compared to the previous period of TPF, so that it can be formulated as follows:

$$\text{GTPF} = \frac{\text{TPF}(t) - \text{TPF}(t - 1)}{\text{TPF}(t - 1)} \times 100\%$$

Quality of Asset Productive (QAP)

To determine QAP value, we once again follow the formulation provided by Bank Indonesia as follow:

$$\text{QAP} = \frac{\text{Classified Productive Assets}}{\text{Total Productive Assets}} \times 100\%$$

Data Analysis

This study uses a quantitative approach where Return on Assets (ROA) as a dependent variable while Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Non-Performing Loans (NPL), Growth of Third Party Funds (GTPF), and Quality of Asset Productive (QAP) as the independent variables. The data are analyzed using multiple linear regression by developing research model as follow:

$$\text{ROA} = \alpha + \beta_1 \text{CAR} + \beta_2 \text{LDR} + \beta_3 \text{NPL} + \beta_4 \text{GTPFG} + \beta_5 \text{QAP} + e$$

RESULT AND DISCUSSION

Result

Descriptive statistics

The results of descriptive statistics are presented in Table 1 below.

Tabel 1. Descriptive statistics

Variable	Min.	Max.	Mean	Std. Deviation
ROA	-.61	5.10	2.9201	.94392
CAR	13.79	38.38	21.2258	5.03987
LDR	70.80	128.43	94.4552	11.19538
NPL	.33	15.03	2.5614	2.46284
GTPF	-30.96	85.84	12.3391	16.20748
QAP	.26	15.11	2.7093	2.81231

Based on the results of the descriptive statistics above, the minimum value of ROA is -0.61 and the maximum value is 5.10, the average of ROA value is 2.9201. The CAR variable has a minimum value of 13.79 and a maximum value of 38.38, and an average CAR value of 21.2258. The LDR variable has a minimum value of 70.80 and a maximum value of 128.43, and an average LDR value of 94.4552. The NPL variable has a minimum value of 0.33 and a maximum value of 15.03, and an average NPL value of 2.5614. The TPF growth variable has a minimum value of -30.96 and a maximum value of 85.84, and an average value of TPF growth is 12.3391. The KAP variable has a minimum value of 0.26 and a maximum value of 15.11, and an average KAP value of 2.7093.

Normality Test

The result of normality test using the Kolmogorov-Smirnov value reported in Table 2.

Table 2. Normality Test Result

	Unstandardized Residual
Asymp. Sig.	.200

Based on the table above, the Kolmogorov-Smirnov score shows the significance value because it (0.200) exceeds the alpha score (0.05). Therefore, the data used in the study is normally distributed.

Multicollinearity Test

Table 3 shows the result of multicollinearity test which is reported below.

Table 3. Multicollinearity Test Result

Variable	Tolerance	VIF
CAR	0.919	1.089
LDR	0.895	1.117
NPL	0.537	2.167
GTPF	0.842	1.194
QAP	0.513	2.293

Based on the table above, it shows that the five independent variables have a higher tolerance value than 0.1 and no variable has a VIF value more than 10. It can be concluded that there is no multicollinearity in the five independent variables (CAR, LDR, NPL, GTPF, and QAP).

Heteroscedasticity Test

The results of the heteroscedasticity test using the Glejser approach are as follows.

Table 4. Heteroscedasticity Test Result

Variabel	Sig.
CAR	0.301
LDR	0.421
NPL	0.956
GTPF	0.624
QAP	0.762

Based on the results of the heteroscedasticity test presented in table 4, it can be seen that the five independent variables (CAR, LDR, NPL, GTPF, and QAP) have a significance value more than 0.05 so that there is no heteroscedasticity in the regression model.

Autocorrelation Test

The result of the autocorrelation test with the Durbin-Watson method is as follows.

Table 5. Autocorrelation Test Result

Model	Durbin-Watson
1	2.028

Based on the result of the autocorrelation test with the Durbin-Watson test, the Durbin-Watson (DW) value is 2.028. By looking at the DW table, the dU value is 1.7919 and the 4-dU

result is 2.2081. Therefore, it can be concluded that there is no autocorrelation, because $dU < d < 4-dU$ or $1.7919 < 2.028 < 2.2081$.

Regression Result

The results of multiple linear regression analysis are as follows.

Table 6. Regression Result

Variable	B	Sig.
(Constant)	1.164	
CAR	0.051	0.000
LDR	0.012	0.044
NPL	-0.129	0.001
GTPF	0.005	0.227
QAP	-0.068	0.044

$$ROA = 1,164 + 0,051 \text{ CAR} + 0,012 \text{ LDR} - 0,129 \text{ NPL} + 0,005 \text{ GTPF} - 0,068 \text{ QAP} + e$$

The first hypothesis states that the Capital Adequacy Ratio has a positive effect on ROA. The test result shows that the value of the CAR regression coefficient is 0.051 and a significance value of 0.000, which is less than 0.05. It can be concluded that CAR has a significant positive effect on ROA and the first hypothesis (H1) is supported.

The second hypothesis states that the Loan to Deposit Ratio has a positive effect on ROA. The test result shows that the LDR regression coefficient is 0.012 and a significance value of 0.044, which is less than 0.05. Therefore, it can be concluded that LDR has a significant positive effect on ROA and the second hypothesis (H2) is accepted.

The third hypothesis states that Non Performing Loans have a negative effect on ROA. The test result shows that the regression coefficient value is -0.129 and a significance value of 0.001 which is smaller than 0.05. It can be concluded that NPL has a significant negative effect on ROA so that the third hypothesis (H3) is supported.

The fourth hypothesis states that the growth of third party funds has a positive effect on ROA. The test result shows that the significance value is 0.227, which is greater than the predetermined significance value of 0.05. Based on the result of this test, it can be concluded that the growth of third party funds has no effect on ROA so that the fourth hypothesis (H4) is not supported.

The fifth hypothesis states that quality of asset productive has a negative effect on ROA. The test result shows that the regression coefficient value is -0.068 and the KAP significance

value is 0.044 which is smaller than 0.05 ($0.044 < 0.05$). As such, it can be concluded that KAP has a significant negative effect on ROA and the fifth hypothesis (H5) is supported.

F-Test

The result of the F Test is shown as follows.

Table 7. F-test Result

Model	Sig.
Regression	.000
Residual	
Total	

Based on the result of F test calculation, a significance value of 0.000 is obtained which is smaller than 0.05. This means that the regression model is feasible to predict ROA as a proxy for bank profitability.

Coefficient of Determination

The result of the determination test is as follows.

Table 8. Coefficient Determination

Model	Adjusted R Square
1	.461

Based on the results of the coefficient determination test, the Adjusted R² value is 0.461. Thus, it can be concluded that the Capital Adequacy Ratio (X1), Loan to Deposit Ratio (X2), Non- Performing Loans (X3), Growth of Third Party Funds (X4), and Quality of Asset Productive (X5) explain Return on Assets (Y) by 46.1%, while the rest (53.9%) is described by other variables outside of this study.

DISCUSSIONS

Based on the test results, the variable Capital Adequacy Ratio (CAR) shows that there is a significant positive effect on Return on Assets (ROA). This is evidenced by the regression coefficient value of 0.051 with a significance value of 0.000. Thus, the first hypothesis which states that the Capital Adequacy Ratio (CAR) has a positive effect on the Return on Assets (ROA) of Regional Development Banks in Indonesia is accepted.

From the results of this study, the positive effect shown by the CAR variable indicates that the higher the CAR value results the greater value of ROA. If the CAR value is higher, the

ability of bank's capital to protect the occurrence of business activity risk will increase so that the bank's performance will increase too. In other words, the higher the CAR indicates that the bank's performance is getting better because the bank is able to bear and cover any losses that cause a decrease in assets due to risky assets related to the adequacy of its capital. In addition, by having a high bank capital, the bank can expand its business, which will affect the profitability of the bank.

The result founded this study is consistent with research conducted by Sudiyatno & Suroso (2010); Trujillo-Ponce (2013); Ongore & Kusa (2013); Aini (2013); Sudarwanto (2014); and Zaharum et al. (2022) that showed the Capital Adequacy Ratio (CAR) has a significant positive effect on Return on Assets (ROA).

The Loan to Deposit Ratio (LDR) variable also shows that there is a positive and significant effect on Return on Assets (ROA). This is evidenced by the regression coefficient value of 0.012 with significance value is 0.044. Thus, the second hypothesis which states that the Loan to Deposit Ratio (LDR) has a positive effect on the Return on Assets (ROA) of Regional Development Banks in Indonesia is supported.

The result of this study indicates that the lower LDR value represents the lack of effectiveness of the bank in extending credit to customers. LDR shows the level of a bank's ability to distribute the third party funds collected by the bank. If the amount of loan distributed to customers is bigger, the amount of idle funds at the bank will be smaller so that the bank can increase the amount of income. Thus, the higher the LDR results the higher the profit achieved by the bank and the ROA value will increase, with the assumption that banks can distribute the funds effectively and it is expected that the number of non-performing loans will be low.

This result is consistent with research conducted by Suhardi & Altin (2013) that found the Loan to Deposit Ratio (LDR) had a significant positive effect on Return on Assets (ROA). Similar to this, Petria et al. (2015); Harun (2016) and Kusmana & Sumilir (2019) found that LDR has a significant positive effect on ROA.

Conversely, Non-Performing Loan (NPL) variable shows that there is a significantly negative effect on Return on Assets (ROA). This is evidenced by the regression coefficient value of -0.129 with a significance value is smaller than 0.05 (0.001). Thus, the third hypothesis which states that Non-Performing Loans (NPL) have a negative effect on the Return on Assets (ROA) of Regional Development Banks in Indonesia is accepted.

The results of this study indicates that the lower value of NPL explains the level of risk in lending is quite low. When the NPL is low, loan distribution runs effectively so that the turnover of funds is faster in generating profits through loan (Akter & Roy, 2017). Therefore,

the lower the NPL generates the higher the ROA achieved by the bank concerned. On the other hand, the higher NPL in a bank, it will decrease the income received by the bank so that the bank's profitability will be decreased. It is because expenses will be higher too (Tani et al., 2019). A high NPL in a bank means that bank must bear the losses from its operational activities which causes the decrease of profitability.

The result in this study is in line with research conducted by Hutagalung et al. (2013); Ahmad (2015); Petria et al. (2015); Serwadda (2018); Tabash et al. (2019); *Kusmana & Sumilir (2019)*; *Tangngisalu et al. (2020)*; Islam & Bhuiyan (2021); and Zaharum et al. (2022) which found that Non Performing Loans (NPL) had a negative and significant effect on Return on Assets (ROA).

Meanwhile, Third Party Funds (TPF) Growth variable has no effect on Return on Assets (ROA). This is evidenced by a significance value greater than 0.05. Thus the fourth hypothesis which states that the growth of Third Party Funds (TPF) has a positive effect on the Return on Assets (ROA) of Regional Development Banks in Indonesia is not accepted.

The results showed that the growth of third party funds had a positive but insignificant effect on ROA. This is possibly due to an imbalance between the number of sources of funds raised and the amount of funds distributed. In other words, there are a lot of funds that have been collected but not distributed to the public optimally. Therefore, it decreases banks' profitability because bank should pay interest to all depositors while loans are not distributed effectively.

The result of this study is in line with research conducted by Nurhasanah (2014); Syachfuddin & Rosyidi (2017) and Silaban et al. (2022) which showed the result that the growth of third party funds does not effect on Return on Assets (ROA).

The same as the result of NPL, we found that the Quality of Asset Productive (QAP) has a significant and negative effect on Return on Assets (ROA). This is evidenced by the regression coefficient value of -0.068 and a significance value of 0.044. Thus, the fifth hypothesis, which states that Quality of Asset Productive (QAP) has a negative effect on the Return on Assets (ROA) of Regional Development Banks in Indonesia, is accepted.

QAP shows the quality of assets and the portion of the allowance to cover losses due to the write-off of earning assets. If the QAP ratio is high, it indicates unproductive distribution of funds from a bank. The higher value of QAP variable indicates the greater provision for profits so that it will reduce the net profit achieved by a bank. The existence of a bigger provision indicates that the productive assets owned by the bank having collectability in the category of special attention to loss in a large number indicates that the bank is not careful in

channelling its funds. On the contrary, if the QAP ratio has a lower value, it shows that the bank's performance is more effective in suppressing CPA and enlarging total productive assets which will increase revenue so that it will generate large profits (Syahyunan, 2002).

The result of this study is in line with research conducted by Trujillo-Ponce (2013); Ongore & Kusa (2013); Aini (2013); Kadioglu et al. (2017); Salike & Ao (2018); Tolangga & Ulpah (2019); and Puteri (2021). These researches state that Quality of Asset Productive (QAP) has a significant and negative effect on changes in bank profits as proxied by Return on Assets.

CONCLUSIONS

This study examines the effect of Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Non-Performing Loans (NPL), Growth of Third Party Funds (GTPF), and Quality of Asset Productive (QAP) on the profitability of Regional Development Banks in Indonesia. The research findings show that the Capital Adequacy Ratio and the Loan to Deposit Ratio have a positive effect on Return on Assets. However, Non-Performing Loans and Quality of Asset Productive have a negative and significant effect on Return on Assets. The Growth of Third Party Fund does not affect the value of Return on Assets.

IMPLICATIONS

Adequacy of capital and distribution of funds affect the level of profitability of Regional Development Banks in Indonesia, but our research finds the profitability of BPD measured by ROA decreases. This shows that the decline of BPD's performance because BPD is very depending on regional government funding sources. In addition, this can also be caused by the fact that the distribution of funds has not been placed in posts that generate maximum profits. Therefore, BPD management needs to try harder and better in analyzing and predicting the increase or decrease in bank profitability. Furthermore, bank is expected to place its fund in area which generates maximum profit. Also, local government should consider other private bank as an alternative to deposit their fund. So that, Regional Government-owned bank may compete to other banks and it becomes independent.

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