DOI: https://doi.org/10.53625/ijss.v3i2.6293

DETERMINANTS OF PROFITABILITY OF **CONVENTIONAL COMMERCIAL BANKS IN INDONESIA FOR THE 2018–2020 PERIOD**

By Anang Aryokho¹, Muji Gunarto², Isfarudi³ ^{1,2,3}Magister Management, Universitas Terbuka, Jakarta, Indonesia Email: ¹anangaryokho@gmail.com

Article Info	ABSTRACT
Article history:	This study aims to examine the effect of CAR, NPL, BOPO and LDR on ROA
Received May 24, 2023	of Conventional Commercial Banks listed at OJK in 2018-2020. The
Revised June 23, 2023	population and sample in this study were 77 conventional commercial banks
Accepted June 27, 2023	with a sample of 231 observational data. The type of data used is secondary
-	data on banking annual financial reports published at OJK for 2018-2019. The
<i>Keywords:</i> Conventional Commercial Banks, Indonesia, Determinants	sampling technique used purposive sampling technique with panel data regression analysis method with Eviews 10 analysis tool. The results showed that CAR had a positive and significant effect on ROA, NPL and BOPO had a negative and significant effect on ROA, and LDR had a positive but not significant effect on ROA. significant to ROA
	This is an open access article under the <u>CC BY-SA</u> license. \bigcirc \bigcirc \bigcirc \bigcirc

Corresponding Author: Anang Aryokho Magister Management, Universitas Terbuka, Jakarta, Indonesia Email: anangaryokho@gmail.com

1. **INTRODUCTION**

Profitability is a bank operational target, the existence of high profitability will support the continuity of banking operations which will certainly have a good impact on issuers, managers, and also for the government through tax collection and economic stability. Factors that affect bank profitability can come from various profitability performance as shown by several indicators. The most important profitability ratio for the banking sector is return on assets (ROA) (Riyadi, 2016). ROA is important for banks because it is used to measure effectiveness in generating profits for companies in utilizing existing assets (Rivadi, 2016).

A healthy bank is a bank that has sufficient capital, maintains the quality of its assets properly, is well managed and operated based on prudential principles, generates sufficient profits to maintain business continuity, maintains liquidity so that it can fulfill its obligations at any time, and pays attention to risks associated risks (Rokhmatika, 2017). Bank performance can be observed from its ability to generate profit or profitability which can be measured by return on equity (ROE) or return on assets (ROA). Return on assets (ROA) is chosen as a measure of bank performance.

This is based on several reasons, the first is that ROA can be used to measure how well a bank's ability to manage assets that are wholly owned. This ROA ratio is also an indicator of bank managerial efficiency in indicating management's ability to manage all of its assets in order to gain profit (Kuncoro & Suhardjono, 2011). Capital adequacy ratio (CAR), non-performing ratio (NPL), loan to deposit ratio (LDR), and operational income operating costs (BOPO) are several factors that affect bank profitability.

Journal homepage: https://bajangjournal.com/index.php/IJSS

101



Graph 1. Trends in CAR, NPL, BOPO, and LDR of conventional commercial banks 2018-2020 Source: Financial Services Authority, 2018-2020

2. METHOD

The research method used in this study is a quantitative method. The type of data used in this study is secondary data, namely the ratio of financial returns on assets (ROA), capital adequacy ratio (CAR), non-performing loans (NPL), BOPO, and loan to deposit ratio (LDR) of banking companies in Indonesia. Secondary data in this study was obtained historically based on Banking Supervision Reports issued directly by Bank Indonesia through the website www.bi.go.id which is part of Bank Indonesia's transparency and accountability provided to the public. The population in this study is all banks registered with the Financial Services Authority (OJK) in the 2018-2020 period, namely 150 banks. And the samples used in this study were taken using the purposive sampling method with a total of 77 banks with total data from 2018 to 2020 as many as 231 samples. To analyze the issues raised, testing was carried out using regression analysis using the help of the EViews 10 application.

3. RESULT AND DISCUSSION

Descriptive Test

Based on the results of the descriptive test for the ROA variable, the lowest value is -15.89, which is owned by Bank Jago Tbk in the 2019 period, while the highest value is 4.56, which is owned by Bank ANZ Indonesia, then an average ROA value of 1.15 is obtained. The mean value of the CAR variable, namely the CAR variable, has the lowest value of 6.60, which is owned by Standard Chartered Bank, and the highest value of 820.88 is owned by BCA Digital Bank, which is 30.46. In the asset quality variable which is proxied in the NPL financial ratio, it has the lowest value with a magnitude of 0.00 which is owned by Bank Capital Indonesia, Bank BNP Paribas Indonesia, Bank Jago, Bank Digital BCA, JP Morgan Chase Bank, Bank of America and Deutsche Bank and the value the highest is 15.75 owned by Bank Neo Commerce, and the mean value of the NPL variable is 3.158545. The BOPO variable has the lowest value of 2.88 which is owned by the Regional Development Bank of Central Java and the highest value is 261.1 which is owned by Bank Jago Tbk, and the mean value of the BOPO variable is 84.70864. The LDR variable has the lowest value of 0.00, which is owned by Bank Digital BCA in 2020 and the highest value is 971.65 owned by Bank Digital BCA also in the previous year, namely 2019 and the mean value of the LDR variable is 102.5005.



Figure 1. Normality Test Results Source: Processing results Eviews 10, 2021.

Scrossref DOI: https://doi.org/10.53625/ijss.v3i2.6293

..... It can be seen that the Jarque-Berra probability value in the normality test of this study is 0.328372 which is greater than the significance level used ($\alpha = 5\%$ or 0.05) so that it can be said that all data used in this study is normally distributed.

Multicollinearity Test

	Table 1. Wurdebindentty Test				
	LOGCAR	LOGNPL	LOGBOPO	LOGLDR	
LOGCAR	1				
LOGNPL	-0.111469	1			
LOGBOPO	-0.067058	0.276313	1		
LOGLDR	0.176481	- 0.066790	-0.168686	1	

Table 1 Multicollinearity Test

Source: Processing results Eviews 10, 2021.

Based on the correlation coefficient value test, no variable was found with a value of more than 0.8, so it can be said that in this study there was no multicollinearity problem.

Heteroscedasticity Test

Table 2. Uji Glejser Heteroscedasticity				
F-statistic	0.257426	Prob. F(4,198)	0.5801	
Obs*R-Squared	2.145805	Prob. Chi-Square (4)	0.8502	
Scaled explained SS	1.561859	Prob. Chi-Square (4)	0.8011	
a	D			

Source: Processing results Eviews 10, 2021.

The Obs*R-Squared Probability value is greater than the specified significance level ($\alpha = 5\%$ or 0.05) which is 0.8502 (0.8502 > 0.05). So it can be interpreted that there is no hetroscedasticity problem in this study.

Autocorrelation Test

Table 3. Breusch-Godfrey Serial Correlation LM Test

Table 5. Breusch-Godfrey Serial Correlation LNI Test			
F-statistic	0.828842	Prob. F(2,196)	0.2148
Obs*R-squared	2.416874	Prob. Chi-Square (2)	0.3712

Source: Processing results Eviews 10, 2021.

Obs*R-Squared has a probability value of 0.3712 which is greater than the significance level used, which is 5% or 0.05. Based on the Obs*R-Squared probability value, it can be concluded that there is no autocorrelation in this research model.

Multiple regression

Table 4. Hasil Uji Regresi Linear Berganda

Dependent Variable : LOGROA				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	4.196296	1.292753	3.246016	0.0014
LOGCAR	0.348637	0.162090	2.150885	0.0327
LOGNPL	-0.472016	0.082486	-5.722395	0.0000
LOGBOPO	-1.248158	0.204686	-6.097926	0.0000
LOGLDR	0.176406	0.157151	1.122529	0.0630
R-squared	0.838030	Mean dependent var		0.211377
Adjusted	0.824657	S.D dependent var		0.963798
R-Squared		_		
S.E of	0.792042	Akaike info criterion		2.395917
regression				
Sum	124.2114	Schwarz criterion		2.477523
squared				
resid				
Log	-238.1855	Hannan-Quinn criter.		2.428931
likelihood				
F-statistic	25.27685	Durbon-Watson stat		0.975439
Prob(F-	0.000000			
statistic)				

Source: Processing results Eviews 10, 2021.

LOGROA = 4.196296 + 0.348637LOGCAR - 0.472016LOGNP - 1.248158LOGBOPO + 0.176406LOGLDR

R-Squared = 0.838030 F-Statistic = 25.27685

Based on the regression test above, when viewed from the coefficient value, all variables in this study are elastic because the coefficient value is less than number 1, except for the BOPO variable whose value is more than number 1.

From the regression results above, a probability value of 0.000 is also obtained for the NPL and BOPO variables, the CAR variable with a probability value of 0.0327, and the LDR variable with a probability value of 0.0630. And the magnitude of the coefficient of determination (R2) is 0.838030 or 83.80 percent. It can be said that the ROA variable for go public banks that have been registered with the Financial Services Authority (OJK) for the period 2018 to 2020 in the model can be explained by the independent or independent variable, namely CAR, NPL, BOPO and also LCR, and the remaining 16.20 percent is influenced by other variables outside of this research model. **t-Test**

In the capital adequacy ratio (CAR) variable, a coefficient value of 0.348637 is obtained, which shows a positive number with a probability value of 0.0327. This probability value is known to be less than the significance level, namely 0.05 (0.0327 < 0.05), so in the first hypothesis it is known that CAR has a significant and positive influence on ROA. Non-performing loan (NPL) variable, obtained a coefficient value of -0.472016, which shows a negative number and a probability value of 0.0000. The probability value is known to be smaller than the 0.05 significance level (0.0000<0.05). So in the first hypothesis it is known that NPL has a negative and significant effect on return on assets (ROA). At BOPO, a coefficient value of -1.248158 is obtained, which shows a negative number and a probability value is known to be smaller than the 0.05 significance level (0.0000<0.05). So in the first hypothesis a negative and significant effect on return on assets (ROA). At BOPO, a coefficient value of -1.248158 is obtained, which shows a negative number and a probability value is known to be smaller than the 0.05 significance level (0.0000<0.05). So in the first hypothesis a negative and significant effect on ROA. And the LDR value, obtained a coefficient of 0.176406, which shows a positive number and a probability value of 0.0630 The probability value is known to be greater than the significance level of 0.05 (0.0630>0.05). So in the first hypothesis it is known that LDR has a positive but not significant effect on return on assets (ROA).

Discussion

The results of testing the effect of CAR on ROA are in accordance with the theory as well as the framework that has been developed. The results of this study are the same as research conducted by Rembet (2020), Setyarini (2020), Arasy (2020) where CAR has a positive and significant effect on ROA. Which means that the factor of capital has an important role in supporting the profits of the bank. According to Setyarini (2020), if a bank's capital adequacy level (CAR) is higher, it can be a benchmark for the success of bank management in earning profits. When CAR increases, CAR also encourages bank profitability as measured by ROA, and vice versa, if CAR decreases, ROA will also decrease.

Based on the results of hypothesis testing, the NPL variable has a significant negative effect on ROA. This is in line with research conducted by Emanuel (2020) which concluded that NPL has a negative and significant effect on ROA. According to Setyarini's research (2020) the higher the NPL, the worse the quality of bank credit which causes the number of problem loans to increase and cause losses. Non-performing loans (NPL) or often called non-performing loans can be interpreted as a situation where the customer is unable to pay part or all of the obligations to the bank as promised (Kasmir, 2014).

Based on descriptive panel data statistics, the mean value of the BOPO variable is 84.70, in accordance with Bank Indonesia provisions in circular letter No.15/7/DPNP dated 8 March 2013 which explains that the BOPO ratio that commercial banks must maintain is no more than 85%. So it can be concluded that the BOPO value meets Bank Indonesia criteria. Calculation of panel data analysis shows the value of the BOPO coefficient is -1.248158, this shows that every 1% increase in BOPO after anti-logging will have a negative impact, namely in the form of a decrease in ROA of -1.248158. This is in accordance with the theory developed within the framework of thinking. This is also in line with research conducted by Setyarini (2020), Anindiansyah, et al. (2020), Pinasti (2018) and Emanuel (2020) where BOPO has a negative and significant effect on ROA. Setyarini (2020) states that the smaller the ratio of BOPO, the more efficient the operational costs incurred by the bank itself.

The results of hypothesis testing conclude that LDR has a positive and insignificant effect on the ROA of commercial banks registered with the Financial Services Authority for the period 2018 to 2020 with a coefficient of 0.176406. The magnitude of the coefficient which has a positive value indicates that an increase in LDR by 1% after anti-log is carried out will be followed by an increase in ROA of 0.176406%. The results of testing the effect of LDR on ROA are not in accordance with the theory and framework developed. The results of this study are in contrast to research conducted by Setyarini (2020) and Pinasti (2018) where LDR has a positive and significant effect on ROA. Meanwhile, this research is in line with research conducted by Rembet (2020), in which LDR has no effect on ROA.

In man home and home

DOI: <u>https://doi.org/10.53625/ijss.v3i2.6293</u>

Rembet (2020) states that the higher the LDR reflects that a bank will be more effective in channeling financing, in this study the LDR has increased, which has an impact on decreasing bank profitability.

CONCLUSION

There is a positive and significant effect of the CAR variable on the ROA variable, which means that if the CAR is higher, the ROA of a bank will also increase, which can be a measure of a bank's success in earning profits. There is a negative and significant effect of the NPL variable on the ROA variable, which means that if the NPL value is higher, the ROA of a bank will decrease, and vice versa if the NPL of a bank is lower, the credit quality of a bank will be better.

There is also a negative and significant effect of the BOPO variable on the ROA variable, which means that if the bank's BOPO is lower, the bank's ROA profitability value will increase, and vice versa if BOPO increases, the bank's ROA profitability will decrease.

And there is a positive but not significant effect of the LDR variable on the ROA variable, which means that if LDR has no effect on ROA profitability, this is because banking LDR has decreased while banking ROA has increased, and vice versa.

REFERENCES

- [1] Dendawijaya, L. (2009). Manajemen Perbankan. Bogor: Ghalia Indonesia.
- [2] Fahmi, I. (2015). Pengantar Manajemen Keuangan Edisi Ke Empat. Bandung: Alfabeta.
- [3] Kasmir. (2014). Analisa Laporan Keuangan. Jakarta: PT Raja Grafindo Persada.
- [4] Kuncoro, M., & Suhardjono. (2011). Manajemen Perbankan Teori dan Aplikasi. Yogyakarta: BPFE Yogyakarta.
- [5] Riyadi, S. (2016). *Banking Assets And Liability Management, Edisi Keempat.* Jakarta: Lembaga Penerbit Fakultas Ekonomi & Bisnis, Universitas Indonesia.
- [6] Sudana, I. M. (2011). Manajemen Keuangan Perusahaan Teori & Praktik. Jakarta: Erlangga.
- [7] Anindiansyah, G., Sudiyatno, B., Puspitasari, E., & Susilawat, Y. (2020). Pengaruh Car, Npl, Bopo, Dan Ldr Terhadap Roa Dengan Nim Sebagai Variabel Intervening (Studi Pada Bank Yang Go Publik Di Bursa Efek Indonesia PeriodE TAHUN 2015-2018). *Proceeding SENDIU*.
- [8] Arasy. (2020). Influence of Capital Adequacy Ratio (CAR), Loan to Deposits Ratio (LDR), Operational Efficiency Ratio (OER), and Non-Performing Loan (NPL) on Return on Assets (ROA) of Soes Bank in 2016 to 2018. *Journal Of Accounting Research and Review*, Vol.6, No.1.
- [9] Emanuel. (2020). Pengaruh BOPO, NPL, Pertumbuhan Ekonomi dan Inflasi terhadap ROA pada PT Bank Mandiri (Persero) Tbk Indonesia. *Jurnal Inovatif Mahasiswa Manajemen*, Vol.1, No.1.
- [10] Fitri, R., Hosen, M. N., & Muhari, S. (2016). Analysis of Factors that Impact Dividend Payout Ratio on Listed Companies at Jakarta Islamic Index. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, Vol.6, No.2.
- [11] Hantono. (2019). Effect of Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR) and Non Performing Loan (NPL) to Return on Assets (ROA) Listed in Banking in Indonesia Stock Exchange. International Journal of Education and Research, Vol.5.
- [12] Harun, U. (2016). Pengaruh Ratio-Ratio Keuangan CAR, LDR, NIM, BOPO, NPL Terhadap ROA. *Jurnal Riset Bisnis dan Manajemen*, 67-82.
- [13] Pinasti, W. F. (2018). Pengaruh CAR, BOPO, NPL, NIM dan LDR Terhadap Profitabilitas Bank Umum Periode 2011-2015. Jurnal Nominal, Vol.7, No.1.
- [14] Rembet, W. E. (2020). Pengaruh CAR, NPL, NIM, BOPO, LDR Terhadap Return On Asset (ROA) (STUDI Pada Bank Umum Swasta Nasional Devisa Yang Terdaftar Di BEI). *Jurnal EMBA*, Vol.8, No.3.
- [15] Rokhmatika, A. (2017). Analisis Tingkat Kesehatan Bank Dengan Menggunakan Metode Risk Profile, Good Corporate Governance, Earning, Capital (RGEC). *Management Insight*, Vol.12, No.1
- [16] Setyarini, A. (2020). Analisis Pengaruh CAR, NPL, NIM, BOPO, LDR Terhadap ROA (Studi Pada Bank Pembangunan Daerah Di Indonesia Periode 2015-2018). *Research Fair Unisri*, Vol.4, No.1.

THIS PAGE IS INTENTIONALLY LEFT BLANK

.....

Journal homepage: https://bajangjournal.com/index.php/IJSS