State-Owned Bank Health Level using the CAMELS Method for the Period of 2015-2020

Yayah Sutisnawati[1]*, Nurul Putri Pamungkas[2]

*yayah@unikom.ac.id**

Universitas Komputer Indonesia, Jl. Dipati Ukur No. 112-116, Kota Bandung, Jawa Barat, Indonesia

ABSTRACT

The purpose of this study was to identify the soundness level of a bank by using CAR, NPL, ROA, BOPO, and long-distance relationships in the CAMELS system in one of the Banking SOEs. The method used is a quantitative method with a descriptive approach over a period of six years (2015-2020). The research findings show a comparison of the 2015-2020 CAR in the face of depreciation and escalation or the occurrence of instability. There was also a decrease in the CAR ratio in 2015-2016 due to an increase in the amount of RWA without being offset by bank capital. Comparison of NPLs in BUMN Banking escalates every year due to the high risk of missing budget formation or bad loans. These results were found by analyzing each level of the soundness of each ratio variable (CAR, NPL, ROA) to financial institutions.

Keywords : Banking; Financial; ROA; BOPO; CAR

ABSTRAK

Tujuan penelitian ini untuk mengidentifikasi tingkat kesehatan bank dengan menggunakan Rasio CAR, NPL, ROA, BOPO, dan hubungan jarak jauh dalam sistem CAMELS di salah satu BUMN Perbankan. Metode yang digunakan adalah metode kuantitatif dengan pendekatan deskriptif dalam periode enam tahun (2015-2020). Temuan penelitian menunjukkan perbandingan CAR tahun 2015-2020 dalam menghadapi penyusutan dan eskalasi atau terjadinya instabilitas. Terjadi pula penurunan Rasio CAR tahun 2015-2016 karena peningkatan jumlah ATMR tanpa diimbangi permodalan bank. Perbandingan NPL di BUMN Perbankan tiap tahun terjadi eskalasi karena tingginya resiko pembentukan anggaran yang hilang atau kredit macet. Hasil tersebut ditemukan dengan menganalisis setiap tingkat kesehatan dari setiap variabel rasio (CAR, NPL, ROA) terhadap lembaga keuangan.

Kata Kunci : Perbankan; Keuangan; ROA; BOPO; CAR

INTRODUCTION

In practice, the bank is divided into several parts, namely based on the type, ownership, status, and principles. Therefore, in practice, banks need an analysis of the results of measuring bank profitability, namely, Return on Assets (ROA). The ROA serves to determine the performance of bank profitability in utilizing assets to generate profits for the company. The ROA benchmark results are strongly influenced by interest rate risk (NIM), compared to credit risk (NPL) and liquidity risk (LDR) (Parenrengi & Hendratni, 2018 & Dewi & Wartana, 2021 & Law Number 10 of 1998). Apart from ROA, there are several factors that affect banking profitability which were found from the results of research by Hidayati and Yudowati, 2020, namely Performing Loans (NPL), Loan Deposit Ratio (LDR), Capital Adequacy Ratio (CAR), the banking Board of Commissioners and Directors.

One of the most important activities in banking activities is the activity of reporting financial data. This is because financial reporting is one of the benchmarks to find out information on the financial condition of a bank. Apart from containing information, financial reports are also a determining indicator in decision-making for internal and external companies (Faradiza, 2019). However, in reporting financial data, there is a problem, namely, fraud is found to attract the attention of investors or potential investors in investing in the company's bank. In addition, there are also several other internal factors that encourage fraud such as pressure, opportunity, rationalization, competence, and arrogance (Septriani and Handayani, 2018). Therefore, it is especially important for the banking sector to pay attention to the effects of financial stability (pressure), ineffective monitoring (opportunities) and rationalization to minimize the possibility of earnings management committing fraud on financial statements.

Therefore, referring to the financial data reporting, we can also pay attention to the health condition of the bank, also known as bank soundness. Determination of the soundness level of a bank is assessed based on the results of an evaluation of the power of a bank which can be observed from the bank's financial information and operational activities in carrying out its obligations and compliance with legal banking regulations. This means that a bank in making assurance must carry out the precautionary principle in its operational activities. Bank soundness analysis is a form of procedure to find out whether a bank is in the healthy category or not. Banking policies issued and implemented by The Central Bank of Indonesia intend to create and maintain the soundness of a good bank, both individually and as a system (Permana dan Aji, 2012).

In the analysis of bank health, there is a main indicator, namely financial information, regarding the causes of financial information is industrial databases. Analysis of financial information includes calculations of financial comparisons. Based on the BI (The Central Bank of Indonesia) Brochure Message No. 6 or 10 or PBI or 2004, coinciding on April 12, 2004, Regarding the Evaluation System for Average Bank Soundness Levels, the designation of bank soundness levels is broken down into 4 levels of very healthy, healthy, fairly healthy and unhealthy. The worsening of the banking soundness system was caused by various aspects. One aspect that is often experienced by banking institutions is the increase in the number of problem installments and bad installments. The formation of cases in terms of liquidity always also affects the level of bank soundness. Therefore, in maintaining a healthy or healthy banking, effective coaching and supervision is needed in a valuable way.

The method rules for measuring the evaluation of a Bank's Soundness Level have previously been regulated in "The Central Bank of Indonesia Decree No. 26 or 23 or KEP

or DIR as well as The Central Bank of Indonesia Brochure Message Number. 26 or 5 or BPPP coinciding on May 29 1993, the start of the evaluation in April 1997 until now has been replaced by the evaluation rules method based on the Decree Message of The Central Bank of Indonesia Board Numberv30 or 11 or KEP or DIR coincided on April 30, 1997".

In research conducted by Permana and Aji (2012) the assessment of the soundness of a bank using the CAMELS method focuses on the factors that influence it. Setiawan (2017) did the same thing, which focused on just one indicator, namely the Return of Assets. Likewise, Putri and Marlius' research (2018) in assessing the soundness of a bank focuses on the use of the Capital Adequacy Ratio (CAR). However, in this study, after analysis using CAR, the Assets Ratio (NPL), Operating Costs and Operating Income (BOPO), and Management Ratio (ROA) were also carried out in the CAMELS method. This was also an update in this study, namely using four ratios simultaneously to observe the soundness level of Stated-owned Bank (Persero).

Thus, this research was conducted with the aim of analyzing financial information originating from comparisons of CAR, comparisons of NPLs, comparisons of ROA, comparisons of BOPO i.e. each of these variables is directly linked to the level of soundness whereas in previous research each variable (CAR, NPL, BOPO, and ROA) associated with each variable. The method used in this research is a quantitative method with a descriptive approach in describing the research results.

RESEARCH METHOD

This research was conducted using quantitative methods, namely analyzing quantitative data and describing the results of research studies based on data in the field so that the accuracy of the data can be more accountable. It can also be analyzed using statistical methods (Imron, 2019). In this study, the authors used a sample research object, namely PT. Bank Rakyat Indonesia (BRI) obtained from a literature study at the Indonesia Stock Exchange. As for other complementary data obtained from literature studies related to the object of research. Meanwhile, this study also contains several variables obtained from the results of the literature study, namely indicators and measures of bank soundness level variables, consisting of:

Table 1. Operational Research Variables

Variable	Draft	Indicator	Size	Scale	Items
Bank Health Level	Assessment of the bank's ability to carry out banking business normally and be able to properly fulfill all obligations in a manner that is consistent with banking regulations (Circular Letter of the Financial Services Authority Number 10/Seojk.03/2014)	*Capital, Assets, Management, Earnings Dan Liquidity*	CAR = bank capital RWA x 100%		
			NPL = non-performing loans total credit x 100% bank capital (core capital + supplementary capital) RWA (assets balance + admin balance x 100%	Ratio	%
				Ratio	%
			ROA=net profit total assets x 100%	Ratio	%
			BOPO = operating expenses operating income x 100%	Ratio	%
			LDR = third party credit, third party funds x 100%	Ratio	%

Source: Processed by Author, 2022

Based on these variables, this study uses the following hypothesis to assess the soundness of a bank using the CAMELS method, namely: [H1] CAR affects the soundness of a bank; [H2] NPL has an effect on the soundness level of the bank; [H3] ROA affects the

soundness level of the bank; [H4] BOPO has an effect on the soundness of the bank; [H5] LDR has an effect on the soundness of the bank.

This hypothesis has a relationship with the four assessment variables as illustrated in the following figure:
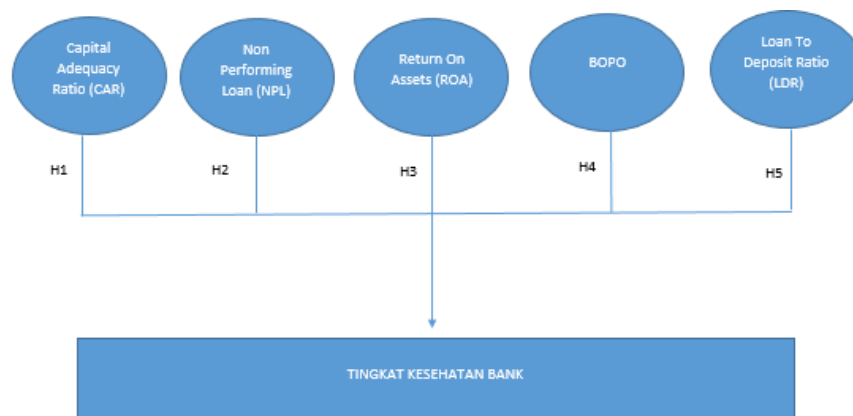
Source: Processed by Author, 2022

Figure 1. Research Hypothesis Relationship Model

The variables and hypotheses are processed and obtained using the CAMELS method with assessment indicators in the CAMELS method based on ratio analysis of financial statements by taking into account the other five dimensions namely Capital Adequacy, Asset Quality, Management Quality, Earnings, and Liquidity. As for besides these dimensions. The CAMELS method also analyzes sensitivity to market risk which is assessed using financial ratios (Lestari, 2020 & Pattiruhu, 2020). An analysis related to Earnings (Rentability) is carried out by looking at a comparison of BOPO, namely a comparison of the analogy between operational fees and operational income. The BOPO comparison is used to measure the level of capability and power of a bank in carrying out its operational activities, along with the formula used.

$$BOPO = \frac{beban\ operasional}{pendapatan\ operasional}\ x\ 100\% \qquad (1)$$

After the profitability analysis has been carried out, an analysis of the liquidity dimension is carried out to see the ratio which states how far the bank has used the depositors' money to provide loans to its customers. In other words, the amount of money used to make loans is money that comes from the deposits of depositors, using the following formula:

$$Loan\ Deposit\ Ratio\ (LDR) = \frac{jumlah\ kredit\ pihak\ ketiga}{total\ dana\ pihak\ ketiga}\ x\ 100\% \qquad (2)$$

The determination of minimum Loan to Deposit Ratio (LDR) limit for a bank has been determined by the Indonesia Stock Exchange (IDX) with reference to The Central Bank of Indonesia Announcement No. 15/15/PBI/2013 of 78% -92%, so this benchmark is used for seeing the health level of a bank (Piliang, 2019).

RESULTS AND DISCUSSIONS

In carrying out their operations, banks are required to be able to measure the bank soundness so that it can be seen whether the bank is in the healthy category or not. Therefore, the determination of variables in conducting Quantitative Descriptive analysis related to the performance of a bank is by observing financial report data. The measurement variable on the value of a bank is seen by the variable level of profitability, investment decisions, and funding decisions on company value. These variables will be determined as independent and dependent variables which are assumed to be able to describe the research conditions objectively (Asnawi and Van, 2018., & Firdaus, 2019). So, to measure the soundness of the bank of Stated-owned Bank (Persero), financial statement data were observed from the 2015-2020 period, specifically the capital structure and ATM to capital ratio (CAR) (can be seen in table 2).

Table 2. The Capital Structure of Stated-Owned Bank and RWA 2015-2020

	2015	2016	2017	2018	2019	2020
Core Capital	93.436.842	139.786.475	154.668.699	172.358.004	197.219.352	188.648.185
Sup. Capital	20.763.556	7.459.267	7.083.240	10.029.307	10.160.078	10.160.456
Total avail. Capital	**114.200.398**	**147.245.742**	**161.751.939**	**182.387.311**	**207.379.430**	**198.808.641**
RWA Credit Risk	458.538.460	524.505.486	566.659.194	690.764.915	726.179.371	746.749.522
RWA Market Risk	2.884.354	9.622.076	6.889.063	11.229.322	14.004.256	4.837.024
RWA Ops. Risk	98.655.847	114.841.081	130.967.728	152.229.031	170.666.840	187.566.487
RWA Total	**560.078.660**	**648.968.643**	**704.515.985**	**854.223.268**	**910.850.467**	**939.153.033**

Source: Indonesian Stock Exchange, 2022

After analyzing the capital structure and RWA of the bank during period of 5 years (2015-2020) using the CAR formula, the CAR ratio value categorized as **HEALTHY** category because the CAR ratio value of the bank is above > 8%, which is in the range of 20.39% - 22.96%. Therefore, in the next stage, the calculation of the development of the CAR ratio for 2015-2020 is carried out as shown in Table 3.

Table 3. Calculation of CAR Ratio Development for 2015-2020

Year	CAR Development
2015	$CAR = \frac{20,39\% - 18,31\%}{18,31\%} \ x \ 100\% = 1,13\%$
2016	$CAR = \frac{22,69\% - 20,39\%}{20,39\%} \ x \ 100\% = 1,12\%$
2017	$CAR = \frac{22,96\% - 22,69\%}{22,69\%} \ x \ 100\% = 0,11\%$
2018	$CAR = \frac{21,35\% - 22,96\%}{22,96\%} \ x \ 100\% = -0,70\%$
2019	$CAR = \frac{22,77\% - 21,35\%}{21,35\%} \ x \ 100\% = 0,66\%$
2020	$CAR = \frac{21,17\% - 22,77\%}{22,77\%} \ x \ 100\% = -0,70\%$

Source: Processed by Author, 2022

Table 3 shows the CAR comparison in 2015 to 2016 experienced a depreciation of 1.12% after that in 2017 it also experienced a reverse depreciation of 0.11%. In 2018 it again experienced a quite drastic reduction of -0.70%, but in 2019 it experienced an increase of 0.66%, and in 2020 it again experienced a decrease of -0.70%. The value of the

increase and decrease in the CAR value ratio shows the willingness of capital to anticipate every possible risk that occurs is relatively large and indicates that the bank is in a "HEALTHY" condition. The same thing was experienced in research conducted by Fauzi *et.al*, 2020 at sharia bank. In this study it was also found that the period 2016-2018, the value of the Capital Adequacy Ratio (CAR) in 2016-2018 experienced an increase and decrease, namely, in 2016 there was a decrease of 15.25%, in 2017 it decreased again by 15.48%. , and 2018 of 14.92% in 2018.

These results, reflect the condition of the soundness of the bank at sharia bank in the Assessment of Bank Soundness in terms of Capital Adequacy Ratio (CAR) is included in the "very good" title. This is because the minimum standard of Capital Adequacy Ratio (CAR) set by the Central Bank of Indonesia is 8% with a ratio of more than 11%. After analyzing the CAR comparison ratio of the bank for 2015-2020, then an analysis of the NPL ratio for 2015-2020 is carried out which is seen based on credit collectibility data (Table 4). The NPL ratio will determine the soundness of the bank.

Table 4. Credit Collectability Data of Stated-owned Bank (Persero) 2015-2020

	2015	2016	2017	2018	2019	2020
Fluent	540.359.286	619.793.792	686.657.087	787.941.336	846.000.848	883.196.258
Special attention	28.551.121	29.474.869	30.784.126	31.173.877	35.981.286	27.156.025
Not that smooth	2.862.971	3.730.004	2.995.624	2.479.185	4.424.973	2.479.943
Doubtful	1.411.066	1.756.805	4.229.123	2.380.777	3.420.007	3.751.019
Congested	7.910.099	8.664.747	9.064.059	14.165.839	17.561.912	21.790.635
Total kredit	**581.094.544**	**663.420.218**	**733.730.019**	**838.141.014**	**907.388.986**	**938.373.880**
NPL	**12.184.137**	**14.151.556**	**16.288.806**	**19.025.801**	**25.406.892**	**28.021.597**

Source: IDX, 2022

The maximum Non-Performing Loan (NPL) ratio set by The Central Bank of Indonesia is 5% in the current category. Based on the credit collectibility data, it was found that the NPL ratio value of Stated-owned Bank (Persero) for 2015-2020 was in a standard safe position for The Central Bank of Indonesia, namely <2% which could be categorized as **Very Healthy** in accordance with The Central Bank of Indonesia regulations (Table 5).

Table 5. Calculation of the Development of the NPL Ratio for 2015-2020

Year	CAR Development
2015	$CAR = \frac{2,10\% - 1,78\%}{1,78\%} \; x \; 100\% = 1,8\%$
2016	$CAR = \frac{2,13\% - 2,10\%}{2,10\%} \; x \; 100\% = 0,1\%$
2017	$CAR = \frac{2,24\% - 2,13\%}{2,13\%} \; x \; 100\% = 0,5\%$
2018	$CAR = \frac{2,28\% - 2,24\%}{2,24\%} \; x \; 100\% = 0,1\%$
2019	$CAR = \frac{2,80\% - 2,28\%}{2,28\%} \; x \; 100\% = 2,2\%$
2020	$CAR = \frac{2,99\% - 2,80\%}{2,80\%} \; x \; 100\% = 0,6\%$

Source: Processed by Author, 2022

Table 5 shows the comparison of NPLs in 2015 to 2016 experienced a decline of 0.1%, after that in 2017 it faced an escalation of 0.5% but in 2018 it experienced a reverse depreciation of 0.1%, after that in the following year the comparison figures NPL again

increased by 2.2% which caused growth to increase by 2.80% and again decreased in 2020 by 0.6%. This is in line with research conducted by Eng, 2013 that the value of the NPL regression coefficient of -0.293 owned by International Banks and Go Public National Banks indicates the health condition of these banks, because any increase in NPL will have an impact on the value of a decrease in ROA.

As for Stated-owned Bank (Persero), a Return On Assets (ROA) ratio analysis was again carried out to measure the company's profit power. The ROA figure is obtained by calculating the profit before tax ratio with the average total assets with the best standard of 1.5 percent. Therefore, the following presents the consolidated financial position report of net profit and total assets of Stated-owned Bank (Persero) for 2015-2020 which is depicted in Table 6.

Table 6. Financial Position Statement of Net Profit and Total Assets Stated-owned Bank (Persero) in 2015-2020

Year	Net Profit	Total Assets
2015	25,410,788	878,426,312
2016	26,285,251	1,004,801,673
2017	29,045,049	1,127,447,489
2018	32,418,486	1,296,898,292
2020	18.660.393	1.511.804.627

Source: IDX, 2022

Based on the above data and calculating the ROA ratio value, it was found that the ability of Stated-owned Bank (Persero) to obtain a net profit is very high compared to the company's assets used, so the ROA ratio value for 2015-2020 is in the Unhealthy category in accordance with the provisions The Central Bank of Indonesia (shown in table 7). This can be seen from the ROA value in 2015-2018 which experienced an increase and decrease in a negative direction, developments from 2015 to 2016 increased by -0.8% from -1.1%, then in 2017 it increased by -0.3% and in 2018 rose by -0.1%. Meanwhile, in 2019-2020 it decreased from -0.4% to -4.3%. This is in line with research conducted by Fahmi, 2015 and Repi *et.al*, 2016 that a negative ROA value indicates that the company's condition is experiencing a loss, because The Central Bank of Indonesia sets a maximum score of 100 (healthy) if the bank has ROA > 1.5%, and it has a significant positive effect on firm value.

Table 7. Calculation of ROA Ratio Development for 2015-2020

Year	ROA Development
2015	$ROA = \frac{4,19\% - 4,73\%}{4,73\%} \times 100\% = -1,1\%$
2016	$ROA = \frac{3,84\% - 4,19\%}{4,19\%} \times 100\% = -0,8\%$
2017	$ROA = \frac{3,69\% - 3,84\%}{3,84\%} \times 100\% = -0,3\%$
2018	$ROA = \frac{3,68\% - 3,69\%}{3,69\%} \times 100\% = -0,1\%$
2019	$ROA = \frac{3,50\% - 3,68\%}{3,68\%} \times 100\% = -0,4\%$
2020	$ROA = \frac{1,98\% - 3,50\%}{3,50\%} \times 100\% = -4,3\%$

Source: Processed by Author, 2022

Furthermore, an analysis of the value of the BOPO ratio of Stated-owned Bank (Persero) in 2015-2020 was carried out which showed a stable condition and showed that the ratio of operating expenses to operating income of the bank exceeded safe limits and could also be categorized as HEALTHY ENOUGH in accordance with The Central Bank of Indonesia regulations (shown in table 8). the development of the BOPO ratio in 2015-2020

experienced stability, where in 2015 to 2016 it decreased by 0.1% then in 2017 it decreased again by 0.03%, there was a decrease of -0.1% in the following year but there was an increase in 2019-2020 of 1.5%.

**Table 8. Calculation of the Development of the ROA Ratio for 2015-2020
Calculation of the Development of the BOPO Ratio BOPO**

Year	BOPO Development
2015	BOPO = 67,96%-65,42%65,42% x 100% = 0,3%
2016	BOPO = 68,93%-67,96%67,96% x 100% = 0,1%
2017	BOPO = 69,14%-68,93%68,93% x 100% = 0,03%
2018	BOPO = 68,40%-69,14%69,14% x 100% = -0.1%
2019	BOPO = 70,10%-68,40%68,40% x 100% = 0,2%
2020	BOPO = 67,96%-65,42%65,42% x 100% = 0,3%

Source: Processed by Author, 2022

Then an analysis of the value of the LDR ratio of Stated-owned Bank (Persero) in 2015-2019 which shows the predicate is GOOD ENOUGH because it is at the third level where the provisions are 85% <LDR≤100% and in 2020 the value of the LDR ratio is included in the GOOD predicate. Because the level of liquidity has decreased it has a lower ratio value than the previous year (Table 9).

Table 9. Calculation of the LDR Ratio Value and Its Development

Year	LDR value	Description	Development	Description
2015	86,88%	Pretty Good	0,6%	-
2016	87,77%	Pretty Good	0,1%	Down
2017	88,13%	Pretty Good	-2,2%	Down
2018	88,96%	Pretty Good	0,09%	Up
2019	88,64%	Pretty Good	-0,03%	Down
2020	83,66%	Good	2,8%	Up

Source: Processed by Author, 2022

The data that has been obtained and analyzed is carried out with the aim of showing the effect of each CAR, NPL, ROA, BOPO, and LDR variable ratio on the soundness level of PT. Bank Rakyat Indonesia (Persero) shows that the results of the analysis of each variable are included in the "HEALTHY" category. This is because the CAR variable has a maximum value of 22.96 and a minimum value of 20.39, this value is 2.57 adrift with an average value of 21.8883 and a std deviation value of 1.06012 with a variance of 1.124. The results of the analysis of the CAR variable are consistent with research conducted by Fauzi *et.al*, 2020 that CAR with a value above 8% is considered a bank with control over the total risk of bank assets (loans, investments, securities, claims on other banks) can be managed by either by the bank. This is because the capital owned by the bank can take in losses and is able to overcome the negative effects of economic conditions and the financial industry.

On the other hand, for the NPL variable, the highest ratio was in 2019 of 2.2%, while for other years the NPL ratio was in the range of 0.1-1.8%. This shows that even though the bank Stated-owned Bank experienced problems in 2019, it was still able to overcome losses due to problem credit managers. This was also found in line with Putri *et.al*., 2018 that the higher the NPL ratio owned by a bank (> 2.2%), the more it indicates that the bank is included in the bad category for credit quality which causes a high probability of a bank in loss.

The ROA variable has a maximum value of 4.19 and a minimum value of 1.98, these values are 2.21 adrift and have an average value of 3.48 and a std deviation value of 0.77048 with a variance value of 0.594. This indicates that ROA is not affected by the NPL value or vice versa. These results are also in line with the non-significant NPL value with ROA in Setiawan's research, 2016. The study found that bank business risk as reflected in NPL had no significant effect on ROA (low NPL in BUKU 4 banks even though ROA continued to increase), so that it can it is concluded that NPL cannot be fully used as the main indicator in assessing the soundness of a bank.

The BOPO variable has a maximum value of 81.22 and a minimum value of 67.96, this value is 13.26 adrift with an average value of 70.9583 and a std deviation value of 5.07925 with a variance value of 25.799. This value indicates that the BOPO ratio at a bank greatly influences the bank's operating income. This is in line with research conducted by Devi, 2021, which states that a high BOPO value means that the costs incurred by the bank for operations are greater than the operating income that goes to the bank, and will affect the operating income of small banks. Therefore, the bank's profitability (ROA) is low.

Likewise, the LDR variable has a maximum value of 88.96 (in 2019) and a minimum value of 83.66 (2020) this value is 5.30 adrift. It is also known that the average value of the LDR is 87.34 with a std deviation of 1.94306 and a variance value of 3.775. The value obtained from the LDR variable shows fluctuations in the 5-year range. So it is feared that even though currently it is still in the Healthy category, it is feared that in the future it will shift to the unhealthy category because according to The Central Bank of Indonesia, a good LDR ratio standard is at 85% -110%. The same thing was experienced by Bank Muamalat in research conducted by Wahyuni, 2020. Wahyuni, 2020 found that Bank Muamalat also experienced fluctuations with Bank Syariah Mandiri's LDR ratio from 2005 to 2013 of 85.17% and was prone to shifting to the low-income healthy category if the bank's performance has decreased.

CONCLUSION

Based on the research review on the analysis of the soundness level of a bank using the CAMELS procedure at BUMN Perbankan, each hypothesis assumed by the author shows that these variables greatly influence the determination of the category of a bank to enter the "HEALTHY" category. However, if we look further at the relationship between Hypothesis 2 (NPL) and Hypothesis 3 (ROA), apart from objectively influencing the health level, these two variables have an influence that cannot be harmonized together (NPLL and ROA values are contradictory). On the other hand, hypotheses 1, 4, and 5 may have a relationship with the effect of hypothesis 2 on the level of bank health (connected simultaneously with ROA). Comparison of CAR in 2015-2020 experienced depreciation and escalation or there was instability. There was also a reduction in the CAR ratio from 2015-2016 due to an increase in the amount of RWA that was not aligned with bank capital.

On the other hand, for comparison, NPL at BUMN Perbankan faces an escalation every year, this is caused by the high risk of a loss in budget returns or untimely installment payments from customers to banks which can lead to bad credit. As for the Return on Assets (ROA) comparison, there was a depreciation in 2015-2016 which was caused by an increase in profits that did not match the escalation of the overall legacy as a result, the ROA ratio shrank and the 2016-2020 depreciation was similar to the previous year. Meanwhile, the BOPO ratio or operational weight experienced an increase from 2015 to 2016 due to an escalation in operating weight as a result the BOPO ratio increased,

however, it experienced a decrease in 2017 to 2018 due to operational weight being greater than operating income as a result the BOPO ratio decreased. Likewise in the comparison of long-distance relationships in 2015-2020 at BUMN Perbankan it experienced declines and increases or there was instability.

RECOMMENDATION

Meanwhile, based on the results of the conclusions in this study, there are several recommendations to increase or decrease the level of each ratio. In the CAR ratio, Stated-owned Bank (Persero) needs to balance the amount of RWA against the bank's capital. So to increase bank capital it is necessary to add investors as well as partners to work together so that this can minimize the decrease in the CAR ratio and so that it remains in the HEALTHY category. As for reducing the increase in the NPL ratio, Stated-owned Bank (Persero) needs to apply the precautionary principle by minimizing non-performing loans, namely non-performing loans or loans where the debtor does not meet predetermined requirements, namely principal payments and interest expenses.

In the ROA ratio, Stated-owned Bank (Persero) needs to increase its net profit by increasing fund management income and other operating income, as well as reducing funding expenses and other operating expenses so that the return on assets will increase. Likewise, for the BOPO ratio, Stated-owned Bank (Persero) needs to increase its operating income by increasing financing and streamlining the cost of funds and other operating expenses so that the efficiency of operating expenses on operating income will decrease. The same thing also happens for the LDR ratio, Stated-owned Bank (Persero) needs to increase its third-party funds by increasing savings funds so that the distribution of financing is smoother.

REFERENCES

Asnawi, W. A., & Van Rate, P. (2018). Pengaruh Kinerja Keuangan Bank Terhadap Return on Asset (Roa) Studi Pada Bank Umum Devisa Buku 4. Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi, 6(4), 2898 – 2907. https://doi.org/10.35794/emba.v6i4.21198

Cardilla, A. L., Muslih, M., & Rahadi, D. R. (2019). Pengaruh Arus Kas Operasi, Umur Perusahaan, Dan Ukuran Perusahaan Terhadap Kinerja Perusahaan Perbankan Yang Terdaftar Di *Indonesian Stock Exchange* Periode 2011-2016. Firm Journal of Management Studies, 4(1), 66-78. http://dx.doi.org/10.33021/firm.v4i1.686

Devi, H. P. (2021). Pengaruh Ratio Kesehatan Bank (CAR, NPF, FDR, BOPO) Terhadap Return On Assets pada Bank Umum Syariah di Indonesia. Owner: Riset dan Jurnal Akuntansi, 5(1), 1-11. https://doi.org/10.33395/owner.v5i1.311

Dewi, I. A. S., & Wartana, I. M. H. (2021). Pengaruh Risiko Kredit, Risiko Tingkat Bunga Dan Risiko Likuiditas Terhadap Profitabilitas Bank Bumn Indonesia Periode 2016-2020. Journal Research of Management (JARMA), 3(1), 27-35. https://doi.org/10.51713/jarma.v3i1.57

Eng, T. S. (2013). Pengaruh NIM, BOPO, LDR, NPL & CAR Terhadap Roa Bank Internasional Dan Bank Nasional Go Public Periode 2007–2011. Jurnal dinamika manajemen, 1(3), 153-167. https://doi.org/10.22437/jdm.v1i3.1473

Fahmi, I. (2015). Manajemen perbankan: Konvensional dan syariah. Jakarta: Mitra Wacana Media.

Faradiza, S. A. (2019). Fraud pentagon dan kecurangan laporan keuangan. EkBis: Jurnal Ekonomi Dan Bisnis, 2(1), 1-22. https://doi.org/10.14421/EkBis.2018.2.1.1060

Fauzi, A., Marundha, A., Setyawan, I., Syarief, F., Harianto, R. A., & Pramukty, R. (2020). Analisis Capital Adequacy Ratio (CAR) dan Penilaian Tingkat Kesehatan Bank Pada PT Bank Syariah XXX. JMBI UNSRAT (Jurnal Ilmiah Manajemen Bisnis dan Inovasi Universitas Sam Ratulangi)., 7(1), 114-127. https://doi.org/10.35794/jmbi.v7i1.28392

Firdaus, I. (2019). Pengaruh DER, PER dan ROA Terhadap PBV Pada Industri Perbankan. Jurnal Ekonomi, 24(2), 242-255. https://doi.org/10.24912/je.v24i2.581

Hidayati, T., & Yudowati, S. P. (2020). Analisis Faktor-faktor yang Mempengaruhi Profitabilitas Perbankan Terbesar di Indonesia. Jurnal Akuntansi Dan Ekonomika, 10(1), 1-10. https://doi.org/10.37859/jae.v10i1.1872

Imron, I. (2019). Analisa pengaruh kualitas produk terhadap kepuasan konsumen menggunakan metode kuantitatif pada CV. Meubele Berkah Tangerang. Indonesian Journal on Software Engineering (IJSE), 5(1), 19-28. https://doi.org/10.31294/ijse.v5i1.5861

Indonesia. Undang-Undang Nomor 10 Tahun 1998 tentang Perubahan atas Undang-Undang Nomor 7 Tahun 1992 tentang Perbankan. LN. 1998/ No. 182, TLN NO. 3790, LL SETNEG : 32 HLM.

Lestari, P. (2020). Analisis Komparatif Kinerja Keuangan Perbankan Syariah Di Indonesia Dan Malaysia Dengan Pendekatan Metode CAMELS Periode 2014-2018. Jurnal Masharif al-Syariah: Jurnal Ekonomi dan Perbankan Syariah, 5(2). http://dx.doi.org/10.30651/jms.v5i2.5471

Parenrengi, S., & Hendratni, T. W. (2018). Pengaruh dana pihak ketiga, kecukupan modal dan penyaluran kredit terhadap profitabilitas bank. Jurnal manajemen strategi dan aplikasi bisnis, 1(1), 9-18. https://doi.org/10.36407/jmsab.v1i1.15

Pattiruhu, J. R. (2020). Analisis kinerja keuangan melalui metode "CAMELS" pada PT. Bank Central Asia, Tbk di Kota Ambon. Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi, 8(2). https://doi.org/10.35794/emba.v8i2.28404

Permana, B. A., & Aji, B. A. Y. U. (2012). Analisis Tingkat Kesehatan Bank Berdasarkan Metode CAMELS dan Metode RGEC. Jurnal Akuntansi Akunesa, 1(1), 1-21. Retrieved from https://ejournal.unesa.ac.id/index.php/jurnal-akuntansi/article/view/288

Piliang, B. V. (2019). Pengaruh Non Performing Loan (NPL) dan Loan to Deposit Ratio (LDR) terhadap Return on Assets (ROA) pada Bank Umum Swasta Devisa yang terdaftar di Indonesian Stock Exchange (BEI) periode 2012-2016. JASa (Jurnal Akuntansi, Audit dan Sistem Informasi Akuntansi), 3(2), 253-271. https://doi.org/10.36555/jasa.v3i2.961

Putri, N. K. A. P., Wiagustini, L. P., & Abundanti, N. N. (2018). Pengaruh NPL, CAR dan BOPO terhadap profitabilitas pada BPR di Kota Denpasar. E-Jurnal Manajemen Universitas Udayana, 7(11), 6212-6238. https://doi.org/10.24843/EJMUNUD.2018.v7.i11.p15

Repi, S., Murni, S., & Adare, D. (2016). Faktor-faktor yang mempengaruhi nilai perusahaan subsektor perbankan pada BEI dalam menghadapi MEA. Jurnal EMBA, 4(1),181-191. https://doi.org/10.35794/emba.4.1.2016.11585

Septriani, Y., & Handayani, D. (2018). Mendeteksi kecurangan laporan keuangan dengan analisis fraud pentagon. Jurnal Akuntansi Keuangan Dan Bisnis, 11(1), 11-23. Retrieved from https://jurnal.pcr.ac.id/index.php/jakb/article/view/1701

Setiawan, A. (2016). Analisis Pengaruh Tingkat Kesehatan Bank Terhadap Return On Asset. Jurnal Lentera Akuntansi, 2(2), 1-13. http://dx.doi.org/10.34127/jrakt.v2i2.201

Setiawan, A. (2017). Analisis pengaruh tingkat kesehatan bank terhadap Return on Asset. Jurnal Analisa Akuntansi dan Perpajakan, 1(2), 130-152. https://doi.org/10.25139/jaap.v1i2