

Research Article

Analysis of Bank Financial Health During and After the COVID-19 Pandemic Using the Camel Method (Study at PT. Bank Rakyat Indonesia (Persero), Tbk 2020-2023)

Eka Sutisna^{*} , Raihan R , Edi Suhara , Rabia Rahmanian 

Faculty of Economics, Islamic University of Jakarta, East Jakarta City, Indonesia

Abstract

Analysis of Bank Financial Health During and After the COVID-19 Pandemic Using the CAMEL Method (Study at PT. Bank Rakyat Indonesia (Persero), Tbk). This study aims to determine whether PT. Bank Rakyat Indonesia (Persero), Tbk experiences differences in financial health as measured by CAMEL (Capital, Assets, Earnings and Liquidity) between during and after the COVID-19 pandemic. The method used in this analysis is the Descriptive Method with a Quantitative Approach. The data used are the Financial Reports of PT. Bank Rakyat Indonesia (Persero), Tbk for the period 2020 - 2023. and the data analysis technique uses the CAMEL Method. The results of the study show that CAMEL PT. Bank Rakyat Indonesia (Persero), Tbk During and After the COVID-19 Pandemic is declared healthy. Average CAR BRI During COVID-19 23.60% and CAR BRI After COVID-19 23.60%, Average KAP During COVID-19 1.76% and After COVID-19 1.96%, Average NPM During COVID-19 72.45% and After COVID-19 78.64%, Average ROA During COVID-19 2.82% and After COVID-19 3.93% and Average LDR During COVID-19 82.76% and After COVID-19 84.73%. Bank BRI was able to face the economic crisis during COVID-19 and was consistently able to maintain its financial performance well.

Keywords

CAMEL Method, Financial Health, COVID-19 Pandemic

1. Background

In 2020, Indonesia was shocked by the spread of a virus called COVID-19 which spread throughout the country so that the World Health Organization (WHO) decided it as a pandemic. COVID-19 has had an impact on various sectors, including the banking sector. Therefore, the Indonesian government made a policy to prevent the transmission of COVID-19 to all Indonesian people to only do activities at home. The efforts made by the Indonesian government to overcome COVID-19 have had a very different impact on community

activities so that most business sectors have experienced obstacles. This policy has caused changes in the raw material chain, decreased production activity, decreased purchasing power, increased unemployment, and decreased economic growth. Indonesia's economic growth could slow down further if the COVID-19 pandemic continues to spread and causes the implementation of restrictions and lockdowns nationally and globally, which in turn has an impact on decreasing investment in the financial market. Banking companies have a cru-

^{*}Corresponding author: ekasutisna5432@gmail.com (Eka Sutisna)

Received: 16 September 2024; **Accepted:** 28 November 2024; **Published:** 7 December 2024



Copyright: © The Author (s), 2024. Published by Science Publishing Group. This is an **Open Access** article, distributed under the terms of the Creative Commons Attribution 4.0 License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

cial role in the economy because banks act as financial intermediary institutions that collect and distribute funds from the public. The activities carried out by banks aim to encourage economic growth and maintain stability, with the hope of improving the welfare of the Indonesian people. Therefore, the existence of banking companies remains crucial even during the COVID-19 pandemic. To ensure that banks operate effectively, good planning, management, control, and supervision are required. The assessment is carried out by qualifying various components, namely Capital, Asset Quality, Management, Earning, and Liquidity, which are collectively known as CAMEL.

Eka Sutisna [7, 1] analysis of Banking Financial Ratio Before and During the COVID-19 Pandemic. Current Ratio (CR) "there were no significant differences in the Bank Muamalat Indonesia current ratio before and during the COVID-19 pandemic. [7, 2] This result is not in accordance with the hypothesis which states that" "there were significant differences in Bank Muamalat Indonesia's current ratio before and during the COVID-19 pandemic. [7, 3] Debt to Asset Ratio (DAR) "there were significant differences in the Bank Muamalat Indonesia current ratio before and during the COVID-19 pandemic. [7, 4] This result is in accordance with the Analysis of Banking Financial Ratio Before and During COVID-19 Pandemic hypothesis that states "" there were significant differences in the Bank Muamalat Indonesia current ratio before and during the COVID-19 pandemic. [7, 5] Return on Assets (ROA) "there are differences but not significant on return on assets of Bank Muamalat Indonesia before and during the COVID-19 pandemic." "This result is not in accordance with the hypothesis that states" "there were significant differences in the return on assets of Bank Muamalat Indonesia before and during the COVID-19 pandemic period."

2. Research Purposes

- 1) To find out whether PT. Bank Rakyat Indonesia (Persero), Tbk experienced a difference in financial health as measured by the CAMEL ratio (Capital, Assets, Management, Earning and Liquidity) between during and after the COVID-19 pandemic.
- 2) To find out whether the CAMEL method is effective in measuring the health level of PT. Bank Rakyat Indonesia (Persero), Tbk.

3. Literature Review

3.1. Bank

Based on a literature review, a bank can be defined as a business entity which..special movein the activity of collecting funds from the public. The collected funds are channeled into credit or investment with the aim of generating profits

and providing banking services.

3.2. Financial Statements

Financial report is a "notebook" to record all financial activities of the company. This book is important because it can find out and provide useful and beneficial information for many parties.

3.3. Understanding Bank Health

Just as human beings need a healthy body to carry out all daily activities optimally, so is the health of the bank. A healthy bank will have a way in better ability in managing funds, providing services to customers, and contributing to the economy.

There are 4 categories in the classification of bank health levels, namely healthy, fairly healthy, unhealthy, and unhealthy. The following is the classification of bank health levels according to CAMEL:

Table 1. Bank Health Level Value using the CAMEL Method.

CAMEL Value	Predicate
81% - 100%	Healthy
66% - < 81%	Healthy Enough
51% - < 66%	Unwell
0% - < 51%	Not healthy

3.4. Bank Health Measurement Ratios

According to [9], in accordance with the rules issued by Bank Indonesia Number 6/10PBI/2004 concerning the General Bank Health Level Assessment System, the scoring of relevant variables is carried out through quantitative and qualitative approaches. This assessment process involves consideration of materiality, significance, and analysis of external factors such as the situation of the banking sector and the national economy. The following ratios will be used in the calculation

Luis-Alberto Casado-Aranda lcasado@ugr.es, Juan Sánchez-Fernández, and Francisco J. Montoro-Ríos. [6] Despite the enormous growth of e-commerce, consumers still come against risk-related barriers while carrying out online purchases. Specialists of e-commerce have therefore explored the facets of online risk perception with the aim of identifying which has the greatest impact. There is, nonetheless, no consensus as to the facets of risk perception or their relative importance. This is the first study resorting to neurological tools that examines the differences between the three most widespread facets of risk (financial, privacy, and performance) in a low-involvement purchase environment. Con-

trary to behavioral findings, brain data from neurological analyses identify differences between the three facets of risk. Financial risk conveys the lowest subconscious aversion and negative values. Subconscious privacy risk, in turn, confers ambivalence and uncertainty while performance risk elicits the highest levels of disappointment and distrust. Implications from the current findings, if taken into account by retailers, can greatly improve web contents and purchase processes, and bolster sales.

1) Capital

Minimum capital requirement is an absolute requirement for every bank. Assessment of bank capital adequacy is done using CAR ratio, which is the comparison between capital and ATMR. CAR ratio set by Bank Indonesia has a function to measure a bank's ability by absorbing losses and meeting minimum capital requirements. If the growth of CAR ratio value is high, it increasingly indicates strong bank solvency.

The CAR ratio formula is as follows:

2) Asset Quality

The main indicator used to assess asset quality in a bank is the KAP ratio. This assessment aims to evaluate the benefits of ensuring asset quality is maintained to calculate the provision for credit losses that have the potential to affect the bank's capital adequacy ratio.

3) Management

In evaluating bank management performance, surveys are generally conducted through questionnaires distributed to management. However, this method often encounters obstacles because it involves sensitive internal bank information. Therefore, as an alternative, this study will measure management effectiveness. NPM was chosen because it can reflect management's ability to optimize the use of allocated resources.

4) Earnings

The ability of a bank to generate profits is a key indicator of bank health. The higher the level of profitability of a bank, the better its performance and financial condition. To measure the efficiency of asset use in generating profits, the ROA ratio is used.

5) Liquidity

The assessment of the liquidity aspect is focused on two main ratios, namely the ratio of net liabilities to current assets and the ratio of credit to bank funds received. In addition, the LDR ratio is also used to measure the bank's ability to channel funds to third parties.

3.5. Previous Research

Fauziah, Neno Syifa [8] Comparative Analysis of Financial Performance of Bank Mandiri (Persero) Tbk and Bank Central Asia Tbk for the Period 2010-2014. The results of the study showed no difference between state-owned banks and private banks in terms of liquidity, profitability, and overall solvency. However, there is a significant difference in the liquidity component, where state-owned banks have good

LDR and CAR ratios compared to private banks. In contrast, national private banks show better profitability performance, reflected in a higher ROA ratio.

Mustika Budiarti, R [10] Capital, Quality of Productive-Assets, Management, Rentability, and Liquidity to Assess the Health Level of Banks at PT BPR Dana Pensiun Tabungan Dan Asuransi Pegawai Negeri (PT BPR Dp Taspen) Pondok Gede Bekasi for the 2010-2012 Period. The CAR Results for 2011 and 2012 Decreased by 1.68% and 0.10% is Good. Rahmadiansyah, RC [11]. The Effect of Non-Performing Loans and the Write-off of Non-Performing Loans on Net Profit Margin (case study of Commercial Banks Listed on the Indonesia Stock Exchange). The results of the regression analysis show a negative relationship between NPL and NPM. An increase in NPL will cause a decrease in NPM. Specifically, every increase in NPL by Rp 1 will reduce NPM by Rp 2.139, assuming the variable other constant.

3.6. Framework of Thinking

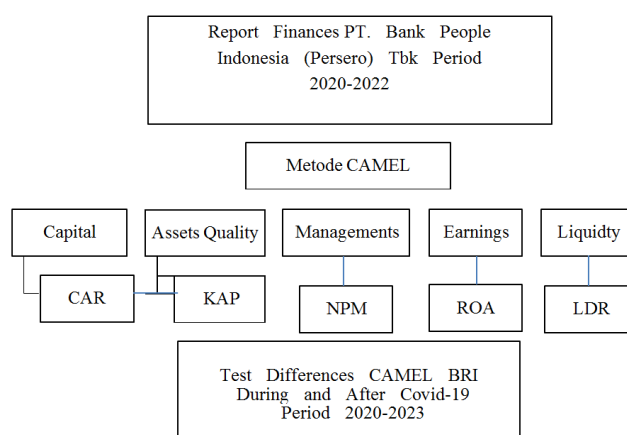


Figure 1. Figure Framework of Thinking.

3.7. Research Hypothesis

H1: How is the Financial Health of Bank PT. Rakyat Indonesia (Persero), Tbk CAMEL During COVID-19?

H2: How is the Financial Health of Bank PT. Rakyat Indonesia (Persero), Tbk CAMEL after COVID-19?

H3: Did PT. Bank Rakyat Indonesia (Persero), Tbk experience an increase or decrease in financial health during and after COVID-19?

4. Research Methodology

4.1. Types of Research

StudyThis uses a quantitative descriptive method. According to Sudjana, Nana, [12] descriptive research is an effort to describe in detail an event or condition that is currently oc-

curing.

Meanwhile, the Quantitative Method is an approach that will be carried out in a way such as recording and analyzing research data in an extra way using calculations in the form of numbers.

4.2. Population and Sample

Population is not only human but also includes objects and other things. The object in question is the Financial Report of PT. Bank Rakyat Indonesia (Persero), Tbk. Non-probability sampling technique is a sampling technique that does not have the same opportunities in each selected element. Non-probability sampling applied in this study is purposive sampling, namely by selecting samples with certain considera-

tions.

4.3. Data Collection Techniques

The data collected is Secondary Data so that the data is obtained by applying a non-participant observation method. By recording the data needed in the study, namely in the Financial Report of PT. Bank Rakyat Indonesia (Persero), Tbk on the Indonesia Stock Exchange at a certain time.

5. Results and Discussion

CAMEL Results Summary Table

Table 2. *Rasio Value.*

Ratio	Year During COVID-19	Ratio Value
CAR	2020	20.61%
	2021	25.28%
	2022	23.30%
	Total Ratio Value	69.19%
	Average Ratio Value During COVID-19	23.06%
	The Year After COVID-19	Ratio Value
Ratio HOOD	2023	23.60%
	Year During COVID-19	Ratio Value
	2020	1.81%
	2021	1.77%
	2022	1.72%
	Total Ratio Value	5.3%
Ratio	Average Ratio Value During COVID-19	1.76%
	The Year After COVID-19	Ratio Value
	2023	1.95%
	Year During COVID-19	Ratio Value
	2020	62.66%
	2021	74.75%
NPM	2022	79.94%
	Total Ratio Value	217.35%
	Average Ratio Value During COVID-19	72.45%
	The Year After COVID-19	Ratio Value
	2023	78.64%
	Ratio	Year During COVID-19

Ratio	Year During COVID-19	Ratio Value
ROA	2020	1.98%
	2021	2.72%
	2022	3.76%
	Total Ratio Value	8.46%
	Average Ratio Value During COVID-19	2.82%
	The Year After COVID-19	Ratio Value
Ratio	2023	3.93%
	Year During COVID-19	Ratio Value
	2020	82.33%
	2021	86.77%
	2022	79.19%
	Total Ratio Value	248.29%
LDR	Average Ratio Value During COVID-19	82.76%
	The Year After COVID-19	Ratio Value
	2023	84.73%

Capital aspect by using the Capital Adequacy Ratio (CAR) ratio that has been produced by PT. Bank Rakyat Indonesia (Persero), Tbk in the midst of challenging conditions and full of uncertainty due to the COVID-19 pandemic, BRI's industrial condition is still well maintained. The Capital Adequacy Ratio (CAR) during COVID-19 in 2020 was still maintained at 20.61%, an increase compared to the same period in 2019 of 22.50%. Meanwhile, the Capital Adequacy Ratio (CAR) in 2021 was 25.28%, higher than in 2020 of 20.61% while the Capital Adequacy Ratio (CAR) in 2022 was 23.30% smaller than in 2021, which was 25.28%. so that in 2020 and 2022 the Total CAR level is lower than in 2021. Meanwhile, the Capital Aspect uses the Capital Adequacy Ratio (CAR) ratio that has been produced by PT. Bank Rakyat Indonesia (Persero), Tbk after COVID-19, namely in 2023, was 23.60%, which means there was an increase compared to 2022 of 23.30%.

Asset Quality aspect using the Productive Asset Quality (PAQ) ratio produced by PT. Bank Rakyat Indonesia (Persero), Tbk in the midst of challenging conditions and full of uncertainty due to the COVID-19 pandemic, BRI's industrial conditions are still well maintained. The Productive Asset Quality (KAP) ratio during COVID-19 in 2020 was still maintained at 1.81%, lower than the 2019 period of 2.1%. While in 2021 it was 1.77% lower than 2020, which was 1.81% and in 2022 it was 1.72 lower than the two years above, namely 2020 and 2021. While the Capital aspect uses the Capital Adequacy Ratio (CAR) ratio produced by PT. Bank Rakyat Indonesia (Persero), Tbk at the time after COVID-19, namely in 2023, was 1.95%, which means there was an increase compared to the year during COVID-19.

Management aspect using the Net Profit Margin (NPM) ratio which has been produced by PT. Bank Rakyat Indonesia (Persero), Tbk in the midst of challenging conditions and full of uncertainty due to the COVID-19 pandemic, the condition of the BRI banking industry is still able to be maintained well. The Net Profit Margin (NPM) Ratio During COVID-19 in 2020 was still able to be maintained at a level of 62.66% lower than in 2019, which was 79.23%. while in 2021 it was 74.75% higher than in 2020, which was 62.66% and in 2022 by 79.94% higher than in 2021 74.75%. While the Management Aspect uses the Net Profit Margin (NPM) that has been generated by PT. Bank Rakyat Indonesia (Persero), Tbk at the time after COVID-19, namely in 2023 by 78.64% which means there was a decrease in the ratio value compared to 2022 during COVID-19.

Earnings (Rentability) aspect using the Return on Assets (ROA) ratio that has been generated by PT. Bank Rakyat Indonesia (Persero), Tbk in the midst of challenging conditions and full of uncertainty due to the COVID-19 pandemic, the condition of the BRI banking industry is still well maintained. In 2020, the Return on Asset (ROA) ratio was 1.98%, lower than in 2019 which was 3.5%. The ROA ratio decreased year on year due to the ongoing pressure on Net Profit amidst the COVID-19 pandemic. Meanwhile, in 2021, it was 2.72% higher than the ratio in 2020, which was 1.98% and in 2022, it was 3.76% higher than the previous two years. Meanwhile, the Management Aspect uses the Net Profit Margin (NPM) that has been generated by PT. Bank Rakyat Indonesia (Persero), Tbk after COVID-19, namely in 2023, was 3.93%, which

means there was an increase in the ratio value compared to the year during COVID-19.

Liquidity Aspect (Liquidity) using the Loan to Deposits (LDR) ratio that has been produced by PT. Bank Rakyat Indonesia (Persero), Tbk in the midst of challenging conditions and full of uncertainty due to the COVID-19 pandemic, the condition of the BRI banking industry is still well maintained. In 2020 the Loan to Deposits (LDR) ratio was 82.33% lower than in 2019, which was 88.64%. BRI's LDR decreased compared to 2019 due to the still weak demand for credit due to the impact of the economic slowdown during COVID-19, while in 2021 it was 86.77% higher than in 2021, which was 82.33% and in 2022 it was 79.19% lower than the previous two years. While the Liquidity Aspect (Liquidity) uses the Loan to Deposits (LDR) that has been produced by PT. Bank Rakyat Indonesia (Persero), Tbk after COVID-19, namely in 2023, was 84.73%, which means there was an increase in the ratio value compared to the year during COVID-19.

6. Conclusion

Financial Health of PT. Bank Rakyat Indonesia (Persero), Tbk CAMEL During COVID-19 declared Healthy, Bank BRI was able to face the economic crisis, namely during the COVID-19 pandemic and was consistently able to maintain its financial performance well. Can be seen in the positive growth in each of its financial ratios, although there are differences in ratio values each year but do not exceed the maximum limit that has been determined.

Financial Health of PT. Bank Rakyat Indonesia (Persero), Tbk CAMEL After COVID-19, namely in 2023, was declared Healthy. In general, in 2023, Bank BRI has produced good performance both in terms of operations and finance. After the contraction of economic growth in 2020 due to the COVID-19 pandemic, the global economy faces challenges that are not easy to be able to immediately return and recover as in pre-pandemic conditions. Bank BRI has consistently been able to maintain its financial performance well, as can be seen in the positive growth in each of its financial ratios, although there are differences in ratio values each year but do not exceed the maximum limit that has been determined.

PT. Bank Rakyat Indonesia (Persero), Tbk experienced an increase and decrease in financial performance during and after COVID-19, namely in each respective ratio.

Abbreviations

CAMEL	Capital, Assets, Earnings and Liquidity
ROA	Return on Asset
CAR	Capital Adequacy Ratio
LDR	Loan to Deposit Ratio
PAQ	Productive Asset Quality
NPM	Net Profit Margin

TBK	Terbuka (Go Publik)
BPR	Bank Perkreditan Rakyat (Rural Bank)

Conflicts of Interest

The authors declare no conflicts of interest.

References

- [1] Arifin, Z. (2009). Learning Evaluation; Principles, Techniques, Procedures. Rosdakarya Youth.
- [2] Afandi, P. (2018). Human Resource Management (Theory, Concept and Indicators. Zanaf Publishing.
- [3] Andrianto. (2022). Comparative Analysis of Bank Muamalat Indonesia's Financial Performance Before and During the COVID-19 Pandemic, Thesis, Faculty of Islamic Economics and Business. State Islamic Institute of Palopo.
- [4] BANK RAKYAT INDONESIA. (2015). Profile of PT Bank Rakyat Indonesia (Persero) Tbk. Bank
- [5] Bank Indonesia In accordance with the rules issued by Bank Indonesia Number 6/10PBI/2004 concerning the General Bank Health Level Assessment System
<https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://peraturan.bpk.go.id/Details/137709/peraturan-bi-no-610pbi2004&ved=2ahUKEwiqL7qpKGJAX8oGMGHdIpGdoQFnoECBUQAQ&usq=AOvVaw2gIfkYsP32xA6vHFsjYgu>
- [6] Casado-Aranda, L.-A., Sánchez-Fernández, J., & Montoro-Ríos, F. J. (2018). How Consumers Process Online Privacy, Financial, and Performance Risks: An fMRI Study. *Cyberpsychology*,
- [7] Eka Sutisna (October 2023) Analysis of Banking Financial Ratio Before and During COVID-19 Pandemic
<https://www.ilomata.org/index.php/ijjm/article/view/958>
- [8] Fauziah, Neno Syifa (2017) Comparative Analysis of Financial Performance of Bank Mandiri (Persero) Tbk and Bank Central Asia Tbk for the Period 2010-2014
<https://repository.mercubuana.ac.id/id/eprint/33593/>
- [9] Indonesia, B. (2004). General Bank Health Level Assessment System. 6, 1-3.
<https://ojk.go.id/id/regulasi/Pages/PBI-tentang-Penilaian-Tingkat-Kesehatan-Bank-Umum.aspx>
- [10] MustkaBudiarti, R (2013) (Capital, Quality of Productive Assets, Management, Rentability, and Liquidity to Assess the Health Level of Banks at PT Bpr Dana Pensiun Tabungan Dan Asuransi Pegawai Negeri (PT Bpr Dp Taspen) Pondok Gede Bekasi for the 2010-2012 Period. <https://eprints.uny.ac.id/17690/>
- [11] Rahmadiansyah, RC (2012).
<https://jurnaljam.ub.ac.id/index.php/jam/article/view/6878>
- [12] Sudjana, Nana, 1989, Research Methodology, Sinar Baru Bandung Publisher
<https://onsearch.id/Author/Home?author=Sudjana%2C+Nana>