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Analysis of Bank Health Level Assessment Using the RGEC Method Before and During The Covid-19 Pandemic

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ABSTRACT

Purpose : The study aims to determine the composite ranking and the condition of whether there are differences in bank health level before and during the Covid-19 pandemic in conventional commercial bank companies in Indonesia Stock Exchange (IDX) in 2019-2020.
Method : Descriptive quantitative research with comparative quantitative is applied in this research method. This study also uses the sign-Wilcoxon test. The data used is annual financial report for 2019-2020. There are 39 banks went public on the IDX in 2019-2020 as research sample in this research.
Findings : The research result proved that the health of conventional commercial banks before and during the Covid-19 pandemic is included in Composite Rating 2 (PK-2), which reflects the bank's general health condition. There is no difference in bank health level before and during the Covid-19 pandemic for the ratio of NPL, GCG, and ROA. However, there are differences in bank health level before and during the Covid-19 pandemic for the ratio of LDR, NIM and CAR.
Novelty : The research contributes a new finding regarding analysis of bank health level assessment using RGEC method with comparing the bank health level before and during the Covid-19 Pandemic whereas the previous study merely research on sharia or conventional banks but before Covid-19 pandemic comes. This research finding directly implicates to the bank management to care about their performance, especially regarding to the bank health as one of signal for the investor who has their interest to the bank.

INTRODUCTION

Banking is one of the sectors of the Indonesian economy which is a determining variable for the country's economic development. Banks become mediators between parties who have excess cash and those who need financing (fund deficit). In an effort to optimize the standard of living of the general public, banks collect and distribute funds in the form of loans. Therefore, the role of banking as a financial intermediary (mediator) in supporting Indonesia's economic growth must run well (Financial Services Authority, 2019).

Since the Covid-19 pandemic issues, the Indonesian economy, including the banking sector, has been negatively affected. Based on the Financial Services Authority (OJK) profile report on the banking industry, Indonesia's economic growth began to slow into the second quarter of 2020. This was due to the enactment of Large-Scale Social Restrictions or known as PSBB which halted community activity and mobility in various sectors, impacted the weakening of consumption and investment. Many people complained about their dependents in a bank's credit because their livelihoods are disrupted and some even lose their jobs due to being laid off (Termination of Employment) by the company. It caused credit risk increase due to the weakening ability of debtors to pay off their debts which has the potential to disrupt bank performance (Financial Services Authority, 2019). As a result of these conditions, Indonesia's economic development decreased by 5.32% in the second quarter of 2020 while in the third quarter of 2020 it decreased by 3.49%.

The Financial Services Authority (OJK) issued a POJK policy Number 11/POJK.03/2020 regarding National Economic Stimulus as a Countercyclical Policy for the Impact of the Spread of Covid-19 as a response to this matter. Since Covid-19 pandemic caused customers unable to pay their debts, this credit relaxation policy is applied

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by the government. This policy intends to keep credit running normally. The policy reconstruction can maintain credit recovery which will affect the health of the bank itself.

At the end of 2020, based on the Financial Services Authority (OJK) profile report on the banking industry, credit growth for the banking sector still contracted -2.41%. The contraction issue was caused by the weakening of credit demand and also the increasing Third-Party Funds (DPK) which rose by 11.11%, resulting in a decrease in the Loan to Deposit Ratio (LDR) by 82.24 and causing the banking intermediation to function a bit stifled. However, the condition of banking capital was recorded to be quite adequate and banking resilience in general was also maintained with a fairly high CAR of 23.81%.

It is undeniable that the Covid-19 outbreak had an impact on the decline in Indonesia's banking performance. In the financial sector, only banks with strong performance can survive. The decline in the bank health level was influenced by those case. Good bank performance is indicated by health level of the bank which is categorized as health. A healthy bank has an effect on public confidence in the bank. Therefore, in a pandemic situation like this, maintaining optimal bank performance is very important to build public and investor confidence because banking activities depend on the ability to collect and distribute funds. This can have a positive effect on banks because more people believe in using bank services in their financial management. People believed that banks will not misuse their funds because of the proper management. Therefore, it is very important to assess the health of a bank (Financial Services Authority, 2019).

CAMELS (Capital, Asset quality, Management, Earnings, Liquidity & Sensitivity to market risk) is used as a basis for assessing the health of commercial banks. This scoring system is stated in Bank Indonesia Regulation No. 6/10/PBI/2004 on April 12, 2004. Then, in Bank Indonesia Regulation No. 13/1/PBI/2011 concerning the Assessment of Commercial Bank Health Levels, there are new provisions regarding the Assessment of Bank Health Levels with a risk approach (Risk-Based Bank Rating) consisting of, Risk Profile (Risk Profile), Good Corporate Governance (GCG), Earning (Profitability) and Capital (Capital). This method is known as the RGEC method. In the Circular Letter of Bank Indonesia No. 13/24/DPNP/2011, the Health Assessment of Commercial Banks is described in its entirety. The RGEC method was applied on January 1, 2012.

Based on the previous explanation, there have been many previous studies related to the health of banks level before and during the Covid-19 case. However, not all of the research has conclusion about bank composite rating and there are no studies comparing the health of conventional banks that go public before and during the pandemic using the RGEC method with different test analysis techniques. The Research by Wijayanti & Afifi (2020), Dinarjito & Priatna (2021), Febrianti (2021), Ariyani (2021), Setiadi & Ursula (2020) and Karim et al., (2018) in the Islamic banking sector, BUMN, BUSN and BUKU 4, compared the health of banks before and during of the Covid-19 case and concluded with the composite rating without different test analysis. The research of Azmi et al., (2021) compared the performance of Islamic banks before and during the Covid-19 outbreak by applying a different test analysis without conclusion about the bank's health by applying a composite rating. Based on this reason, researcher interested to evaluate the Health of Conventional Commercial Banks for the 2019-2020 period with four aspects of health using RGEC method, conclude the state of the bank using a composite rating and compare the health of conventional commercial banks in the banking sector before and during the Covid-19 pandemic by applying a different test.

The novelty of this study is the sample which is observed is a go public Conventional Commercial Bank (BUK). In the previous study used a sample of go public Conventional Commercial Bank based on ownership and business groups and used a sample of Islamic banks. The selection of research objects at Conventional Commercial Banks (BUK) is based on the Financial Services Authority (OJK) profile report on the banking industry during the Covid-19 outbreak where the banking performance has decreased.

Based on the review of this information, the researcher decided to conduct a study health bank level before and during the Covid-19 pandemic. This study will provide an overview of the current state of bank health and as a reference to choose future performance policies due to relevance of bank health in building public trust. Based on this background, the researcher determined the title "Analysis of Bank Health Level Assessment Using the RGEC Method Before and During the Covid-19 Pandemic".

The Covid-19 pandemic forced governments worldwide to impose social distancing, quarantine, lockdown, and curfews to try to stop the spread the contagious diseases that led the freeze of economy activities around the world (Batmanghelidj, 2020). The lockdown has impacted all businesses, no matter their size or area of operations. COVID-19 has adversely affected all businesses on an unprecedented scale (Abas and Kalair, 2021). This pandemic caused worldwide havoc, declined many economies, caused several fatalities, and caused countries to lose billions of dollars in business within a few months, which had direct effects on sustainable environmental, social and industrial production (Allocati et al., 2016; Gorbalenya, 2020; Kumar et al. (2020). The theory that related to this study is Restriction on large-scale community activity on the economy which is it can represent Covid-19 Pandemic condition. During the Covid-19 Pandemic, almost all economy activities are shut down for all parties. This policy effects on the number of money flows from and to the bank. There is probability that the bank health can change to the worst level due to this policy. Therefore, it is very important to analyse whether any change of bank health level by comparing it in the period before and during the Covid-19 Pandemic. The results of bank health can be determined using the RGEC method, which shows the results of whether the bank is healthy, fairly healthy, less healthy or un-

healthy. The value evaluation results obtained from the sending party (the owner of the information) will provide a signal to stakeholders or third parties (customers) as consideration for investment. Therefore, every financial report needs to include information that is valuable to the parties concerned. Information as a signal for stakeholders or third parties (customers) in making investment decisions and information is disseminated as an announcement. If what is published includes a good value, it is expected that the market will respond when the news is received.

Banking performance is evaluated by using the health of the banking system which is applied based on the prevailing rules and regulations. Managerial performance increases when health ratings are lower. The NPL ratio, a metric applied in assessing a bank's ability to withstand default on customer loans, Akbar et al., (2018). The NPL variable reflects banks' asset quality, measured as the ratio of non-performing loan to gross loans. The lower the ratio, the better (Garcıa-Herrero et al., 2009; Ozili, 2019). The NPL ratio is used as an indicator of the risk profile because NPL is able to determine non-performing loans that can cause credit risk borne by the bank compared to the amount of credit disbursed by the bank in the form of a percentage. Based on Bank Indonesia regulations, a healthy NPL ratio is less than 5%. A low NPL ratio will lead to fewer loan loss provisions, which would increase banks' interest margin, and increase overall profitability (Ozili and Outa, 2017). The higher this ratio indicates the lower the quality of bank credit which caused the number of non-performing loans getting bigger. So, it will affect the health of the bank itself.

During pandemic and restriction on large-scale community activity policy, many people lose some of their income. In contrast, their needs increase during the pandemic, consequently some people decide to borrow money on the bank. Moreover, some people also face difficulties to complete their obligation to pay their payable on the bank due to this restriction. Therefore, there is possibility for the bank to have an increase in bad credit.

The low NPL ratio will be good news for investors so it can affect investor confidence in the company. The low value of the NPL ratio shows a good signal so it will affect on improving the health of the bank. Prior to the Covid-19 pandemic, Susanto et al., (2016) conducted a study which found the NPL ratio in a healthy range. This is different from Ariyani's research (2021), which showed an increase in NPL during the Covid-19 pandemic. Then the hypothesis is made as bellows:

H_1: Before and during the Covid-19 pandemic, there is a difference in the Risk Profile assessed by Non-Performing Loans at conventional commercial banks registered in IDX

The LDR ratio is used to measure a bank's capability to settle its short-term obligations. The higher the LDR, the less liquid of the bank is (Ariyani, 2021). Companies will provide information to external parties to reduce information asymmetry and investors use the information obtained for their investment decision maker. The decreasing of LDR ratio will be good news for investors so it can affect investor's confidence to the company. The decreasing of LDR ratio value indicates that the more liquid a bank is, which affects the health of a bank.

During pandemic covid-19, the performance of bank especially the health bank condition becomes one of the factors that is noticed by interest parties. Because the restriction policy during pandemic led to the decrease of economy activities that can give effect to the liquidity capabilities of the bank itself. Therefore, bank should maintain their liquidity to keep their health bank condition during pandemic. The increasing of LDR ratio categorized as very healthy predicate in Susanto et al., (2016) research, which conducted before the covid-19 outbreak. In contrast to the research of Febrianti (2021) during the Covid-19 pandemic, the LDR ratio decreased, so it affected liquidity decreasing. Then the hypothesis is made as below:

H_2: Before and during the Covid-19 pandemic, there is a difference in the Risk Profile assessed by the Loan to Deposit Ratio at conventional commercial banks registered at the IDX

GCG is defined as the organisation's code of conduct to ensure whether board members and executives actions are compatible with the stakeholder's interests (Esteban-Sanchez et al., 2017). The scope of corporate governance also embraces business ethics, disclosure, and accountability (Aboud and Diab, 2018; Lerach, 2002). Strong corporate governance may influence the financial performance of banks. Prior literature suggests that the firm with good governance have higher profitability (Esteban-Sanchez et al., 2017; Jamali, 2008; Velte, 2017). The development of the corporate governance perspective begins with agency theory which states that the separation between ownership and management will cause an agency's problem and the way to overcome agency's problems is through the implementation of good corporate governance. al., (2021). Therefore, the use of GCG as an assessment of the bank's health level is caused by many companies experiencing unhealthy bank health conditions due to poor bank management.

During pandemic, many companies face unpredicted economy conditions, including bank institutions and this can give effect to bank management. It is very important to investigate whether the bank has been managed well or not especially during pandemic. This result able to give calm for interest parties to the bank. They can make sure that their capital is managed well or not by monitoring the bank health condition. Before the outbreak of the COVID-19 pandemic, the research by Elizabeth et al., (2018) showed that self-assessment of Good Corporate Governance (GCG) is fluctuated. In contrast to the research of Azmi et al., (2021), who found that GCG was in a healthy condition during the covid-19 pandemic. Then the hypothesis is made:

H_3: Before and during the Covid-19 there is a difference in the Good Corporate Governance (GCG) pandemic, which is assessed based on self-assessment at conventional commercial banks listed at the IDX

Return on Assets (ROA) measures the ability of the bank management to generate income by utilising company assets at their disposal. A higher ROA shows that the company is more efficient in using its resources (Bandyopadhyay, 2022). ROA is the company's ability which has a function to get benefit from its operational activities by maximizing the value of its assets. The reason for using ROA in assessing the health level of a bank is ROA can measure the company's effectiveness in obtaining profits from asset management and overall managerial efficiency. The greater the ROA, the greater the profits obtained by the bank which can show the health level bank getting better (Ariyani, 2021). The government take a policy to restrict all economic and social activity during pandemic, then bank institutions have to ensure whether their assets are managed well or not to yield earnings for the institutions.

Increasing the ROA ratio will be a good signal that can affect investor confidence in the company. The greater the value of the ROA ratio indicates that the bank's ability for capital management increased to earn a profit. So, it affects the Bank Health Level. ROA continued to increase before the COVID-19 pandemic in a study developed by Elizabeth et al., (2018). In contrast to the research of Azmi et al., (2021) ROA decreased. Then the hypothesis is made:

H_4: Before and during the Covid-19 outbreak, there is a difference in earnings which measured using Return on Assets (ROA) at conventional commercial banks registered at the IDX

Net Interest Margin (NIM) measures the gap between the interest income the bank receives on loans and securities and interest cost of its borrowed funds. It reflects the cost of bank intermediation services and the efficiency of the bank. However, a higher interest margin could reflect riskier lending practices associated with substantial loan loss provisions (Bandyopadhyay, 2022). Profitability Measurement in the management of productive assets to generate net income is assessed by Elizabeth et. al., (2018). NIM is used in assessing bank health level because if the bank can carry out its duties as an intermediary between the owner of the funds and the user of the funds properly, the bank's profit level can be achieved. The bank will also get the difference in interest income called NIM. The greater the NIM value indicates that the bank has succeeded in managing interest-bearing assets so as to generate higher profits (Ariyani, 2021) and will affect the health of the bank. The higher the value of the NIM ratio, the better the ability of the bank in managing its capital to earn a profit so that it affects the bank health level. In Handayani & Maheasy's (2020) research conducted before the COVID-19 pandemic, NIM continued to increase. In contrast to Ariyani's research (2021) during the COVID-19 pandemic, the NIM ratio decreased but it is not significant. Then the hypothesis is made:

H_5: Before and during the Covid-19 pandemic, there is a difference in earnings measured using the Net Interest Margin (NIM) at conventional commercial banks registered with the IDX

For two decades, the capital adequacy ratio (CAR) requirement has been one of the primary regulatory mechanisms used to monitor banks (Aboody, et. Al., 2006). Presently, most regulators around the world follow the Basel Accord, under which CARs are calculated by dividing a firm's regulatory capital CAR can help determine how much capital they have to deal with credit losses. The use of CAR for bank health level measurement because CAR ratio can measure the adequacy of capital owned by a bank to support losses in credit. The higher the CAR ratio indicates that the bank is able to handle existing losses so that the smaller trouble risk happened. It can affect bank health level. The higher the value of the CAR ratio, the better the ability of the bank to manage its capital to earn a profit so that it affects the bank health level. In the research of Elizabeth et. al., (2018) which was conducted before the covid-19 pandemic, showed that the CAR ratio fluctuated. In contrast to the study of Azmi et. al., (2021), the average CAR ratio increased and was in a healthy condition during the covid-19 pandemic. Then the hypothesis is made:

H_6: Before and during the Covid-19 pandemic, there is a difference in the capital measured using the Capital Adequacy Ratio (CAR) at conventional commercial banks registered at the IDX

RESEARCH METHODS

The secondary data applied is the annual report which is obtained from the official website of the Indonesia Stock Exchange and the website of each bank for 2019-2020 period. The location of the research is banking companies which is listed on the Indonesia Stock Exchange agency. The object of the research is health level assessment of conventional commercial banks that go public which is listed on the IDX in 2019-2020. Population in this study was Conventional Commercial Banks in Indonesia. Based on the statistical data of Conventional Commercial Banking, the number of Conventional Commercial Banks was 47. Sample used was 39 Conventional Commercial Banks by using purposive sampling technique Documentation technique in data collection are financial reports that were audited in 2019-2020 from the official website of the Indonesia Stock Exchange (IDX), namely www.idx.co.id and from the bank's websites itself.

This study used analytical technique and a quantitative approach to the RGEC method, with reference to

Table 1. The Summary of Sampling Process Results

No.	Criteria of Sample	Total sample
1	The conventional banks that already went public and listed on the Indonesia Stock Exchange (IDX) for the 2019-2020 period.	47
2	The conventional banks that do not report the figure in financial statement using rupiah currency	(3)
3	The banking company does not provide all data related to the ratio of NPL, LDR, GCG, ROA, NIM and CAR for bank health level analysis that are needed	(2)
4	The banks that do not routinely publish annual reports from 2019-2020 through the official website of the Indonesia Stock Exchange and the bank's websites itself.	(3)
	Total data analysis	39

Source: Secondary Data processed, 2022

article 6 of PBI No. 13/1/PBI/2011 concerning Commercial Bank Health Level, Commercial Banks are required to complete the Bank Health Level Assessment by considering the methodology regarding Risk Profile, GCG, Profitability and Capital. The health level of a bank is assessed using the RGEC method, which includes the following components:

Risk Profile

According to (Christian et al., 2017) risk profile is a general description of risk in banking operations. To manage bank risk properly, banks need to manage risk profiles. Liquidity risk and credit risk are used to evaluate the risk profile. Non-Performing Loan (NPL) metric applied in quantitative assessment of a company's credit risk (equation 1). The following estimate of NPL refers to SE BI No. 13/24/DPNP,25 October 2011 (Table 2).

$$NPL = \frac{\text{Non-performing Loans}}{\text{Total Credit}} \text{ X } 100\% \quad \text{.....1}$$

As for the calculation of Loan to Deposit Ratio (LDR), equation 2 and Table 3.

$$LDR = \frac{\text{Total Credits Granted}}{\text{Third-party Funds}} \text{ X } 100\% \quad \text{.....2}$$

Good Corporate Governance (GCG)

Dewi & Candradewi (2018) define good corporate governance (GCG) as a corporate governance system that is evaluated based on how well GCG principles are incorporated into the company's management process. Bank Indonesia mandates all banks in Indonesia to apply GCG indicators in analysing the health level of banks. To get the title of health level in corporate governance, banks must be responsible for the stability of their banking system. The implementation of GCG needs to be evaluated periodically by banks with reference to SE BI Number 15/15/DPNP/2013, with the aim of improving and improving its quality.

Profitability (Earning)

According to Prastyananta et al., (2016), evaluation of profitability (earnings) is a metric of the bank's capacity to generate profits. ROA (equation 3 and Table 5) and NIM (Equation 4 and Table 6) were used to evaluate this aspect.

$$ROA = \frac{\text{Profit Before Tax}}{\text{Average Total Assets}} \text{ X } 100\% \quad \text{.....3}$$

Table 2. Rating Standards for NPL Composite Ratings

Composite Ranking	Percentage	Predicate
1	0% < NPL < 2%	Very Healthy
2	2% ≤ NPL < 5%	Healthy
3	5% ≤ NPL < 8%	Fairly Healthy
4	8% < NPL < 11%	Lack of Healthy
5	NPL > 11%	Not Healthy

Source: SE Bank Indonesia No. 13/24/ DPNP dated October 25, 2011.

Table 3. Rating Standards for LDR Composite Ratings

Composite Ranking	Percentage	Predicate
1	50% < LDR ≤ 75%	Very Healthy
2	75% < LDR ≤ 85%	Healthy
3	85% < LDR ≤ 100%	Fairly Healthy
4	100% < LDR≤ 120%	Lack of Healthy
5	LDR > 120%	Not Healthy

Source: SE Bank Indonesia Number 13/24/ DPNP on October 25, 2011.

Table 4. Assessment Standards for Determining GCG Ratings

Composite Ranking	Ratio	Predicate
1	Composite Value < 1.5	Very Good
2	1.5 < Composite Value < 2.5	Good
3	2.5 < Composite Value < 3.5	Good Enough
4	3.5 < Composite Value < 4.5	Poorly
5	Composite Value > 4.5	Not Good

Source: SE Bank Indonesia No. 13/24/ DPNP, 25 October 2011

Table 5. Rating Standard for ROA Composite Rating

Composite Ranking	Percentage	Predicate
1	ROA > 1.5%	Very Healthy
2	1.25% < ROA ≤ 1.5%	Healthy
3	0.5% < ROA ≤ 1.25%	Fairly Healthy
4	0% < ROA ≤ 0.5%	Lack of Healthy
5	ROA ≤ 0%	Not Healthy

Source: SE Bank Indonesia Number. 13/24/ DPNP on October 25, 2011

$$NIM = \frac{\text{Net Interest Income}}{\text{Average Earning Assets}} \text{ X } 100\% \quad \text{.....4}$$

Capital

In accordance with Bank Indonesia Regulation Number 13/1/PBI/2011, the assessment of the capital factor consists of the adequacy of capital management and the amount of capital. The capital portion of the bank health level is calculated by applying the Capital Adequacy Ratio (CAR), see equation 5 and Table 7

$$CAR = \frac{\text{Capital}}{\text{Risk Weighted Assets}} \text{ X } 100\% \quad \text{.....5}$$

Descriptive analysis implemented all RGEC components from 2019-2020 to establish and analyze bank health level. The composite value of each component that occupied the composite rating (PK) is summarized as follows:

1. Rank 1 = each indicator that ranks 1 is given a value of 5.
2. Rank 2 = each indicator that ranks 2 is given a value of 4.
3. Rank 3 = each indicator that ranks 3 is given a value of 3.
4. Rank 4 = each indicator that ranks 4 is given a value of 2.
5. Rank 5 = each indicator that ranks 5 is given a value of 1.

After obtaining the composite value of each indicator, it is calculated using the formula 6.

$$PK = \frac{\text{Sum Composite Value}}{\text{Total of All Composite Value}} \text{ X } 100\% \quad \text{.....6}$$

Then, the weight value is calculated based on a percentage. Table 8 are used to assess the total components.

Descriptive Statistic analyse data based on the mean standard deviation, variance, maximum, minimum, sum, range, kurtosis and skewness or distribution skewness (Ghozali, 2018). The average value of 39 bank health ratio before and during the Covid-19 case in banking companies will be used to calculate the average bank health level. The normality test of the data used in this study is the Kolmogorov-Smirnova Normality Test. The researcher decided to use this test because the research sample is less than 50.

Wilcoxon test, a non-parametric test used in the test of different sample pairs. By using the Sign-Wilcoxon test, the researcher can check whether there is a statistically significant difference between the two samples if the data did not match the basic assumptions of the T-test. This test is based on the following factors as below:

1. If Z count ≥ Z table and the significance is < 0.05 so the hypothesis is accepted
2. If Z count ≤ Z Table and the significance value is > 0.05 so the hypothesis is rejected

Table 6. Rating Standard for NIM Composite Rating

Composite Ranking	Percentage	Predicate
1	NIM > 3%	Very Healthy
2	2% < NIM ≤ 3%	Healthy
3	1.5% < NIM ≤ 2%	Fairly Healthy
4	1% < NIM ≤ 1.5%	Lack of Healthy
5	NIM ≤ 0%	Not Healthy

Source: SE Bank Indonesia No. 13/24/ DPNP dated October 25, 2011

Table 7. CAR Composite Rating Standard

Composite Ranking	Percentage	Predicate
1	CAR ≥ 12%	Very Healthy
2	9% ≤ CAR < 12%	Healthy
3	8% ≤ CAR < 9%	Fairly Healthy
4	6% ≤ CAR < 8%	Lack of Healthy
5	CAR ≤ 6%	Not Healthy

Source: SE Bank Indonesia No. 13/24/ DPNP dated October 25, 2011

Table 8. Determination of Composite Rating

Composite Ranking	Percentage	Predicate
1	86-100%	Very Healthy
2	71-85%	Healthy
3	61-70%	Fairly Healthy
4	41-60%	Lack of Healthy
5	<40%	Not Healthy

Source: Bank Indonesia Circular Letter No.13/24/ DPNP 2011

RESULTS AND DISCUSSIONS

As shown in Table 9, the performance of Indonesian conventional commercial bank is included in Composite Rank 2 in terms of Risk Profile, Good Corporate Governance, Earning, and Capital (RGEC). The ratio value is obtained from the average value of each indicator before and during the Covid-19 outbreak, so that commercial banks have a composite rating of 80%. Based on the criteria described for all aspects of RGEC, the value of the composite rating ranges from 71-85 percent included in PK-2 which indicates a good bank condition and is able to withstand the unfavorable adverse effects of changes in the business environment and other external factors. After assessed the bank health according to the composite rating, then a different test is carried out.

Descriptive Statistic Test

Table 10 shows the result of descriptive statistic tests on the variables of NPL, LDR, GCG, ROA, NIM, and CAR in conventional banking companies listed on the IDX for the 2019-2020 period. According to the table 10, there is an average NPL ratio of 3.4528 before Covid-19 and 3.3305 during the Covid-19 period. If the NPL value before the pandemic compared with the NPL after pandemic, it proved that most conventional banks experienced a decrease in the risk of non-performing loans by 0.12 in the NPL ratio. This is based on the Circular Letter of Bank Indonesia No. 13/23/DPNP 2011 NPL of conventional banking on the IDX, before and during the Covid-19 outbreak can be said to be healthy because NPL is considered as unhealthy if it is more than 12 percent.

Before the Covid-19 outbreak, the average LDR ratio is 90.1997 and during the pandemic is 83.9618. This shows that during the Covid-19 outbreak, most conventional banks' LDR ratios decreased by 6.24, which indicates that these banks are increasingly liquid. According to SE BI No. 13/24/DPNP of 2011, if the LDR ratio value is less than 75% so it is considered as very healthy. If it is more than 120%, so it is considered as unhealthy. Therefore, conventional banking LDR variables listed on the IDX before and during the COVID-19 outbreak can be categori-

Table 9. Conventional Commercial Banks Composite Rating Determination Based on the RGEC Method for the 2019-2020 Period

Period	Component Factor	Ratio	Ratio %	Ranking 1	2	3	4	5	Predicate	Composite Ranking
2019	Risk Profile	NPL	3.45		✓				Healthy	Healthy
		LDR	90.20			✓			Fairly Healthy	
	Good Corporate Governance	GCG	2.10		✓				Good	
	Earning	ROA	0.87			✓			Fairly Healthy	
		NIM	4.95	✓					Very Healthy	
	Capital	CAR	27.23	✓					Very Healthy	
	Composite Value			10	8	6	-	-	(24/30) X100%	80%
2020	Risk Profile	NPL	3.33		✓				Healthy	Healthy
		LDR	83.96		✓				Healthy	
	Good Corporate Governance	GCG	2.18		✓				Good	
	Earning	ROA	0.56			✓			Fairly Healthy	
		NIM	4.21	✓					Very Healthy	
	Capital	CAR	28.51	✓					Very Healthy	
	Composite Value			10	8	6	-	-	(24/30) X100%	80%

Table 10. Variable Descriptive Statistics

Ratio	Period	N	Min	Max	Mean	Std. Deviation
NPL	Before Covid-19 Pandemic	39	0.80	10.16	3.4528	2.07558
	During Covid-19 Pandemic	39	0.00	10.16	3.3305	2.12900
LDR	Before Covid-19 Pandemic	39	47.54	163.00	90.1997	23.23785
	During Covid-19 Pandemic	39	39.33	221.24	83.9618	33.78248
GCG	Before Covid-19 Pandemic	39	1.00	3.00	2.1026	0.44691
	During Covid-19 Pandemic	39	1.00	3.00	2.1795	0.50637
ROA	Before Covid-19 Pandemic	39	-15.89	4.00	0.8703	3.04292
	During Covid-19 Pandemic	39	-11.27	4.13	0.5626	2.50154
NIM	Before Covid-19 Pandemic	39	0.39	19.30	4.9451	2.87620
	During Covid-19 Pandemic	39	0.22	13.52	4.2087	2.36299
CAR	Before Covid-19 Pandemic	39	12.59	148.28	27.2292	22.67807
	During Covid-19 Pandemic	39	11.59	94.63	28.5056	18.21299

zed as healthy.

The implementation of GCG based on this self-assessment shows an average of 2.1026 before the Covid-19 outbreak and 2.1795 during the Covid-19 outbreak. The implementation of GCG in conventional banking increased by 0.08 during the Covid-19 outbreak, which shows that it has been implemented properly. And in accordance with Bank Indonesia's policy in implementing GCG. BI No. 13/24/DPNP 2011 states that if the GCG composite value is less than 1.5 so it is considered as healthy. If it is greater than 4.5 so it is considered as unhealthy. Thus, the conventional banking GCG variable on the IDX before and during the COVID-19 outbreak can be categorized as healthy.

Before the Covid-19 outbreak, the average ROA ratio is 0.8703 and during the pandemic the average is 0.5626. This shows that the ROA ratio of conventional banks decreased by 0.31 compared to before the pandemic condition. According to SE BI No. 13/24/DPNP 2011, if the ROA ratio value is more than 1.5%, so it is categorized as "very healthy", and if it is less than 0% so it is categorized as "unhealthy". Then the ROA ratio before and during the Covid-19 outbreak can be considered as unhealthy.

Before the Covid-19 pandemic, the average NIM ratio is 4.9451. During the Covid-19 pandemic I, the average NIM is 4.2087. This shows that the NIM ratio of conventional banks decreased by 0.74 compared to before the pandemic. SE BI No. 13/24/DPNP 2011 states that if the NIM ratio is more than 3% so it is categorized as very healthy. If it is less than 0% so it is unhealthy. Therefore, the NIM ratio of conventional banking on the IDX before and during covid 19 pandemic is categorized as healthy.

Before Covid-19 pandemic, the average CAR ratio is 27.2292 and increased to 28.5056 during the outbreak. This shows an increase in the CAR ratio of 1.28 seen in most conventional banks during the pandemic. As stated in SE BI No. 13/24/DPNP 2011, if the CAR ratio is more than 12%, it is categorized as very healthy and if it is less than 6% it is categorized as unhealthy. Therefore, conventional banks listed on the IDX before and during the Covid-19 outbreak are classified as very healthy.

Data Normality Test

Based on table 11, data are not normally distributed so the sign-Wilcoxon test is used.

Risk Profile

Non-Performing Loans (NPL)

Table 12 shows a significance value is 0.851 or greater than 0.05. it means that H_1 which state that before and during the Covid-19 pandemic the Risk Profile assessed by Non-Performing Loans at conventional commercial banks listed on the IDX has differences, not supported. Between before and during the Covid-19 pandemic, the NPL ratio of conventional banks on the IDX is no different. The absence of a difference in this hypothesis, reveals that there are no substantial problems with banking finance during Covid-19. This happened because the ability of conventional banks to regulate their funding by restructuring loans to customers. Not only that, but the governments also provided a stimulus to banks by delaying debt payments during the Covid-19 outbreak. During pandemic covid-19, the restriction policy to limit all economy and social activity can lead to possibility for an increase in bad debt. However, bank institutions still can manage their risk profile during pandemic. It is indicated that when the NPL ratio of a bank is low, it gave a favorable signal for potential investors. It used by investors to make a decision whether to keep their money in the bank or not. This study is in line with Azmi et al., (2021), there was no difference between the NPF ratio before and after Covid-19 in Islamic banks.

Table 11. Kolmogorov-Smirnov Normality Test Result

Ratio	Period	Kolmogorov-Smirnov[a]			Information
		Statistic	df	Significance	
NPL	Before Covid-19 Pandemic	0.224	39	0.000	Abnormally Distributed Data
	During Covid-19 Pandemic	0.092	39	0.200*	Normal Distributed Data
LDR	Before Covid-19 Pandemic	0.151	39	0.026	Abnormally Distributed Data
	During Covid-19 Pandemic	0.281	39	0.000	Abnormally Distributed Data
GCG	Before Covid-19 Pandemic	0.437	39	0.000	Abnormally Distributed Data
	During Covid-19 Pandemic	0.408	39	0.000	Abnormally Distributed Data
ROA	Before Covid-19 Pandemic	0.299	39	0.000	Abnormally Distributed Data
	During Covid-19 Pandemic	0.324	39	0.000	Abnormally Distributed Data
NIM	Before Covid-19 Pandemic	0.171	39	0.006	Abnormally Distributed Data
	During Covid-19 Pandemic	0.106	39	0.200*	Normal Distributed Data
CAR	Before Covid-19 Pandemic	0.347	39	0.000	Abnormally Distributed Data
	During Covid-19 Pandemic	0.251	39	0.000	Abnormally Distributed Data

Loan to deposit Ratio (LDR)

According to Table 12 data, the significance value is 0.002 or less than 0.05. This means that in H_2 before and during the Covid-19 pandemic, the Risk Profile assessed by the Loan to deposit Ratio at conventional commercial banks recorded at the IDX has supported differences. By using the liquidity risk indicator, this shows that there is significant differences in conventional banking before and during the Covid-19 outbreak. There is a difference result because conventional banks experienced a decrease in the LDR ratio due to weakening credit demand which was not matched by an increase in third party deposits (DPK). Thus, reducing the main function of banking as intermediary as well as the prudence of banks in providing credit during the current pandemic. A low LDR ratio is a positive signal that give benefits for external parties (investors) which allows them to make decisions whether to invest their money in banks or not. The research is in line with Febrianti (2021) and Dinarjito & Priatna (2021) which showed that the LDR ratio fell during the Covid-19 pandemic.

Good Corporate Governance (GCG)

Based on the data from Table 12, the significance value is 0.180 or more than 0.05, so H_3 before and during the Good Corporate Governance (GCG) pandemic which is assessed based on self-assessment at conventional commercial banks listed on the IDX is not supported. Thus, there is no difference in GCG between before and during the Covid-19 pandemic because the significance value is greater than 5%. During Covid-19 outbreak, the presented composite value did not indicate a major change in the company's management. The better the bank's health rating, the better the bank's management performance. Therefore, interested external parties (investors) can see the bank's performance before making investment decisions. The findings of this study are in line with research by Azmi et al., (2021) on Islamic banks during and before the Covid-19 pandemic did not find significant differences.

Earning (Profitability)

ROA (Return on Assets)

From table 12, it can be seen that the significance value is 0.056 > 0.05. it means that H_4 before and during the Covid-19 pandemic, the Earning measured using Return on Assets (ROA) at conventional commercial banks are different, not supported. The Return on Assets (ROA) measurement shows no difference before and during the Covid-19 pandemic. There is no difference showing that conventional banking funding is not affected by the Covid-19 outbreak. Conventional banks are able to manage their capital to earn profits during the pandemic. An increase in

Table 12. Hypothesis Testing

Hypothesis	Sig	Conclusion
NPL	0.851	Not Supported
LDR	0.002	Supported
GCG	0.180	Not Supported
ROA	0.056	Not Supported
NIM	0.000	Supported
CAR	0.046	Supported

the ROA ratio indicates that external parties (investors) able to make a decision whether they want to save their money in the bank or not. Based on research conducted by Hartadinata & Farihah (2021), there is no significant difference in ROA values before and during the Covid-19 pandemic (in 2020).

Net Interest Margin (NIM)

Based on the data from Table 12, the significance level is 0.000 <0.05. H_5 before and during the Covid-19 pandemic, which Earning measured using Net Interest Margin (NIM) at conventional commercial banks listed on the IDX has differences, supported. By using the Net Interest Margin as a profitability measurement, this shows that there is a difference in the NIM ratio. The difference in the NIM ratio during the Covid-19 pandemic is caused by decreasing of bank interest income. The bank interest income decreasing happened because of credit delivery activity decreasing. A high NIM ratio of a bank means that external interested parties (investors) can decide whether they want to put their money in the bank or not. This is in line with research by Ariyani (2021), Febrianti (2021), and Dinarjito & Priatna (2001), revealed that the NIM ratio fell during the Covid-19 pandemic, but the decreasing was not statistically significant.

Capital

CAR (Capital Adequacy Ratio)

From table 12 it is clear that the significance value is 0.046 <0.05. It means H_6 before and during the Covid-19 pandemic that Capital measured using the Capital Adequacy Ratio (CAR) at conventional commercial banks listed on the IDX has differences, supported. CAR data shows that before and during the Covid-19 outbreak, there were significant differences in capital. This difference exists because conventional banks are more careful during the pandemic in terms of lending, which causes a higher CAR due to a decrease in lending that causes strong capital. Another factor that makes strong capital is the increasing of alternative formation which set aside to combat the potential impact of the Covid-19 outbreak. A high CAR ratio of banks means that external interested parties (investors) can decide whether they want to put their money in the bank or not. The results of this study agree with Azmi et al., (2021), Ariyani (2021), and Febrianti (2021), who found that the average Capital Adequacy Ratio (CAR) improved and was in good health during the Covid-19 pandemic.

CONCLUSIONS

Based on the results of this research, the following conclusions can be drawn as the overall condition of the bank is healthy (PK-2), it can be seen from its performance in terms of Risk Profile, Corporate Governance, Profitability and Capital (RGEC). Meanwhile, before and during the Covid-19 pandemic, there is no difference in the NPL ratio. In contrast, there is difference in LDR ratio between before and during the Covid-19 pandemic. Other findings in this research are GCG is assessed based on self-assessment, there is no difference before and during the Covid-19 pandemic. During and before the Covid-19 outbreak also found that there is no difference in the ROA ratio. Meanwhile, the NIM ratio shows that there is a difference between before and during the Covid-19 pandemic. However, for CAR ratio show a difference in the period before and during the Covid-19 pandemic. As overall conclusion, it can be some news for investor or debtor to put their money on bank or not, while for the bank itself, these findings can be one of the good signals for bank to start some new policy to attract the investor to save their money on them.

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