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"Entrepreneurship on Global Economics Development in the Era of Society 5.0"

**Industry Performance Analysis Banking Before and After Covid-19
(Panzar - Rosse Model)****Mathora Tatiana Sinambela^{1*}, Ranti April Yani¹, Nugraha Pratama¹, Ahmad Albar Tanjung¹**¹Master of Economics, Faculty of Economics and Business, Universitas Sumatera Utara
Jl Dr. T. Mansur No.9, Padang Bulan, Kec. Medan Baru, Kota Medan, Sumatera Utara, Indonesia.***Email:** mathora.tatiana21@gmail.com**ABSTRACT**

Banking as a financial intermediary institution has a big role in improving and driving the economy. However, with the pandemic, the banking sector has experienced many disruptions and an increase in various risks related to bank performance. This research was conducted with the aim of knowing that there were significant differences between the financial performance of conventional commercial banks listed on the IDX before and during the Covid-19 pandemic. The approach used is the Panzar-Rosse approach which assesses financial performance based on 5 aspects, namely capital, assets, management, earnings, and liquidity which are then projected by the CAR, NIM, LDR, BOPO and ROA ratios respectively. In this study using the Panzar-Rosse non-structural approach using secondary data from commercial banks in Indonesia for the 2017-2021 period. Research shows that there are significant differences between CAR, NIM, LDR, BOPO and ROA of conventional commercial banks before and during the Covid-19 pandemic.

Keywords: capital adequacy ratio (CAR) , net interest margin (NIM) , loan to deposit ratio (LDR) , operating expenses operating income (BOPO) and return on assets (ROA)

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INTRODUCTION

Indonesia is a country that has potency high economy starting potential noticed internationally Indonesia - economy largest in Southeast Asia - has a number characteristics that place this country in great position for experience development rapid economy . Besides it , deep a number of year final there is Support strong from government center for curb Indonesia's dependence on exports commodity (raw), all at once increase role industry manufacture in economy . Infrastructure development is also purpose main government , and what is necessary causing deep multiplier effect economy .

Previously, Indonesia was often mentioned as the right candidate to be included in the BRIC group of countries (Brazil, Russia, India and China). Another group often mentioned before - those belonging to the acronym CIVETS (namely Colombia, Indonesia, Vietnam, Egypt, Turkey and South Africa) - have also received attention because their members have quite sophisticated financial systems and fast-growing populations. Several years ago the gross domestic product (GDP) of CIVETS was estimated to contribute around half of the global economy in 2020. However, due to the prolonged global economic slowdown after 2011 we rarely hear the terms BRIC and CIVETS again.

In report Bappenas (2022) A pandemic that has lasted more than two years has been handled quite well by various countries. However, the global economy has yet to fully recover. Amid soaring commodity prices and supply chain disruptions, inflation that spreads globally provides a difficult situation for policy makers between supporting economic growth and controlling increasingly strong price pressures. Global financial conditions have tightened and borrowing costs have increased, particularly in emerging markets, reflecting reduced policy accommodation in response to increasing inflationary pressures, economic uncertainty and geopolitical risks.

The Indonesian economy in the second quarter of 2022 continues to show recovery and is getting stronger, which grows by 5.4 percent (YoY). From the expenditure side, all components grew positively except for government consumption which was still contracting. This growth was driven by the household consumption expenditure group, which was the highest source of growth. The increase in household consumption is in line with the Ramadan and Eid al-Fitr holidays in the second quarter of 2022, driven by an increase in shopping activity for community groups. Meanwhile, from the production side, all sectors grew positively except for the Government Administration and Education Services sectors which were still contracting. Of the majority of sectors that grew positively, the highest growth occurred in the transportation and warehousing sector which was influenced by holiday moments and Idul Fitri holidays, as well as the easing of travel conditions policies.

Bank Indonesia again maintained its benchmark interest rate at 3.50 percent until the second quarter of 2022 to maintain the momentum of economic recovery and exchange rate stability amid high global market uncertainty. The normalization of domestic liquidity continues through increasing the Minimum Statutory Reserves (GWM) and providing GWM incentives while maintaining the availability of liquidity and banking intermediation. In addition, Bank Indonesia also continued purchasing SBN on the primary market in line with the national economic recovery program. The average Rupiah exchange rate in the second quarter of 2022 is Rp 14,549 per USD, down 1.13 percent (YoY) which was influenced by

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increasing pressure on global financial markets, in line with inflation turmoil. Meanwhile, domestic inflation showed an increase beyond the 2022.S inflation target

The Indonesian economy is expected to be able to continue its economic recovery amidst global inflationary pressures and a slowdown in the economies of several countries throughout 2022. Indonesia must be aware of the risks and impacts, such as escalating geopolitical tensions, tightening global monetary policy, and rising commodity prices. Many countries have shown a slowdown in economic development and increasing inflationary pressure, thus indicating that the risk of stagflation is getting stronger and closer. However, this condition was not seen in the condition of the domestic economy. The windfall phenomenon allows the government to expand its fiscal stimulus while still focusing primarily on the recovery process. Overall, GDP is forecast to grow strongly in the 5.0 – 5.5 percent range in 2022.

Based on data from the Central Bureau of Statistics (2022) , Indonesia's economy grew briskly in the second quarter of 2022, amidst risks of a weakening global economy and increasing inflationary pressures. This development was reflected in economic growth in the second quarter of 2022 which reached 5.44% (yoy), far above the achievement of the previous quarter of 5.01% (yoy). The acceleration in economic performance was supported by increasing domestic demand, especially household consumption, and export performance which remained high. The improvement in the national economy is also reflected in the increased growth in the majority of business fields and in all regions. Going forward, Indonesia's economic recovery is predicted to continue, supported by increased mobility, sources of financing, and business activity. Nevertheless, the impact of the global economic slowdown on export performance and the potential for restrained household consumption due to rising inflation should be watched out for.

From the expenditure side, economic growth in the second quarter of 2022 was supported by almost all of its components. Household consumption grew briskly at 5.51% (yoy), far above the previous quarter's achievement of 4.34% (yoy). This positive performance was driven by increased community mobility in line with the loosening of mobility restriction policies and activities related to the celebration of National Religious Holidays (HBKN). Investment growth slowed by 3.07% (yoy), especially construction investment, amid the good performance of non-construction investment. Meanwhile, government consumption still contracted by 5.24% (yoy), mainly stemming from a decrease in spending on goods for handling Covid-19 and National Economic Recovery (PC-PEN) in line with the improving conditions of the Covid-19 pandemic. Export growth was recorded to increase by 19.74% (yoy), supported by demand from major trading partners which remained strong. Meanwhile, imports grew briskly by 12.34% (yoy) in line with the improving performance of domestic and export demand.

In terms of Business Fields (LU), the performance of almost all LA in the second quarter of 2022 shows continued economic improvement. This improvement was mainly driven by several LUs such as the Processing Industry, Transportation and Warehousing, as well as Wholesale and Retail Trade. Meanwhile, LU Provision of Accommodation and Food and Drink also recorded high growth driven by easing travel requirements and increased activities related to the HBKN celebration. Spatially, economic improvement was supported by increased growth that occurred in all regions of Indonesia, with the highest growth

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recorded in the Sulawesi-Maluku-Papua (Sulampua) region, followed by Java, Sumatra, Kalimantan and Bali-Nusa Tenggara (Balinusra).

Conditions in the financial services sector are increasingly recovering, as reflected in growth in the banking intermediary function, strengthening performance of the capital market and the non-bank financial industry. The development of the total assets of conventional banks in Indonesia is shown in Table 1 as follows:

Table 1 Development of Total Assets of Conventional Banks in Indonesia

<u>Kelompok</u>	<u>Tahun</u>				
Bank	2017	2018	2019	2020	2021
Bank Umum	7.387.144	8,068,346	8,562,974	9.177.894	10,112,304
BPR	125.945	135,57	149,872	155.075	168,443

Sumber : Otoritas Jasa Keuangan (2021)

Based on Table 1 in above, in 20 17 - 2021 total assets of conventional banks Keep going experience enhancement from year to year , Based on registered OJK statistical data total public bank assets in 2017 was IDR 7,387,144 , - billion and BPR IDR 125,925 billion whereas in 2021 commercial banks will be Rp . 10,112,304.- billion and rural banks will be 168,443.- billion . This showing that growth asset banking in Indonesia still healthy and strong , though in the middle uncertainty economy and the COVID-19 pandemic.

Banking performance in Indonesia has also shown a significant increase, as can be seen from the increasing banking profitability. Bank performance can describe the bank's financial condition , because the higher the level of profitability, the better the performance of the bank. In measuring profitability can use *Return On Assets (ROA)*. *Return On Assets (ROA)* can be measured by a comparison between net income to total assets. The greater the ROA, the better the financial performance will be.

Table 2 Development of *Return On Assets of* Conventional Banks in Indonesia

<u>kelompok</u>	<u>Tahun</u>				
Bank	2017	2018	2019	2020	2021
Bank Umum	2,45	2,55	2,47	1,59	1.84
BPR	2,55	2,48	2,31	2	1.78

Sumber : Otoritas Jasa Keuangan (2021)

Based on Table 1.2. shows that the *Return on Assets of* conventional banks in Indonesia for the period 2017 – 2021 has changed from year to year. In 2017 - 2019 , return on banking assets conventional enough stable , however in 2020 – 2021 return On assets continue experience decline . this _ caused because exists the virus-19 pandemic so activity economy enough affected consequence from restrictions activity economy .

Theory *Structure Conduct Performance (SCP)* is widely used as a tool to analyze industry performance in general. SCP focuses more and concentrates on empirical analysis

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compared to theoretical analysis. The SCP theory itself is the basis for the emergence of a new paradigm, especially one that focuses more on interactions between individuals in one market. The SCP analysis framework presents a relationship between structure in one industry (*structure*) and the *conduct* and performance of *companies* in the same industry. Companies in the same industry are one keyword with the assumption that the behavior of companies in one industry will be interrelated and will influence each other. Specifically in the SCP approach, the market structure will affect the behavior of the company and ultimately the behavior of the industry will affect the performance of the company itself.

Market structure will be related to the degree of seller concentration (the number of sales that can be made by one company compared to the total number of sales that can be made by all companies in one industry). Apart from being related to the degree of sales concentration, market structure will also be related to the degree of concentration of buyers, the degree of product differentiation and the obstacles that occur and are faced by companies in one industry. This market structure analysis is important to see how the market structure is faced by the industry. Knowing the market structure where the company is located will influence the behavior of the company.

Industrial behavior can be interpreted as a pattern of behavior followed by companies in the market to adapt to market conditions to achieve the goals of each company. The pattern of behavior of each of these companies will be seen from the strategies and policies implemented by each company. The main elements of corporate behavior can be clearly seen from several things, such as the application of selling prices, the type and quantity of products produced by the company and other behaviors of companies that are more technical in nature.

In some industrial economics literature, performance is defined as a certain amount of achievement that can be achieved by one company in a certain period of time. Generally, these achievements are quantitative in nature, such as sales volume, profits, and the company's market share. Measures that can be achieved by one company will be compared with the achievements that can be achieved by other companies in the same field. By comparing the achievements that the company has achieved, it will make the company managers understand how the company's position is compared to other companies in the same industry.

important indicator in a company, because performance can describe how well the company works and manages its capital. Performance can be measured by one of them through the pattern of profitability. Literally, the definition of profitability is the difference between income and costs incurred, which is generally reflected in net income after tax. The profitability aspect in this study is proxied by *Return On Assets* (ROA).

Return on Assets (ROA), namely the ratio to measure the ability of bank management to manage assets under their control to generate various *incomes* . *Return on Assets* indicates the bank's ability to generate profits by using its assets, the greater this ratio indicates the better the bank's performance. *Return on Assets* (ROA) was chosen as an indicator for measuring banking financial performance, because the more ROA increases, the company's profitability also increases, so that it can be said that the bank's financial performance is successful according to the wishes and objectives of the shareholders and the company, namely increasing profitability (Purwoko & Sudiyatno, 2013).

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The role of capital is very important because apart from being used for expansion purposes, it is also used as a " *buffer* " to absorb losses in business activities. In this case the Bank is required to comply with the Minimum Capital Adequacy Requirements (KPMM) that apply to capital increases (SE. Intern BI, 2004). Technically, analysis of capital is also known as solvency analysis, or also called capital adequacy analysis, which aims to determine whether the existing bank capital is sufficient to support bank activities carried out efficiently, whether the bank's capital will be able to absorb losses, unavoidable losses, and whether bank wealth (shareholder wealth) will get bigger or smaller (Muljono, 1999). Furthermore, according to Muljono, to measure the ability of the capital is used: *primary ratio, capital ratio and Capital Adequacy Ratio (CAR)*. according to Bank Indonesia Regulations, CAR (*Capital Adequacy Ratio*) is a ratio that shows how much the total risky bank assets (loans, investments, securities, claims on other banks) are also financed from their own capital in addition to obtaining funds from other sources. sources outside the bank. The CAR ratio set by Bank Indonesia is at least 8%, if a bank's CAR ratio is below 8%, it means that the bank is unable to absorb losses that may arise from the bank's business activities, then if the CAR ratio is above 8%, it indicates that the bank is increasingly solvable. . With the increasing level of bank solvency, it will indirectly affect the increase in bank performance, because the losses borne by the bank can be absorbed by the capital owned by the bank.

Market risk according to Bank Indonesia Regulation No. 5 of 2003 is a risk that arises due to movements in market variables from the portfolio owned by the bank, where these movements can result in losses, in this case are movements in interest rates and exchange rates. Based on the provisions of BI regulation No.5/2003, one of the proxies for market risk is interest rates, thus the market ratio can be measured by the difference between the *funding* interest rate and the lending interest rate *or in absolute form* , which is the difference between the total interest cost of funding and the total interest cost of the loan. In the banking world it is called the *Net Interest Margin (NIM)*. This ratio is used to measure the ability of bank management to manage its earning assets to generate net interest income. Net interest income is obtained from interest income minus interest expense. This ratio shows the bank's ability to obtain operating income from funds placed in the form of loans (credit). The higher the NIM, the more effective the bank is in placing productive assets in the form of credit. The standard set by Bank Indonesia for the NIM ratio is 6% and above. The greater this ratio, the higher the interest income on earning assets managed by the bank so that the possibility of a bank in a troubled condition is getting smaller. So it can be concluded that the greater the net interest margin (NIM) of a company, the greater the return on assets (ROA) of the company, which means that the financial performance is getting better or increasing. Vice versa, if *the net interest margin (NIM)* is getting smaller, the *return on assets* will also be getting smaller, in other words the company's performance is getting lower .

The availability of funds and sources of bank funds at present and in the future is an understanding of the concept of liquidity in this indicator. According to Ali, (2006), liquidity arrangements are primarily intended so that banks can fulfill their obligations which must be paid immediately. Liquidity is assessed by considering that most of the bank's assets are not liquid with sources of funds with a shorter term. Liquidity indicators include the large *secondary reserve* for daily liquidity needs, the ratio of concentration of dependence on large funds which is relatively unstable, and the distribution of third party funding sources that are

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sound, both in terms of cost and in terms of stability. According to Bank Indonesia, the assessment of the liquidity aspect reflects the bank's ability to manage an adequate level of liquidity to meet its obligations in a timely manner and to meet other needs. Bank Indonesia regulations state that a bank's liquidity capacity can be proxied by the LDR (*Loan to Deposit Ratio*), namely the ratio between credit and Third Party Funds (DPK). This ratio is used to assess the liquidity of a bank by dividing the amount of credit extended by the bank to third party funds. According to Muljono, (1999), the *Loan to Deposit Ratio* shows a comparison between the volume of credit compared to the volume of deposits held by banks. This means that the level of liquidity is getting smaller and vice versa because the source of funds (deposits) that are owned have been used up to finance the *financing of the* loan portfolio. The higher this ratio, the lower the ability of the bank's liquidity so that the possibility of a bank in a troubled condition will be even greater. Loans provided do not include loans to other banks, while for third party funds are current accounts, savings, time deposits, certificates of deposit. The standard used by Bank Indonesia for the LDR ratio is 80% to 110%. If the LDR ratio of a bank is below 80% (for example 60%), it can be concluded that the bank can only distribute 60% of all funds that have been collected. Because the main function of a bank is to act as an intermediary (intermediary) between parties who have excess funds and those who lack funds, an LDR ratio of 60% means that 40% of all funds raised are not channeled to those in need, so it can be said that the bank is not carry out its function properly. Then if the bank's LDR ratio reaches more than 110%, it means that the total loans provided by the bank exceed the funds raised. Because of the small amount of funds collected from the public, the bank in this case can also be said to have not carried out its function as an intermediary party properly. The higher the LDR, the more risky the bank's liquidity conditions are, conversely, the lower the LDR, the less effective the bank is in extending credit.

Peter Drucker, in Hanafi (1999), states that efficiency is the ability to use unnecessary resources. Efficiency will be clearer if it is associated with the concept of output-input comparison. According to Bank Indonesia, operating efficiency is measured by comparing total operating costs to total operating income or what is often called BOPO. This BOPO ratio aims to measure the ability of operating income to cover operating costs. An increasing ratio reflects the bank's lack of ability to reduce operational costs and increase operating income which can cause losses because banks are less efficient in managing their business (SE. Intern BI, 2004). Bank Indonesia sets the best figure for the BOPO ratio below 90%, because if the BOPO ratio exceeds 90% to close to 100% then the bank can be categorized as inefficient in carrying out its operations.

For know behavior characteristic competition _ *contestable* or *non-contestable* this develop non- structural models as developed by Bresnahan-Lau (1981) and Panzar Rosse (1987). methods this no measure behavior competition banking without use information market structure _ explicit , but with estimate difference structure cost from price competition . these models dominate studies latest for analyze competition banking .

The Bresnahan-Lau (1981) model and the Panzar-Rosse (1987) model (or known with PR model names) are popular used for look level and behavior competition banking . The Bresnahan-Lau model has applied by Shaffer (1993) to estimate banking in the United States , and then find behavior occurs _ competition monopolistic in 1989. Research _ similar has also been performed by Nathan and NaÃve (1989) for test competition banking

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in Canada . They find behavior competition perfect for 1982 and the competition monopolistic for 1983-1984 .

Temporary the application of the Panzar-Rosse model by Kim and Chun (2004) to industry banking in Korea for 1999-2002 shows _ results interesting , with crisis banking 1999 has change Korean banking market structure of competition monopolistic Becomes monopoly . Strength monopoly banking even increase after crisis , even though banks compete in condition competition monopolistic . in other words. Crisis banking has push industry Korean banking became more concentrated .

Testing competition banking with use method Panzar-Rosse for developing countries - bang up moment this still relatively limited . Gelos and Roldos (2002) analyze several banking markets with use methodology this for banking in several developing countries in 1994-1999 . Study this show that all banking markets in sample eight developing countries in Europe and Latin America characteristic competitive although level concentration increase . They conclude that decrease obstacle for enter to in industry banking , like with allowed foreign banks enter to the domestic market , has been raise pressure competition .

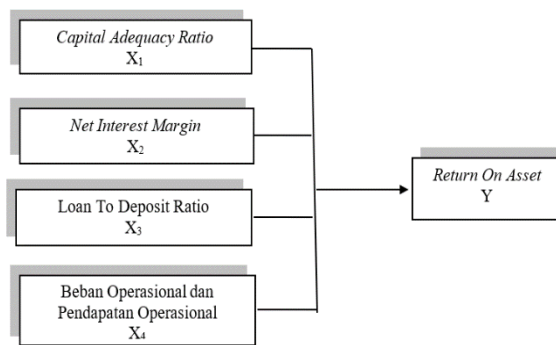


Figure 1 Research Conceptual

METHOD

The approach used to measure the level of influence of the independent variables on the performance and level of competition of commercial banks in this study is the panzar-rosse non-structural approach using secondary data from 35 commercial banks in Indonesia for the period 2017 to 2021.

The object of this research is all conventional commercial banks that issue report finance on the Indonesia Stock Exchange . Equation estimation using *return on assets* (ROA) as the dependent variable on the performance of commercial banks, and variables *capital adequacy ratio* (CAR), *net interest margin* (NIM) *loan to deposit ratio* (LDR), operating expenses operating income (BOPO) and as independent variables .

The analytical model used in this study is the panzar-rosse model to see the effect of behavior based on input factors on Indonesian banking performance before and after Covid-19 . Where the Panzar - Rosse model explains that the company's total revenue is influenced by input factors, which can be replaced with proxy values that are directly related to these input factors.

The method used in this study is the ordinary least squares (OLS) method in multiple linear regression analysis using Eviews software version 10. This method is used in the

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panzar-rosse model to measure stability and long-term structural changes between input factor variables

Table 3 Panel Data Regression Results

Dependent Variable: LOGROA				
Method: Panel Least Squares				
Date: 01/10/23 Time: 13:01				
Sample: 2017 2021				
Periods included: 5				
Cross-sections included: 34				
Total panel (unbalanced) observations: 163				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	11.62129	2.117187	5.489021	0.0000
LOGCAR	-0.050710	0.160066	-0.316808	0.7518
LOGNIM	0.145283	0.127379	1.140553	0.2558
LOGLDR	0.227856	0.229776	0.991643	0.3229
LOGBOPO	-2.833214	0.363497	-7.794332	0.0000
R-squared	0.387614	Mean dependent var	0.065644	
Adjusted R-squared	0.372110	S.D. dependent var	1.024131	
S.E. of regression	0.811516	Akaike info criterion	2.450370	
Sum squared resid	104.0523	Schwarz criterion	2.545271	
Log likelihood	-194.7052	Hannan-Quinn criter.	2.488899	
F-statistic	25.00179	Durbin-Watson stat	1.154588	
Prob(F-statistic)	0.000000			

Source : Processing Results Eviews10

Testing hypothesis

Models used in study will tested a number of testing for interesting conclusion is results from conclusion the corresponding with a hypothetical model or no . Testing following conducted for test the panel data regression model .

Based on results regression in Table 4, the t - statistic CAR value is -0.316808 more small from t - table (-0.316808 < 1.689). Conclusion H0 is accepted , which means CAR individual no influential significant to ROA variable on the level 95% confidence .

Regression results in Table 4, the NIM t - statistic value is more than 1.140553 small from t - table (1.140553 < 1.689). Conclusion H0 is accepted , which means NIM individual no influential significant to ROA variable on the level 95% confidence .

From the results regression the t - statistic LDR value is more than 0.991643 small from t - table (0.991643 < 1.689). Conclusion H0 is accepted which means LDR literally individual no influential significant to ROA variable on the level 95% confidence .

Viewed from results regression the BOPO t - statistic value is more than 7.794332 small from t - table (7.794332 > 1.689). Conclusion H1 is accepted which means BOPO significantly individual influential significant to ROA variable on the level 95% confidence

Statistics Test

For know established market structure based on the equation modeling approach Panzar-Rosse . In the approach model Panzar-Rosse , used three variable main in study this namely , *capital adequacy* ratio (CAR), *net interest margin* (NIM) *loan to deposit ratio* (LDR), operating expenses operating income (BOPO) .

From the results of the H - Statistics output obtained score coefficient *capital adequacy* ratio (CAR) of -0.050710 ; *net interest margin* (NIM) of 0.145283; *loan to deposit ratio* (LDR) of 0.227856; and operating expenses operating income (BOPO) of -2.833214. Accepted hypothesis $0 < H < 1$, where H- statistic of 0.107646 gives information that impact the Covid-19 pandemic that occurred in Indonesia is estimated will trigger growth credit / or industry financing _ banking slow down or experience later decline _ will resulted

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descent profitability industry in level competition Indonesian commercial banking industry in the banking era before and after covid-19 on the competitive market structure monopolistic

Conclusions and recommendations**Conclusion**

From the results study could concluded as following : shows that performance industry bank Indonesia before and after the measured Covid -19 with ROA affected in a manner significant operating expenses operating income (BOPO) . However *capital adequacy ratio* (CAR), *net interest margin* (NIM) , and *loan to deposit ratio* (LDR) no influential significant on ROA. Next , based on the panzar-rosse model using H- statistics show that performance financial proxies experienced by ROA decline , will but the market remains respond well as indicated by the average BOPO experienced increase . That is , banking in Indonesia is still capable for manage source the power it has is responded to with both by the market during the covid-19 pandemic . So that in the future banking could consistent for follow policy government related ethnic group flower possible reference _ help performance financial and banking market .

Suggestion

Based on conclusions that have been delivered , got put forward that following results confirming research _ that the most influential variable significant to performance (ROA) is operating expenses operating income (BOPO) . Other variables like *capital adequacy ratio* (CAR), *net interest margin* (NIM) , and *loan to deposit ratio* (LDR) influential negative and no significant on ROA before and after covid-19.

Based on results analysis it is expected Indonesian Commercial Bank management can take policy efficiency in enhancement health banking although in condition the covid-19 pandemic with method reduce LDR with limit distribution loans on risky objects , increase _ capital , and channels loans on potential objects _ get profit .

The role of Bank Indonesia and the Financial Services Authority (OJK) as government institutions is needed in maintaining and protecting the banking industry in Indonesia, especially at the level of competition between bank and non-bank financial institutions. It is hoped that Bank Indonesia and OJK can prevent competition that violates Bank and Non-Bank financial institutions to maintain financial and monetary sector stability by issuing regulations as financial institution regulators .

Ability results predictive by 37.2% because influence of existing models in study this , meanwhile the remaining 62.8% is influenced by research latest for add ratio finance other in affect ROA as the performance of Bank Umum Indonesia before and after covid-19. Study the latest also use panel data in the Panzar-Rosse model based on types of banks include Islamic banks, rural banks or etc so that could analyze in more detail performance banking in Century pandemic covid-19 with method use RGEC method is appropriate with Bank Indonesia regulations in order to be able to keep the money in the healthiest banking without doubts . Study with up-to- date data and a remote sample more big is also expected could produce continuous research _ for enrichment intellectual specifically for industry banking in Indonesia.

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REFERENCES

- Ali, H. Masyhud. (2006) . *Risk Management: Banking and Business World Strategies Facing the Challenges of Business Globalization* . Jakarta: PT. King of Grafindo Persada.
- Ali. (2006) . *Banking And Financial Ratios* . Jakarta: Refika Aditama.
- Ardiansyah, R., & Mawardi, W. (2017). *Analysis of the Effect of Capital Adequacy Ratio, Loan To Deposit Ratio, Bopo, and Net Interest Margin on Bank Financial Performance. (Studies on Conventional Commercial Banks Listed on the Indonesia Stock Exchange in 2010-2014)* (Doctoral dissertation, Faculty of Economics and Business).
- Azhari, AR, & Wahyudi, R. (2020). Analysis of Islamic banking performance in Indonesia: Study during the Covid-19 pandemic. *JESI (Journal of Indonesian Sharia Economics)* , 10 (2), 96-102.
- Damayanti, P., & Savitri, DAM (2018). Analysis of the Effect of Size (Size), *Capital Adequacy Ratio* (Car), Deposit Growth, *Loan to Deposit Ratio* (Ldr), on Go Public Banking Profitability in Indonesia in 2005–2009. *Journal of Management and Applied Accounting (JIMAT)* , 3 (2), 45-54.
- Lestari, D. (2014). Analysis of the effect of CAR, BOPO and LDR ratios on the financial performance of banks listed on the Indonesia Stock Exchange in 2008-2012.
- Muljono Teguh Pudjo. 1999. *Analysis of Financial Statements for Banking* . Revised edition 1999. Printing 6. Jakarta Djbatan.
- Nasution, MS, & Kamal, H. (2021). Comparative Analysis of Pre and Post Covid-19 Sharia and Conventional Banking Performance. *At-Tasyri': Scientific Journal of Muamalah Study Program* , 29-38.
- Nursidin, M. (2020). Effect of *Capital Adequacy Ratio* and Operating Expenses Operating Income on *Loan To Deposit Rati o*. *Juripol (Journal of Institutional Polytechnic Ganesha Medan)* , 3 (2), 1-8.
- Panzar , JC & Rosse , JN (1987). Testing For "Monopoly Equilibrium". *Journal of Industrial Economics*, 35.
- Purwoko, D., & Sudiyatno, B. (2013). Factors influencing bank performance (Empirical studies on the banking industry on the Indonesia Stock Exchange). *Journal of Business and Economics* , 20 (1).
- R. Gaston Gelos and Jorge Roldos, "Consolidation and Market Structure in Emerging Market Banking System", IMF Working Paper, 2002
- Rahman, TA, Sudjana, N., & Zahroh, ZA (2016). Analysis of Banking Performance with the RGEC Approach (*Risk Profile, Good Corporate Governance, Earning , and Capital*) to Determine Bank Soundness Level (Studies on State-Owned Banks and Regional Development Banks Period 2012-2014). *Journal of Business Administration (JAB)* , 35 (1).
- Saputra, FE (2020). Analysis of the Influence of *Fdr, Bopo , and Npf* on the Performance of *Islamic Commercial Banks in Indonesia from January 2015 to July 2020* (Doctoral dissertation, Indonesian Technocrat University).
- Suryani, A., & Hidayat, RR (2016). *The Effect of Capital Adequacy Ratio, Operating Costs Per Operating Income, Loan to Deposit Ratio, Net Interest Margin and Non-*

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“Entrepreneurship on Global Economics Development in the Era of Society 5.0”

Performing Loans on Return on Assets (Study on Commercial Banks Listed on the Indonesia Stock Exchange Period 2012-2 . Brawijaya University.

Vidyanancy, CC (2019). *The Influence of Banking Risk on Banking Financial Performance: An Overview of Conventional Commercial Banks on Stock Exchanges for the 2011-2017 Period* (Doctoral dissertation, STIE Indonesia Banking School).

Yudiartini, DAS, & Dharmadiaksa, IB (2016). the effect of financial ratios on the financial performance of the banking