THE IMPACT OF CAPITAL ADEQUACY RATIO, CAPITAL STRUCTURE, NON-PERFORMING LOAN, AND RETURN ON ASSETS TOWARDS FIRM VALUE OF BANKING COMPANIES LISTED IN INDONESIA STOCK EXCHANGE

Geoffry Japin 1), Ciptawan 2)

^{1,2)} Universitas Pelita Harapan, Medan

*)e-mail: : gj80109@student.uph.edu 1) ciptawan.mdn@lecturer.uph.edu 2)

ABSTRAK

Penelitian ini bertujuan untuk mengetahui Pengaruh Capital Adequacy Ratio, Capital Structure, Non-Performing Loan, and Return on Assets secara parsial dan simultan terhadap Nilai Perusahaan. Sampel penelitian ini adalah perusahaan perbankan yang tercatat di Bursa Efek Indonesia dimulai dari tahun 2017 hingga 2020 dengan menggunakan metode purposive sampling. Terdapat 27 perusahaan perbankan yang memenuhi kriteria sebagai sampel penelitian. Data yang telah terkumpul selanjutnya diolah menggunakan aplikasi SPSS 26.0 dan diuji dengan uji normalitas, heteroskedastisitas, multikolinearitas, dan linieritas. Selanjutnya, dilakukan pengujian regresi linier berganda, koefisien determinasi dan dilanjutkan dengan pengujian hipotesis yang terdiri dari uji T dan uji F. Hasil penelitian ini menunjukkan bahwa Capital Adequacy Ratio secara parsial tidak berpengaruh signifikan terhadap Nilai Perusahaan, Capital Structure secara parsial berpengaruh signifikan terhadap nilai perusahaan, Non-Performing Loan secara parsial berpengaruh signifikan terhadap nilai perusahaan, variable Capital Adequacy Ratio, Capital Structure, Non-Performing Loan, and Return on Assets berpengaruh signifikan terhadap Nilai Perusahaan.

Kata Kunci: capital adequacy ratio, capital structure, non-performing loan, return on assets, firm value.

ABSTRACT

This study aims to determine the impact of the Capital Adequacy Ratio, Capital Structure, Non-Performing Loan, and Return on Assets partially and simultaneously on firm value. The sample of this study is banking companies listed on the Indonesia Stock Exchange starting from year 2017 to 2020 using the purposive sampling method. There are 27 banking companies that meet the criteria as research samples. The data that has been collected is then processed using the SPSS 26.0 application and tested with normality, heteroscedasticity, multicollinearity, and linearity tests. Furthermore the data is tested further with multiple linear regression testing, the coefficient of determination and continued with hypothesis testing consisting of T test and F test. The results of this study indicate that the Capital Adequacy Ratio partially has an insignificant effect on Firm Value, Capital Structure partially has a significant effect on firm value, and Return on Assets partially has a significant effect on Firm Value. Simultaneously, the variables: Capital Adequacy Ratio, Capital Structure, Non-Performing Loan, and Return on Assets have a significant effect on firm value.

Keywords: capital adequacy ratio, capital structure, non-performing loan, return on assets, firm value.

3. INTRODUCTION

Firm value is the view of investors on the company, and this is often associated with stock prices as well as a company's financial growth. Stock price is meant by the price that occurs when shares are traded on the stock market. If the stock price is high, the firm value will also be followed by high figures. On the other hand, firm value is the result of management from various sectors, including capital structure, financial performance, and credit quality. As stock price is one of the indicators towards firm value, this applies to companies especially banking companies that are already listed on the stock exchange where the amount of stock prices will affect the company. This is an indicator of firm value and potential investors before deciding to become an investor in a company.

As a finance company, banks must pay attention to careful planning in making funding decisions. The bank's capital structure is how the bank finances its business and operations. The bank's capital structure is characterized by a much higher level of debt (Irdavani, 2015). This is reflected in the international regulation in the banking sector, namely Basel III. The regulation states that banks must maintain a capital adequacy ratio of no less than 8%. The capital structure of a bank includes high leverage, so there is a risk if the bank goes bankrupt for some reason. One of the risks of bank failure is the high number of bad loans. Non-Performing Loans (NPL) are loans that are past due for 90 days or more and include bad loans, substandard loans and doubtful loans. Non-Performing Loan is one of the indicators for assessing the performance of banking functions. With good credit management and the use of prudential principles, the bank can increase the value of the company and generate a better profit value for the company. Return of profit based on Assets as well as beneficial compared to other indicators. The more return a company gain would also sending a signal to potential investors to invest in the company.

Banks are financial institutions that focus on saving deposits on demand, reserves and time deposits. Moreover, the bank is also regarded as a spot where people can buy money, sell money, transfer money, or collect payments of all sorts. Banking as a financial institution has an important role in the life of a country, especially in a developing country like Indonesia. The strategic role of the bank is mainly due to the main function of the bank as an institution that can raise funds and channel public funds effectively and efficiently.

Banks are the most important financial institutions in a country that affect the economy both at macro and micro levels. In Indonesia, banking, both consumption and investment, has a market share of 80% of the total financial system currently available (Winarto, 2020). Banks in running their business collect funds from the public and channel them back into various investment alternatives. In connection with this function of collecting funds, banks are often called trust institutions. In line with these business characteristics, the bank is a business segment whose activities are largely regulated by the government. There are two types of banks in Indonesia, including conventional banks and shari'ah banks. Shari'ah banks are banks whose activities leave us with a problem of usury (*riba*).

The Banking Industry in Indonesia is supervised by an agency called the Financial Services Authority (OJK). OJK has the function of administering an integrated regulatory and supervisory system in the financial services sector, which is divided into the banking sector, capital market and non-bank financial industry. Banks carry out their functions based on the principle of prudence. The main function of banking is to collect and channel public funds with the aim of supporting the implementation of national development in the context of increasing equitable distribution of development and its results. Banking is also one of the pillars of

economic growth and national stability to improve people's lives in terms of the financial sector.

According to OJK data as of March 2020 the number of banks was 96 banks which were divided into 4 categories from Commercial Banks based on Business Activities (BUKU). The distribution includes 12 banks of BUKU I, which is a bank with core capital of 100 billion rupiahs to 1 trillion rupiahs, 52 BUKU II bank which has a core capital of 1 trillion rupiahs to 5 trillion rupiahs, 26 BUKU III bank which has a core capital above 5 trillion rupiahs to 30 trillion rupiahs, and 6 BUKU IV banks with core capital above 30 trillion rupiahs.

There are several measurements used to measure the firm value of the company, some of which are used are divided into: Capital Adequacy Ratio is a ratio that serves to accommodate the risk of loss that may be faced by the bank. Capital structure is a balance or comparison between capitals that is sourced by our own capital and foreign source of capital. Non-Performing Loan (NPL) is a ratio used to measure a bank's ability to cover the risk of credit failure by debtors. Return on Assets (ROA) is a ratio used to measure the ability of bank management to obtain profits or overall profits.

Table 1. 1 Comparison Table of Top Four Best Performing Banking Company in Indonesia

No.	Year	Stock Code	CAR	DER	NPL	ROA	PBV
1.	2017		21.95%	5.71	0.88%	2.57%	2.66x
	2018	BBRI -	20.15%	6.00	0.92%	2.49%	2.44x
	2019		21.52%	5.79	1.04%	2.43%	2.60x
	2020		19.59%	6.56	0.80%	1.23%	2.57x
2.	2017		21.64%	5.62	1.06%	1.91%	1.10x
	2018	– DMDI	20.96%	5.50	0.67%	2.15%	1.86x
	2019	BMRI	21.39%	5.31	0.84%	2.16%	1.73x
	2020		19.90%	6.38	0.43%	1.23%	1.52x
3.	2017		23.1%	4.71	0.4%	3.11%	4.07x
	2018	- BBCA	23.4%	4.44	0.4%	3.13%	4.18x
	2019	DDCA	23.8%	4,28	0.5%	3.11%	4.68x
	2020		25.8%	4.82	0.7%	2.52%	4.52x
4.	2017		18.5%	6.03	0.7%	1.92%	1.81x
	2018	– – BBNI	18.5%	6.33	0.8%	1.86%	1.47x
	2019	DDNI	19.7%	5.76	1.2%	1.82%	1.16x
	2020		16.8%	6.90	0.9%	0.37%	1.02x

Source: Prepared by Writer (2021)

⁵th NCBMA (Universitas Pelita Harapan, Indonesia) "The Opportunity of Digital and Technology Disruption" 18 Mei 2022, Tangerang.

Table 1.1 above contains information related to the Capital Adequacy Ratio, Debt-Equity Ratio, Non-Performing Loan, Return on Assets, and Price to Book Value of 4 companies that have the best banking performances in Indonesia. These 4 companies are consisted of Bank Rakyat Indonesia (Persero) Tbk, Bank Mandiri (Persero) Tbk, Bank Central Asia Tbk, and Bank Negara Indonesia (Persero) Tbk.

In the last few years, the banking performance in Indonesia tends to be far from the expectations of the stakeholders. To meet the expectations of the stakeholders, government is carrying out banking recovery and restructuring in order to improve banking performance in Indonesia so that it is of good quality. The performance of this bank has various problems due to intense competition. Financial performance in particular that really needs to be improved in order to improving the firm value of a banking company. Assessment of banking financial performance can be identified in various ways, one of which is using the banking-related Financial Ratio.

Using financial indicators such as Capital Adequacy Ratio, Capital Structure, Non-Performing Loan, and Return on Assets, this research is expected to increase knowledge and be able to find out how these variables affect the firm value towards the banking industry in Indonesia. Seeing the importance of discussing and analyzing these variable to determine the firm value of bank that established and listed in Indonesia, the writer took the title "The Impact of Capital Adequacy Ratio, Capital Structure, Non-Performing Loan, and Return on Assets Towards Firm Value of Banking Companies Listed in Indonesia Stock Exchange".

2. LITERATURE REVIEW 2.1. Literature Review 2.1.1Firm Value

Firm value is the view of investors on the company, and this is often associated with stock prices. What is meant by stock price is the price that occurs when shares are traded on the stock market. If the stock price is high, the value will also be high. On the other hand, firm value is the result of management from various sectors, including net cash flow, growth and cost of capital (Prasetyo, 2011). Stocks are also an indicator of the company's value because if the stock price is high, the value will also be high. The value of the company describes the current conditions in the company.

2.1.2Signaling Theory

Signaling theory are actions that is taken by companies to provide clues to investors about how management views the company's prospects (Brigham & Houston, 2015). This signal is in the form of information about what management has done to realize the owner's wishes. The information released by the company becomes important, because of its influence on the investment decisions of parties outside the company. This information is important for investors and business. As information essentially presents an important indicator; notes or descriptions, both for past, present and future conditions for the survival of the company and how it will affect the company.

2.1.3Bank and Banking

Banks are official financial institutions that have a license from the relevant authorities to raise funds from the public. In simple terms, a bank can be defined as a financial institution whose main activity is to collect funds from the public and channel

these funds back to the public and provide other bank services (Kasmir, 2014). Funds that have been collected from the community will be channeled back in the form of financial products such as credit or loans to the community so that the existing funds can be more productive and can drive the economy. In addition to collecting and channeling funds back, currently banks also provide other financial products such as investment management, foreign currency exchange, and various payment services.

2.1.4Financial Statement Analysis

Financial Statement Analysis is the use of analytical tools and techniques to produce estimates and conclusions that are useful in business analysis from general purpose financial reports and any other related data (Subramanyam, 2013). Financial statement analysis reduces the uncertainty of business analysis by reducing reliance on hunches, guesses, and intuition in decision-making. Financial statement analysis consists of reviewing or studying the relationships or trends to determine the financial position and operations as well as the development of the business concerned (Munawir, 2014). With this financial statement analysis, it is hoped that useful information can be generated for interested parties.

2.1.5 Financial Ratio

Financial ratio financial analysis tool mainly used by a company to assess their overall financial performance based on the comparison of financial data contained in financial statement items such as balance sheets, profit / loss statements, cash flow reports. Financial ratios analyze the company's financial condition in a certain period to see how the company is performing. The ratio describes a relationship or balance that occurs between a certain amount and another.

2.1.6 Capital Adequacy Ratio

Capital Adequacy Ratio is the ratio of capital adequacy which is useful for accommodating the risk of loss that may be faced by a bank. The capital adequacy ratio is used to safeguard depositors and foster stability and performance in financial markets all over the world, also known as the CRAR (Capital to Risk-Weighted Adequacy Ratio). There are two types of capital being measured: level-1 capital, which can absorb losses without needing the bank to stop trading, and tier-2 capital, which can absorb losses in the event of a close thus providing a lower level of protection to depositors.

The capital adequacy ratio guarantees the reliability and integrity of the financial structure of a nation by reducing the possibility of bankruptcy. Banks that have high capital adequacy levels are often seen as stable and have a tendency to meet their financial commitments. The closure process prioritizes savers' savings above banking capital and allows savers to lose their deposited funds only if the bank reports a loss over and above the money it holds. The higher the capital suitability ratio of the bank, the higher the degree of asset security for depositors.

2.1.7Return on Assets

Return on Assets is a type of profitability ratio that is able to assess a company's ability to earn profits from the assets used. Return on Assets will assess the company's ability based on past profit income so that it can be used in the next or next period. In this case, assets are all company assets obtained from own capital or capital from outside parties that have been converted by the company into various company assets so that the company can survive.

2.1.8 Capital Structure

Capital structure is a balance or comparison between debt and owner's equity. Debt from external party, in this case, is both long-term and short-term debt. Meanwhile, owner's capital or equity itself is divided into retained earnings and company ownership. The optimum capital structure is a type of capital structure that improve and astonish the risk-return balance in order to increase the share price. Thus, it is important to remember the various variables which affect a company's capital structure. The capital structure is an important issue for firms, since the positive or poor structure of the capital structure directly affects the financial situation of the firm, particularly when the company will suffer from very large debts.

2.1.9Non-Performing Loan

NPL (Non-Performing Loan) is one indicator of the health of a bank's assets. Non-Performing Loan can be interpreted as a condition where the debtor cannot pay his obligations to the bank in paying the installments that have been promised at the beginning. These indicators can be in the form of basic financial ratios that are able to provide assessment information on the condition of capital, profitability, credit risk, market risk, and liquidity. NPL is an indication of a problem within the bank, which if not addressed immediately, will have a negative impact on the bank itself.

To determine a non-performing loan, banks in Indonesia are complying to OJK rules concerning Asset Quality Assessment of Commercial Banks. Banks are required to apply collectability for all debtor or user of credit facilities following the lowest collectability. Credit Collectability is a classification of credit quality status based on business prospect assessment factors, debtor performance and ability to pay their principal, interest and other costs. A credit collectability level that is above level 3 (three) are considered as Non-Performing Loan which are determined in the table below:

Table 2. 1 Credit Collectability Status

Age of Account	Collectability	Status						
(Days)	Level							
0	1	Current						
1-90	2	Special Mention						
91-120	3	Substandard						
121-180	4	Doubtful						
>180	5	Loss						

Source: Prepared by Writer (2021)

According to Bank Indonesia Regulation No. 6/10/PBI/2004 dated April 2004 regarding the Rating System for Commercial Bank Soundness, stipulates that the ratio of non-performing loans (NPL) is 5%. The higher the NPL value (above 5%), the bank can be said to be unhealthy. Because a high NPL will cause a decrease in profits to be received by the bank.

2.2 Hypothesis Development

2.2.1 Capital Adequacy Ratio on Firm Value

Capital Adequacy Ratio is the ratio of capital adequacy which is useful for accommodating the risk of loss that may be faced by a bank. The Capital Adequacy Ratio shows the extent to which a bank is exposed to risks (credit, statements, securities, claims)

which are also financed by public funds as higher figures in a bank's capital adequacy ratio will created the better bank's soundness level. As a result, banks will be prepared more to embrace losses due to risk, such as credit, bills, etc. According to the research conducted by (Halimah & Komariah, 2017), there is a significant effect of Capital Adequacy Ratio on Firm Value.

H₁ = Capital Adequacy Ratio has a significant effect on Firm Value

2.2.2 Capital Structure on Firm Value

Capital structure refers to the amount of debt and / or equity used by a company to fund its operations and finance its assets. The capital structure of a company is usually expressed as the ratio of debt to equity. Overall, the balanced figure of capital structure will affect positively into the company. Especially for bank, higher debt means better financial performance for bank as they are bringing more money inside the company. Furthermore, higher debt and equity of a banks will determine the number of trusts that is received by the banks.

 H_2 = Capital Structure has a significant effect on Firm Value.

2.2.3 Return on Assets on Firm Value

Return on Assets may characterize the willingness of the organization to benefit from its investments. A high percentage ratio shows that the corporation can effectively control its properties. The greater the return on investment, the greater the net return provided by any rupiah of funds incorporated into total assets. By learning Return on Assets, we will evaluate whether it has used its properties efficiently to produce benefit in operational activities.

 H_3 = Return on Assets has a significant effect on Firm Value.

2.2.4 Non-Performing Loan to Firm Value

Non-Performing Loan shows the level of bad loans faced by banking companies in channeling credit to the public. The higher the NPL ratio means the higher the level of failure to fulfill obligations by debtors. This can cause losses that will be borne by the company and will later affect the value of the company. Signaling theory states that company information is a signal that describes the company's condition. The credit risk faced by banks can be used as a negative signal by investors in viewing the company's performance which has an impact on investors' assessment of the company's prospects. So, the hypothesis can be formulated as follows:

H₄: Non-Performing Loan has a significant effect on Firm Value.

2.2.5 Capital Adequacy Ratio, Capital Structure, Return on Assets, and Non-Performing Loan to Firm Value

 H_5 = Capital Adequacy Ratio, Capital Structure, Return on Assets, and Non-Performing Loan have a simultaneous effect towards Firm Value of banking company listed in Indonesia Stock Exchange.

Research Model

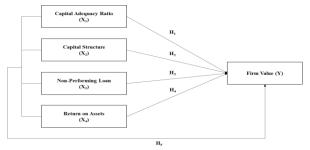


Figure 2. 1 Research Model Source: Prepared by Writer (2021)

3. RESEARCH METHOD 3.1 Research Design

This research is designed using the quantitative analysis research. These techniques are the kind of research used in this research. Quantitative analysis is a kind of research using an inductive method in principle. This method starts from a theoretical basis, expert theories and researchers' knowledge, and is then developed into questions and solutions which are suggested in the form of support for scientific evidence in the field to achieve a rationale or evaluation. In order to assess preset assumptions, quantitative research methods may also be construed as positives dependent research approaches, which were used for researching such groups or samples, selection of research tools, examination of quantitative / statistical results. The approach is referred to as the positive method because it is founded on positive theory. This is a scientific approach because it complies with specific, practical, imperceptible, observable, logical and systemic scientific concepts. The quantitative approach is known because the results in the study are numbers and estimates are used in the analysis.

3.2 Population and Sample

Population is the whole, totality or generalization of units, individuals, objects or subjects that have certain quantities and characteristics to be studied, which can be people, objects, institutions, events, etc. in which it can be obtained or can provide information (data) research which can then be drawn conclusions.

Samples are part of the number and characteristics possessed by the population, or a small part of the population members taken according to certain procedures so that they can represent the population (Siyoto & Sodik, 2015). Samples can be illustrated as a small part of the population members taken according to certain procedures that can represent the population.

The population of this research is banking companies that are listed in Indonesia Stock Exchange for the period of 2017-2020 which amounts to 46 companies as of 2021. This research uses purposive sampling technique by which the sampling process is run with the goals of the research as the focus, then analysis unit are picked with regard to criteria will allow the researcher questions to be answered (Bell, Bryman, & Harley, 2019). The criteria for selected sample companies for this research are as follows:

- 1. Companies that are listed in IDX under banking industry sector for the year 2017-2020.
- 2. Banking Companies that are listed in IDX before year 2017.

- 3. Banking companies that have published complete and audited financial statement for the year 2017-2020.
- 4. Banking companies did not suffer any losses under the net profit after tax for the year 2017-2020.

Based on criteria listed above, there are 27 companies that are eligible to become the sample companies. Total sample is then multiplied with the 4 periods starting from 2017-2020, which resulting in total of 108 audited annual reports of the banking companies.

Table 3. 1 Sample of the Research

No	Criteria	Companies
1.	Listed Banking Companies in IDX	47
2.	Banking Companies that are listed in IDX after 2017	(6)
3.	Banking companies that suffer losses under the net	(14)
	profit after tax for the year 2017-2020.	
-	Total Number of Companies Eligible as sample	27
	4	
	Number of Sample	108

Source: Prepared by Writer (2021)

3.3 Data Collection Method

Secondary data is used in this research. It is collected from the existing source. Secondary data collection essentially means that the data have been gathered and compiled by someone else using evidence normally found in quantitative science. Sources from local and foreign references founded through the internet searching from the respective or related official website of specific company.

3.4 Operational Variable Determination and Variable Measurement 3.4.1 Firm Value (Y)

Every company that runs a business must have different values. Company value is a score owned by a company that either gets local or foreign capital. This score is obtained based on several important points that have built the company from its inception until now. Price to Book Value or the book value of a company describes how much the market appreciates the book value of a company's shares. The company's book value is measured using ordinary equity divided by the number of shares outstanding. Price to book value also shows how far a company is able to create company value relative to the amount of capital invested. This study also examines the Debt-to-Equity Ratio which is measured using Total Debt divided by Equity as an assessment of how much the company's capital is funded by debt, so this study uses PBV because it measures the amount of capital or equity invested.

 $= \frac{Price\ to\ Book\ Ratio}{Book\ Value}$

3.4.2 Capital Adequacy Ratio (X₁)

Capital Adequacy Ratio is the ratio of the bank's capital adequacy or the ability of banks in existing capital to cover possible losses in credit or trading. Capital adequacy is an important factor for banks in the context of business development and mitigating risk of loss. Bank Indonesia determines capital CAR (Capital Adequacy Ratio), which is the

minimum capital requirement that every bank must always maintain as a certain proportion of total Risk Weighted Assets (RWA).

ets (RWA).
$$CAR = \frac{Tier\ 1\ Capital + Tier\ 2\ Capital}{Risk\ Weighted\ Assets}$$

Where:

Tier 1 Capital

= Book Value of Share + Retained Earnings
Tier 2 Capital

= Loan - Loss Reserves + Subordinated Debt

3.4.3 Capital Structure (X₂)

The capital structure is a structural measure for the execution of corporate business between short-term debt, long-term debt and equity. Capital structure can be a major issue for an enterprise, as it significantly affects the financial condition of the business that has experienced serious damage, positive or poor capital structure. The composition of the capital regulates the business balance. Financial Ratios that is most related to capital structure was Debt-to-Equity Ratio (DER).

$$DER = \frac{Total\ Debt}{Total\ Shareholders' Equity}$$

3.4.4 Non-Performing Loan (X₃)

Non-performing loan (NPL) is an indicator in which the borrower defaults due to not making scheduled payments for a certain period of time. NPLs are also referred to as non-performing loans. BI (Bank Indonesia) Regulation Number 6/10/PBI/2004 dated April 12, 2004 concerning the Rating System for Commercial Banks, the higher the Non-Performing Loan (NPL) value exceeds 5%, the bank is not healthy. If the ratio of Non-Performing Loans is below 5%, the potential profits will be even greater.

$$Non-Performing\ Loan\ Ratio\\ = \frac{Non-Performing\ Loans}{Total\ Loans}$$

3.4.5 Return on Assets (X₄)

Return on Assets (ROA) is a ratio which measures the ability of an organization to produce income from the use of its capital or its properties. As a profitability ratio, Return on Assets is used to evaluate a company's efficiency and efficiency to generate net revenues through the use of its inventory. Return on Assets can also be interpreted as a ratio used to calculate a company's productivity in sales generation or benefit from its balance sheet economic capital or equipment. Simpler, a comparison of net profits after taxes and the total assets held by one entity will describe Return on Assets.

$$ROA = \frac{Total\ Profit\ After\ Tax}{Total\ Assets}$$

3.5 Data Analysis Method

The research variable data was processed using the Software Statistical Product and Service Solution (SPSS) version 26. The analytical methods used included descriptive statistical analysis, classical assumption test, multiple linear regression analysis, and hypothesis testing.

4. RESULT AND DISCUSSION

4.1 Data Analysis

4.1.1 Descriptive Statistics

Following shows the descriptive statistics of the research:

Table 4. 1 Descriptive Statistics

Descriptive Statistics							
N Minimum Maximum Mean Std. Deviation							
CAR	108	12.67	66.43	23.4102	7.87417		
DER	108	159.37	1707.14	577.8584	245.50092		
NPL	108	.00	4.86	1.3605	.89492		
ROA	108	.02	3.13	1.1999	.78515		
PBV	108	.26	5.15	1.5585	1.00536		
Valid N (listwise)	108						

Source: Data Processing – SPSS 26 (2021)

4.1.2 Result of Classical Assumption Test

4.1.2.1 Normality Test

Normality test is carried out with the aim of assessing the distribution of data in a group of data or variables, whether the distribution of the data is normally distributed or not.

Table 4.2 One Sample K-S

IUNIC	one sumple in						
One-Samp	One-Sample Kolmogorov-Smirnov Test						
		Unstandardized					
		Residual					
N		62					
Normal Parameters ^{a,b}	Mean	.0000000					
	Std. Deviation	.39152887					
Most Extreme	Absolute	.061					
Differences	Positive	.053					
	Negative	061					
Test Statistic		.061					
Asymp. Sig. (2-tailed)		.200 ^{c,d}					
a. Test distribution is Nor	mal.						
b. Calculated from data.							
c. Lilliefors Significance Correction.							
d. This is a lower bound of	of the true significance.						
Source: Data Processing -	SPSS 26 (2021)						

Source: Data Processing – SPSS 26 (2021)

The results of the normality test using the Kolmogorov-Smirnov test in the "Asymp. Sig. (2-tailed)" reached 0.200. With the achievement of a significant value that exceeds 0.05, then the data has been normally distributed.

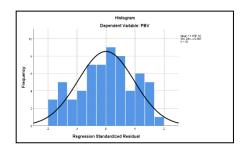


Figure 4. 1 Normality Test (Histogram)

Source: Data Processing – SPSS 26 (2021)

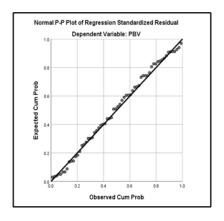


Figure 4. 2 Normality Test (P-Plot)

Source: Data Processing – SPSS 26 (2021)

The histogram above shows a bell-shaped pattern which indicates that the data is normally distributed and does not produce a pattern that tends to be on the left (positive skewness) or right (negative skewness). Furthermore, the P-Plot indicates that the data is also normally distributed like a straight-line pattern.

4.1.2.2 Heteroscedasticity Test

Heteroscedasticity test assesses whether there is an inequality of variance from the residuals for all observations in the linear regression model.

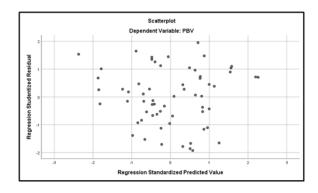


Figure 4. 3 Heteroscedasticity Test (Scatterplot)

Source: Data Processing – SPSS 26 (2021)

The scatterplot test above shows that the sample is scattered and does not form a pattern which indicates that the processed data is good data.

Table 4. 2 Heteroscedasticity Test (Glejser Test Method)

	Coefficients ^a							
		Unstandardized Coefficients		Standardized Coefficients				
Mo	odel	В	Std. Error	Beta	t	Sig.		
1	(Constant)	158	.384		412	.682		
	CAR	.007	.010	.110	.646	.521		
	DER	.001	.000	.227	1.388	.171		
	NPL	.098	.050	.273	1.958	.055		
	ROA	023	.044	070	526	.601		
a.]	Dependent Vai	riable: ABS	RES2					

Source: Data Processing – SPSS 26 (2021)

Based on the results of the heteroscedasticity test using the Glejser method, the significant level of all independent variables is at 0.05 which indicates that the processed data does not experience symptoms of heteroscedasticity. The significant level obtained from the Capital Structure (CAR) is 0.521, the Debt-Equity Ratio is 0.171, followed by Non-Performing Loans at 0.55, and Profitability (Return on Assets) at 0.601.

4.1.2.3 Multicollinearity Test

Multicollinearity test ensures whether in a regression model there is intercorrelation or collinearity between independent variables. The presence or absence of multicollinearity in the data was tested using the Tolerance Value and Variance Inflation Factor (VIF). Below is a table that shows the results of Tolerance and VIF.

Table 4. 3 Colinearity Statistic Testing

Coefficients ^a				
Collinearity Statistics				
Model		Tolerance	VIF	
1	CAR	.533	1.874	
	DER	.583	1.714	

	NPL	.798	1.254
·	ROA	.870	1.149
a. De	ependent	Variable: ABS	_RES2

Source: Data Processing – SPSS 26 (2021)

The four independent variables in the table above have been freed from the multicollinearity test by meeting the criteria for a tolerance value above 0.1 followed by a VIF value below 10.

4.1.2.4 Autocorrelation Test

The autocorrelation test is to see if there is a correlation between a period and the previous period. Run Test is used to test whether the processed data is free from autocorrelation.

Table 4. 4 Autocorrelation Test (Runs Test)

Runs Test				
	Unstandardized Residual			
Test Value ^a	.01818			
Cases < Test Value	31			
Cases >= Test Value	31			
Total Cases	62			
Number of Runs	29			
Z	768			
Asymp. Sig. (2-tailed)	.442			
a. M	[edian			

Source: Data Processing – SPSS 26 (2021)

The table above shows the Asymp. value Sig. (2-tailed) is greater than 0.05 (0.442>0.05) which indicates that the data is free from autocorrelation symptoms. The autocorrelation test was continued with the Durbin-Watson test.

Table 4. 5 Autocorrelation Test (Durbin-Watson)

Model Summary ^b							
Model	R	R	Adjusted	Std. Error of the	Durbin-Watson		
		Square	R Square	Estimate			
1	.648a	.420	.379	.40503	1.992		
	a. Predictors: (Constant), ROA, DER, NPL, CAR						
,	b. Dependent Variable: PBV						

Source: Data Processing – SPSS 26 (2021)

4.1.3 Result of Hypothesis Testing

4.1.3.1 Multiple Linear Regression Analysis

Multiple Linear Regression Analysis is used to measure the effect between more than one independent variable to the dependent variable.

Table 4. 6 Multiple Linear Regression Analysis

	Coefficients ^a							
Unstandardized Standardized								
		Coefficients		Coefficients				
Model		В	Std. Error	Beta	t	Sig.		
1	(Constant)	-2.203	.735		-2.999	.004		
	CAR	.020	.020	.141	1.018	.313		

DER	.002	.001	.297	2.247	.029		
NPL	.355	.096	.419	3.713	.000		
ROA	.436	.084	.561	5.186	.000		
a. Dependent Variable: PBV							

Source: Data Processing – SPSS 26 (2021)

By positioning Y as Firm Value, Capital Adequacy Ratio on X_1 , Capital Structure on X_2 , Non-Performing Loan on X_3 , and Profitability on X_4 , the results of the multiple linear regression test are obtained with the following equation:

$$Y = -2.203 + 0.02X_1 + 0.002X_2 + 0.355X_3 + 0.436X_4 + e$$

4.1.3.2 Partial T-Test

In testing the hypothesis with the Partial T-Test, there are two references that can be used as a basis for making decisions, first by looking at the significance value (Sig), and secondly comparing the t-count value with the t-table.

With 95% CI (Confidence Level) and 57 df (degree of freedom) obtained from the number of samples 61 minus the total variable 4 minus 1, the result of the t-table acquisition is 2.0025. Therefore, the results of the hypothesis testing of the four independent variables using the Partial T-Test can be interpreted as follows:

- 1. H_1 : Based on the table listed above, it can be seen that the significance value of the Capital Adequacy Ratio (X_1) is 0.313. Because the significance value is greater than 0.05 (0.395 > 0.05), it can be concluded that H_1 or the first hypothesis is rejected, which can be interpreted as an insignificant effect between Capital Adequacy Ratio (X_1) on Firm Value (Y).
- 2. H₂: Based on the table listed above, it can be seen that the significance value of the Capital Structure (X_2) is 0.029. Because the significance value is less than 0.05 (0.029 < 0.05), it can be concluded that H₂ or the second hypothesis is accepted, which can be interpreted as a significant influence between Capital Structure (X_2) on Firm Value (Y).
- 3. H_3 : Based on the table listed above, it can be seen that the significance value of the Non-Performing Loan (X_3) is 0.000467. Because the significance value is less than 0.05 (0.000467 < 0.05), it can be concluded that H_3 or the third hypothesis is accepted, which can be interpreted as a significant influence between Non-Performing Loans (X_3) on Firm Value (Y).
- 4. H₄: Based on the table listed above, it can be seen that the significance value of Profitability (X_4) is 0.000003. Because the significance value is smaller than 0.05 (0.000003 < 0.05), it can be concluded that H₄ or the fourth hypothesis is accepted, which can be interpreted as having a significant effect between Profitability (X_4) on Firm Value (Y).

4.1.3.3 Simultaneous F-Test

Simultaneous F Test or ANOVA Test looks at how the influence of all the independent variables together (simultaneously) on the dependent variable. In this study, the F test is useful for testing whether there is a significant effect on the fifth hypothesis (H_5) which unites all independent variables (X) to look for their effect on the dependent variable (Y).

H₅: Capital Adequacy Ratio, Capital Structure, Non-Performing Loan, and Return on Assets has a significant impact towards Firm Value of Banking Companies listed in Indonesian Stock Exchange (IDX).

Table 4. 7
Analysis of Variance (ANOVA) Table

ANOVA ^a									
Model		Sum of	df	Mean	F	Sig.			
		Squares		Square					
1	Regression	6.774	4	1.693	10.322	.000b			
	Residual	9.351	57	.164					
	Total	16.125	61						
a.]	Dependent Varia	able: PBV							
b.]	Predictors: (Con	stant), ROA, l	DER, NI	PL, CAR					

Source: Data Processing – SPSS 26 (2021)

With 95% CI (Confidence Level), and df (degree of freedom) for the numerator is 4 which is obtained from the number of variables, and the df for the denominator is 58 which is obtained from the number of samples 62 minus the total variable 4, then the result of obtaining f-table is 2.53. Based on the ANOVA output table listed above, it can be seen that the simultaneous significance value is 0.000002. Because the significance value is smaller than 0.05 (0.000002 < 0.05), it can be concluded that H_5 or the fifth hypothesis is accepted. Based on the table listed above, it is known that the f-count of the ANOVA output is 10,322. The nominal is greater than 2.53 which is the f-table of the processed data. Because the f-count value is 10.322 > f-table 2.53, it can be concluded that H_5 or the fifth hypothesis is also accepted, which can be interpreted as a simultaneous significant influence between Capital Adequacy Ratio (X1), Capital Structure (X2), Non-Performing Loan (X3), and Profitability (X4) to Firm Value (Y).

4.1.3.4 Coefficient of Determination (R² Test)

The value of the coefficient of determination or R Square (R^2) predicts and sees how big the contribution of the influence given by variable X simultaneously (together) to variable Y.

Table 4. 8 Coefficient of Determination Test

Model Summary ^b										
			Adjusted R	Std. Error of	Durbin-					
Model	R	R Square	Square	the Estimate	Watson					
1	.648a	.420	.379	.40503	1.992					
a. Predictors: (Constant), ROA, DER, NPL, CAR										
b. Dependent Variable: PBV										

Source: Data Processing – SPSS 26 (2021)

Based on the SPSS "Model Summary" output table above, it is known that the coefficient of determination or R Square is 0.42. The R Square value of 0.379 is derived from the adjusted R square value obtained in the table above.

The magnitude of the coefficient of determination of 0.379 means that the Capital Adequacy Ratio (X_1) , Capital Structure (X_2) , Non-Performing Loan (X_3) , and Profitability (X_4) simultaneously (together) affect the Firm Value (Y) by 37.9%. While the remaining 62.1% (100% - 37.9% = 62.1%) is influenced by other variables outside this regression equation or is influenced by variables not examined.

4.2 Discussion

4.2.1 The Impact of Capital Adequacy Ratio towards Firm Value

The regression coefficient for the Capital Adequacy Ratio (CAR) variable is 0.02 and is positive, this explains that each change of one percent in CAR while the Debt-to-Equity Ratio, Non-Performing Loan (NPL), and Return on Assets (ROA) are assumed constant, then the value of the company will experience an increase of 0.02. For the CAR variable, the t-Count number is 1.018 which is smaller than the t-Table of 2.0025 at = 0.05 and the significance level is greater than 0.05, which is 0.313, thus H1 is rejected, meaning that there is a positive and has an insignificant effect of the variable. CAR to Firm Value.

The results of this study are in line with research conducted by Halimah and Komariah (2017) in the previous research section, the Capital Adequacy Ratio showed a significant impact, as well as positive results, this result are also proven by another research which is conducted by Murni and Sabijono (2018). Their research stated that the Capital Adequacy Ratio had positive and significant results, thus creating a significant effect to the value of the company.

Capital Adequacy Ratio (CAR) has a positive effect on firm value, meaning that an increase in Capital Adequacy Ratio will be followed by an increase in firm value, on the other hand, a decrease in Capital Adequacy Ratio will be followed by a decrease in firm value, this is in line with the test results which show that Capital Adequacy Ratio has a positive effect on firm value. The results of this study are in accordance with previous estimates that if the Capital Adequacy Ratio increases, then the value of the company also increases, this condition illustrates that the increase in Capital Adequacy Ratio has an impact on the increase in the value of the company.

This Capital Adequacy Ratio value is obtained from bank capital compared to Risk-Weighted Assets. Risk-Weighted Assets is credit given to the public by the bank (Dendawijaya, 2005). So, the bigger the Risk-Weighted Assets, the lower the Capital Adequacy Ratio value and vice versa, the smaller the Risk-Weighted Assets, the higher the Capital Adequacy Ratio value. On the other hand, credit given to the public can open up opportunities for banks to earn income from the interest on loans. If it is seen that the Capital Adequacy Ratio does not affect the firm value, it is probably because the banks operating in that year were very careful about the amount of capital they had or owned. This is due to Bank Indonesia regulations that require a minimum Capital Adequacy Ratio of 8%, resulting in banks always trying to keep their Capital to adequate in accordance with the provisions.

4.2.2 The Impact of Capital Structure towards Firm Value

The regression coefficient for the Capital Structure variable is 0.002 and is positive, this explains that every one percent change in the Capital Structure is measured using the Debt-Equity Ratio while the Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), and Return on Assets (ROA) is assumed to be constant, then the value of the company will experience an increase of 0.002. For the Capital Structure variable, the t-count is 2.247 which is greater than the t-Table of 2.0025 at = 0.05 and the significance level is less than 0.05, which is 0.029, thus H_2 is accepted which indicates a positive and significant effect. from the Capital Structure variable to Firm Value.

The results of this study are in line with research conducted by Murni and Sabijono (2018) which states that Capital Structure has a positive correlation and a significant effect

on firm value. However, the research conducted by Irdavani (2015) showed different results with Capital Structure showing negative and has insignificant results.

An effective capital structure policy can lower the cost of capital issued by the company so that the company's profits involving debt, namely the interest paid can be deducted for tax purposes (source). With a better capital structure complemented by adequate capital structure planning and management, the company is expected to increase the value of the company in order to improve the company's prospects in the future. The existence of a positive influence between the capital structure variable and firm value is in accordance with the signaling theory which states that an increase in the amount of debt in the capital structure of a company indicates that the company is confident in the company's prospects and the level of company profitability in the future so that companies do not need to worry about paying debts. and the flowers.

Company management can take advantage of more debt, which acts as a more reliable positive signal. This is because banking companies that increase debt can be seen as companies that are confident and optimistic about the company's prospects in the future, both in the medium and long term. With an adequate capital structure and equipped with positive signals, prospective investors are expected to use these signals as a means to indicate that the company has a firm value that will continue to increase in the future. The value of the company calculated through PBV in this study will potentially increase which can also be marked by an increase in market capitalization. The more investors who pour their funds into the company will bring bright prospects for the company.

4.2.3 The Impact of Non-Performing Loan towards Firm Value

The regression coefficient for the Non-Performing Loan variable is 0.355 and has a positive sign, this explains that every one percent change in the Capital Structure is measured using the Debt-Equity Ratio while the Capital Adequacy Ratio (CAR), Capital Structure, and Return on Assets (ROA) is assumed to be constant, then the value of the company will experience an increase of 0.355. For the Non-Performing Loan variable, the t-count is 3.713 which is greater than the t-Table of 2.0025 at = 0.05 and the significance level is less than 0.05, which is 0.000467, thus H_3 is accepted which indicates a positive influence, and the significance of the Non-Performing Loan variable on Firm Value.

The results of this study are in line with research conducted by Irdavani (2015), Murni and Sabijono (2018) which states that Non-Performing Loans have a positive correlation and significant effect on firm value. However, research conducted by Halimah and Komariah (2017) showed different results from Capital Structure showing negative and significant results.

The NPL variable has a positive correlation with firm value. A positive correlation between variables indicates that an increase in Non-Performing Loans will be followed by an increase in firm value, whereas a decrease in Non-Performing Loans will be followed by a decrease in firm value. The test results show that Non-Performing Loan has a positive effect on firm value. The results of this study are not in accordance with previous estimates which explain that if there is an increase in the NPL, it will be followed by a decrease in the value of the company.

From the results of the statistical description, it shows that during the period from 2017 to 2020, the level of Non-Performing Loans of banking companies is still relatively low, which is below 5%. Banking companies always keep the amount of Non-Performing Loans below 5%, this is also the reason why in this study Non-Performing Loans have a significant effect on firm value. The high value of Non-Performing Loans will result in poor

credit quality. Poor credit quality will then have the potential to hinder the increase in company value and increase risk. Lending is carried out without using prudential principles such as the principle of 5C lending and expansion in lending that is less controlled so that banks will bear greater risks as well. The risk is in the form of difficulty in repaying credit by debtors which if the amount is large enough it can affect the value of the company and overall banking performance.

4.2.4 The Impact of Return on Assets towards Firm Value

The regression coefficient for the Return on Assets variable is 0.436 and is positive, this explains that every one percent change in the Capital Structure is measured using the Debt-Equity Ratio while the Capital Adequacy Ratio (CAR), Capital Structure, and Return on Assets (ROA) is assumed to be constant, then the value of the company will experience an increase of 0.436. For the Non-Performing Loan variable, the t-count is 5.186 which is greater than the t-Table of 2.0025 at = 0.05 and the significance level is less than 0.05, which is 0.000003, thus H₃ is accepted which indicates a positive influence. and the significance of the Non-Performing Loan variable on Firm Value. The results of research conducted on Return on Assets on firm value are in line with research conducted by Halimah and Komariah (2017) which states that Return on Assets has a positive correlation and significant effect on firm value.

Financial performance as measured by Return on Assets in this study has a positive and significant effect on the value of the company where Return on Assets measures the effectiveness of the company in generating profits by utilizing assets or assets owned. The positive correlation shown between Return on Assets and firm value indicates that the higher the company's ability to generate profits, the higher the firm value. The higher the company's ability to generate profits by utilizing the available resources indicates the success of the company's management in carrying out operational activities.

This is also in line with signaling theory where an increasing ratio of Return on Assets will produce a positive signal to investors because with a high percentage of returns, investors assume that companies that have large profits will produce large returns as well. Thus, a high level of corporate profitability can increase investor confidence and expectations of the company.

4.2.5 The Impact of Capital Adequacy Ratio, Capital Structure, Non-Performing Loan, and Return on Assets towards Firm Value

Overall, the four independent variables discussed, namely the Capital Adequacy Ratio, Capital Structure, Non-Performing Loan, and Return on Assets, have a significant impact on the value of banking companies listed on the Indonesia Stock Exchange in 2017-2020. Nevertheless, individually or partially, Capital Structure, Non-Performing Loan, and Return on Assets have a positive and significant impact on firm value and the Capital Adequacy Ratio has a positive but insignificant impact on firm value.

The results of this study have a significant impact on the basis of the findings of the Simultaneous F-Test which has a significance value of less than 0.05 (0.000002), and the f-count of the ANOVA output which is greater than 2.53 is 10.322. In addition, the four variables simultaneously have an Adjusted R-Square value of 0.379, which means that the four variables studied have a percentage of 37.9% which have an effect on firm value.

5. CONCLUSION

Overall, research that discusses the impact of Capital Adequacy Ratio, Capital Structure, Non-Performing Loan, and Return on Assets on Firm Value in banking companies listed on the Indonesian Stock Exchange in 2017-2020 can be concluded:

- a. The Capital Adequacy Ratio has insignificant impact on the Firm Value of banking companies listed on the Indonesian Stock Exchange from 2017 to 2020.
- b. Capital Structure as measured using the Debt-to-Equity Ratio (DER) has a significant impact on the Firm Value of banking companies listed on the Indonesian Stock Exchange in 2017 to 2020.
- c. Non-Performing Loans as measured by using have a significant impact on the Firm Value of banking companies listed on the Indonesian Stock Exchange in 2017 to 2020.
- d. Return on Assets which is measured by using has a significant impact on the Firm Value of banking companies listed on the Indonesian Stock Exchange in 2017 to 2020.
- e. The four variables: Capital Adequacy Ratio, Capital Structure, Non-Performing Loan, and Return on Assets simultaneously have a significant effect on the Firm Value of banking companies listed on the Indonesian Stock Exchange from 2017 to 2020.

All of the variables studied are having a relationship with signaling theory which makes this variable as information that can give a signal to investors about their decision to add funds or start investing in the company. Based on the results of the study, the relationship between signaling theory and the company's financial performance, such as the Capital Adequacy Ratio, Capital Structure, Non-Performing Loans, Return on Assets, and other related variables is that disclosure of this information will provide a positive signal to the parties that are interested in investing in the company.

REFERENCES

- Bell, E., Bryman, A., & Harley, B. (2019). *Business Research Methods*. Oxford: Oxford University Press.
- Brigham, E. F., & Houston, J. F. (2015). Fundamentals of Financial Management. Cengage Learning.
- Dendawijaya, L. (2005). Manajemen Perbankan. Bogor: Ghalia Indonesia.
- Djarwanto. (1994). *Pokok-Pokok Metode Riset dan Bimbingan Teknis Penulisan*. Yogyakarta: Liberty.
- Ghozali, I. (2018). *Aplikasi Analisis Multivariate dengan Program SPSS 25.* Semarang: Badan Penerbit Universitas Diponegoro.
- Halimah, S. N., & Komariah, E. (2017). Pengaruh ROA, NPL, LDR, BOPO Terhadap Nilai Perusahaan Bank Umum. *Jurnal Akuntansi, Ekonomi dan Manajemen Bisnis*, 14-25.
- Ikatan Bankir Indonesia. (2017). *Memahami Bisnis Bank*. Indonesia: Gramedia Pustaka Utama.
- Irdavani, A. (2015, December). Pengaruh Struktur Modal Dan Non-Performing Loan (NPL) Terhadap Nilai Perusahaan Pada PT. Bank Rakyat Indonesia (Persero), Tbk Yang Terdaftar Di Bursa Efek Indonesia. *Jurnal Sultanist*, *III*(2), 1-8.

- 5th NCBMA (Universitas Pelita Harapan, Indonesia) "The Opportunity of Digital and Technology Disruption" 18 Mei 2022, Tangerang.
- Ismail. (2010). Manajemen Perbankan. Jakarta: Prendamedia Group.
- Kasmir. (2014). Bank Dan Lembaga Keuangan Lainnya. Medan: Raja Grafindo Persada.
- Kasmir. (2018). Analisis Laporan Keuangan (11th ed.). Indonesia: Raja Grafindo Persada.
- Munawir. (2014). Analisa Laporan Keuangan (4th ed.). Yogyakarta: Liberty.
- Murni, S., & Sabijono, H. (2018). Peran Kinerja Keuangan Dalam Menentuan Nilai Perusahaan. *Jurnal Manajemen Bisnis dan Inovasi*, 97-107.
- Prasetyo, A. H. (2011). Valuasi Perusahaan. Jakarta: Penerbit PPM.
- Putri, J. (2016). Pengaruh Struktur Modal Terhadap Nilai Perusahaan Perusahaan Manufaktur Go Publik. *JOM FISIP*, 1-12.
- Riyanto, B. (2008). Dasar Dasar Pembelanjaan Perusahaan. Yogyakarta: BPFE.
- Setiawan, Mai, M. U., & Galuh, N. R. (2020). Corporate Social Responsibility Dan Kinerja Perusahaan Pada Perusahaan Manufaktur Kriteria Syariah. *JEMASI: Jurnal Ekonomi Manajemen dan Akuntansi*, 16(2), 33-47.
- Siyoto, S., & Sodik, A. (2015). *Dasar Metodologi Penelitian*. Yogyakarta: Literasi Media Publishing.
- Subramanyam, K. R. (2013). *Financial Statement Analysis* (11th ed.). United States: McGraw-Hill Education.
- Suranto, V., Nangol, G., & Walandouw, S. (2017). Analisis Pengaruh Struktur Modal dan Kinerja Keuangan Terhadap Nilai Perusahaan Pada Perusahaan Bursa Efek Indonesia. *Jurnal EMBA*, 1031-1040.
- Triandaru, S., & Budisantoso, T. (2006). *Bank Dan Lembaga Keuangan Lain* (2nd ed.). Jakarta: Salemba Empat.
- Weston, J. F., & Copeland, T. E. (1992). *Managerial Finance*. Jakarta: Binarupa Aksara.
- Winarto, Y. (2020, August 17). *Peran perbankan sangat besar dalam menggerakkan ekonomi nasional*. Retrieved from kontan.co.id: https://keuangan.kontan.co.id/news/peran-perbankan-sangat-besar-dalam-menggerakkan-ekonomi-nasional