

# Bank Specific Factors and Dividend Policy on BUMN Bank in Indonesia

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## **ABSTRACT**

The purpose of this study is to determine whether factors such as Return on Assets (ROA), Loan to Deposit Ratio (LDR), Capital Adequacy Ratio (CAR), Non-Performing Loans (NPL), Debt Equity Ratio (DER), Growth of Third-Party Funds (PDPK), and Market to Book Value have a significant effect on dividend policy in state-owned or state-owned banks. This research is development research from previous research that examined 14 banks in Indonesia (Silalahi et al, 2021). The data analysis tool used is panel data regression. The results of this study indicate that the seven x variables affect dividend policy by 20.78%. Variables that have a significant effect on dividend policy are LDR/RR, CAR and MBV. The findings in this study are that banking, especially BUMN banking, has unique characteristics compared to other industries. Apart from the fact that banks have different cash flows from other industries, state-owned companies also have different dividend policies from non-government industries. Therefore, these factors do not have a significant influence on dividend policy in banking companies in BUMN.

Keywords: Dividend Policy, Bank BUMN, Specific Bank

#### 1. Introduction

The determination of dividend policy in each company is very important because it is related to the proportion of income distributed as dividends and the company's retained earnings for reinvestment, including the banking sector. In Indonesia, there are several banks that can be distinguished based on the type of ownership, namely: state-owned banks, national private-owned banks, cooperative-owned banks, foreign-owned banks and joint venture banks. Government-owned banks in Indonesia that have been designated as BUMN include Bank



Negara Indonesia (BNI), Bank Mandiri, Bank Rakyat Indonesia (BRI), Bank Savings State (BTN) and most recently Bank Syariah Indonesia (BSI). These five banks have an annual obligation to pay dividends to the Government of the Republic of Indonesia in accordance with the applicable Ministry Regulations, which is at least 25%. This regulation makes the government in 2020 in the distribution of dividends decided at the Annual General Meeting of Shareholders (AGM) which is distributed to reach Rp. 23.21 trillion and the state gets a dividend of Rp. 13.53 trillion of net profit in 2020.

In 2020, BRI's banking net profit was 18.65 T, Mandiri 17.11 T, BNI 2 T, and BTN 1.6 T, then distributed a dividend payout ratio (DPR) to the government and shareholders of BRI 65%, Mandiri 60%, BNI 25% and BTN 25%. Meanwhile, BSI has not yet distributed dividends because it was only officially established in 2021. Of course, in paying dividends, banks have made decisions regarding the percentage of dividends distributed to the government and shareholders.

The data above shows that state-owned banks pay dividends with a fairly high presentation, this is contrary to what was said by the Financial Services Authority (OJK) which stated "Banks are required to maintain adequate liquidity" (OJK Regulation Number 42/POJK. 03/2015 concerning Obligations to Fulfill Liquidity Adequacy Ratios for Commercial Banks). In order to create a sound banking system capable of developing and competing nationally and internationally, banks need to have sufficient liquidity to anticipate crisis conditions and in order to increase bank liquidity adequacy, it is necessary to increase high quality financial assets to anticipate net cash outflows. net cash outflow) in accordance with international standards. Fulfillment of liquidity adequacy using LCR (Liquidity Coverage Ratio). LCR is the ratio between High Quality Liquid Assets and the total net cash outflow for 30 days. The OJK regulations also emphasize that the fulfillment of the liquidity adequacy ratio for commercial banks is mandatory. Bank Indonesia even gave a warning to banks in Indonesia to prioritize the capital adequacy ratio. The distribution of dividends with a high ratio can reduce the bank's share of capital. Therefore, it is important for banks to regulate the dividend policy that will be taken because this will affect the distribution of dividends that will be received by the government as the largest shareholder of the BUMN banking in the object of this research as well as the shareholders.

Dividend policy is influenced by various factors. According to Janifairus (2013) and Yudhanto (2013) stated that Return on Assets (ROA) has a significant positive effect on the Dividend Payout Ratio (DPR) which is a dividend policy variable. While ROA is a profitability ratio used to measure the effectiveness of the company in generating profits by utilizing the assets of the company. The bigger this ratio, the better the company's performance, because the rate of return on investment is getting bigger. This means that if ROA increases, the DPR will also increase. On the other hand, if ROA decreases, the DPR will also decrease. According to Rasyid (2018), the Loan to Deposit Ratio (LDR) has a negative influence on the DPR. This influence is caused by the bank increasing its liquidity for business development, thereby reducing the amount paid as dividends to the bank's shareholders. So that the decrease in the DPR is caused by the increase in the LDR. In addition to the LDR, according to Rasyid (2018), the DPR is also influenced by the Capital Adequacy Ratio (CAR). According to him, CAR has a significant negative effect on the DPR. This means that the greater the CAR at the bank, it actually results in a decrease in the DPR. This is because the bank retains its capital for business development, thereby reducing the amount paid as dividends to the bank's shareholders. Because CAR is a variable that shows the extent to which the decline in bank assets can still be covered by available bank equity (Taswan,



2010). The higher the CAR, the more capital to cover the decline in assets. Furthermore, the factor that influences the dividend policy is credit risk in banks as seen from non-performing loans. According to Ahmad and Mugaddas (2016) found that credit risk has a negative effect on dividend policy. Because the higher the credit risk in a bank, the more capital is needed to overcome it, this causes a decrease in the level of dividends distributed. In addition to credit risk, debt risk to capital also affects dividend policy. Al-Twaijry (2007), Deshmukh et al. (2013) Strebulaev and Yang (2013) revealed that the debt policy factor using the debt equity ratio (DER) found that DER had a negative effect on dividend payment policy. So, the higher the debt used as a growing business in a company, the lower the dividend payment. Because the company will pay more interest than profits. In addition to DER, Third Party Funds (TPF) is also a factor that influences dividend policy. Because, to obtain funds from the wider community, banks can offer various types of deposits. According to Manos (2001) TPF has a negative effect on dividend policy because if the debt capital structure is greater than the capital, the dividends to be paid will be lower. Based on the description above, the authors are interested in conducting research using the independent variables Return on Assets (ROA), Loan to Deposit Ratio (LDR), Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), Debt Equity Ratio (DER), Growth of Third-Party Funds (PDPK), and Market to Book Value (MBV) using the dependent variable, namely dividend policy which has a Dividend Payot Ratio (DPR) with research conducted on four state-owned banks in Indonesia. This study was conducted with the aim of knowing whether these factors have a significant effect on dividend policy in state-owned or state-owned banks. This research is development research from previous research that examined 14 banks in Indonesia (Silalahi et al. 2021).

## 2. Literature Review

Brigham and Houston (2011: 211) stated that there are several theories regarding dividend policy. Dividend policy can be explained through the following theories:

- Dividend Irrelevance Theory
  - Miller and Modigliani (MM) argue that when a company has investment opportunities, dividend payments do not affect shareholders' wealth. MM make an important assumption that states that a company's investment policy is not related to its dividend policy. If a company has an investment-related policy, the dividend policy will only impact the size of external financing (in addition to retained earnings) needed to fund new investments and pay dividends.
- Bird In the Hand Theory
  - Gordon and Lintner argue that shareholders prefer the "bird in the hand" in the form of cash dividends over uncertain gains ("bird in the bush"), which are the positive difference in stock prices that result in capital gains. Increasing dividend payments when other factors are considered constant can increase the company's value. This is because the dividends provided now can reduce the cost of capital, thus increasing the company's value. So, a high dividend payout ratio will maximize the company's value.
- Tax Differential Theory
  - Lizenberger and Ramaswamy (1979), who argue that the appropriate income for shareholders is income after taxes, so the expected profits are also after taxes. This theory reveals that shareholders prefer high capital gains over high dividends. Shareholders expect



the company to retain post-tax earnings and use them to finance more profitable investments rather than making dividend payments.

# Signalling Theory

This theory suggests that dividend payments can send positive signals to the market about good performance, while a decrease in dividends indicates poor company performance. This theory can answer the question of why companies pay dividends that are adjusted to net income. Changes in dividend payments contain information that can change shareholders' perceptions of the company's future prospects, affecting stock price adjustments when dividend changes are announced. However, increasing dividends can also be a negative signal to investors. Companies that increase dividend payments may be perceived as having poor future prospects. This can happen because companies typically pay high dividends when investment needs are low or even zero. Companies with low investment levels may be seen by some shareholders as an inability to grow the business and a lack of prospective future investments.

## • Clientele Effect

This theory explains the conditions within a company where there are multiple groups of shareholders with various interests that lead to conflicts. These conflicts arise as a result of shareholders who prefer to receive current income in the form of dividends and shareholders who prefer reinvestment due to high taxation. When a company decides to retain post-tax earnings, shareholders who favor dividend payments will be disappointed. Meanwhile, shareholders who choose reinvestment want the company to pay low dividends because large dividend payments result in higher taxes paid.

## 2.1 Dividend Policy (Dividend Payout Ratio)

dividend payout ratio measurement of the dividend policy. The ratio between the company's net profit and the dividends paid out is known as the dividend payout ratio. While a larger dividend payment ratio will be good for investors, it won't help the company because it would inevitably damage its finances. The dividend payout ratio, according to Stice et al. (2005), compares payouts to net income. Dividends are the main goal of investors in investing in shares, if the number of dividends is not as expected by investors, investors are more likely not to buy shares or sell shares if they already have them.

# 2.2 Profitability (Return on Assets)

Return on Assets is the level of net profit achieved by the company in carrying out its operational activities, therefore dividends will be distributed if the company makes a profit. The greater the profit earned, the greater the company's ability to pay dividends (Al Najjar, 2012). The residual theory states that dividends are the last priority, if the company has residual funds, it will be distributed as dividends.

# 2.3 Reserve Requirements (Load to Deposit Ratio)

Reserve Requirement or Statutory Reserves (GWM) is a minimum deposit that must be maintained by a bank in the form of a checking account balance with Bank Indonesia, the amount of which is determined by Bank Indonesia at a certain percentage of Third-Party Funds. Statutory Reserves are intended so that all bank liquidity obligations can be fulfilled immediately, these obligations include withdrawal of funds through clearing, withdrawal of



government funds, withdrawal of Bank Indonesia liquidity credit funds (KLBI) and other obligations.

## 2.4 Capital Adequacy Ratio (CAR)

CAR is a capital-to-capital ratio that shows the bank's ability to provide funds for business development purposes and accommodate the risk of loss of funds caused by bank operations. Purba (2019) who said that CAR had a significant and positive effect on the Dividend Payout Ratio. This is appropriate if the capital of a bank is in a high or good portion, the profit that will be used or initially retained for capital will not be used if the bank's capital is in high or good condition. So that it can be used for dividend payments to shareholders.

# 2.5 Credit Risk (Non-Performing Loan)

This NPL shows how much the collectibility of the bank in collecting back the credit that has been disbursed. The high NPL can affect the bank's policy in channeling credit, namely the bank becomes more careful. Because a bank that continues to provide credit when its NPL is high means that the bank is considered a risk. Ahmad and Muqaddas (2016) found that credit risk has a negative effect on dividend policy.

# 2.6 Debt Ratio / Debt to Equity Ratio (DER)

According to Prihantoro (2003), one of the ratios included in the solvency ratio or leverage is the Debt-to-Equity Ratio. This ratio is used to find out how much of each own capital is used as collateral for the company's overall debt or to assess the amount of debt used by the company. Therefore, the lower the DER, the higher the company's ability to pay all its obligations. The greater the proportion of debt used for the capital structure of a company, the greater the amount of its liabilities. In Agency Theory, the increase in debt will in turn affect the size of the net profit available to shareholders, including dividends to be received, because these obligations are prioritized over dividend payments.

# 2.7 Growth of Third-Party Funds (TPF)

Third party funds are funds deposited by customers in banks in the form of ordinary savings, current accounts and time deposits. As stated by Afrizal (2017), third party funds are funds owned by banks that come from outside parties or the community which aims to store some of their assets/money in the bank so that they are safe and can be withdrawn when needed by the community who acts as a customer. Third party funds have a negative effect on dividend policy because if the debt capital structure is greater than capital, the dividends to be paid will be lower (Manos, 2001).

# 2.8 Company Size (Market to Book Value)

According to Gill et al (2010) showing that MBV is an important factor that affects the dividend payout ratio, Gill et al. (2010) found on the contrary that the market to book value ratio positively affects the dividend payout ratio.

## 2.9 Conceptual Framework

According to Sugiyono (2017) the conceptual framework will link theoretically between research variables, namely between explanatory variables and dependent variables. In this study, researchers used seven explanatory variables, namely: Return on Assets (ROA), Loan to Deposit Ratio (LDR), Capital Adequacy Ratio (CAR), Non-Performing Loans (NPL), Debt Equity Ratio (DER), Growth of Third-Party Funds (PDPK), and Market to Book Value as well as one dependent variable, namely Dividend Policy which has a Dividend Payout Ratio (DPR).



# • The Influence of Return on Assets (ROA) on Dividend Payout Ratio (DPR)

Return On Assets represents the level of net profit achieved by a company in its operational activities; therefore, dividends will be distributed when the company earns a profit. The larger the profit, the greater the company's ability to pay dividends (Al Najjar, 2012). This argument implies that a company will pay dividends when it earns a profit, so a

company with higher profits will have higher earnings, and it will distribute larger dividends to shareholders. Research conducted by Gill et al. (2010), Nurhayati (2013), and Rizqia et al. (2013) indicates a significant positive relationship between Return on Assets and Dividend Payout Ratio. Based on this description, the hypothesis is formulated as follows:

H1: Return on Assets has a positive influence on Dividend Payout Ratio.

# • The Influence of Reserve Requirement (RR) on Dividend Payout Ratio (DPR)

Reserve Requirement or Giro Wajib Minimum (GWM) is the minimum deposit that banks are required to maintain in the form of checking account balances at Bank Indonesia, the amount of which is determined by Bank Indonesia as a certain percentage of Third-Party Funds. An increase in GWM indicates that the bank is better at making reserves, and the bank will distribute more of these funds to the public. GWM is intended to ensure that all of a bank's liquidity obligations can be immediately met, including clearing fund withdrawals, government fund withdrawals, Bank Indonesia Liquidity Credits (KLBI) withdrawals, and other obligations (Kuncoro, 2012:198). Therefore, the larger the obligation imposed on the bank, the smaller the portion that will be used, in this case related to dividend distribution. Thus, it can be said that GWM has a negative impact on dividend policy.

H2: Reserve Requirement or Giro Wajib Minimum (GWM) has a negative influence on Dividend Payout Ratio.

# • The Influence of Capital Adequacy Ratio (CAR) on Dividend Payout Ratio (DPR)

CAR is a capital adequacy ratio that shows a bank's ability to provide funds for business development and to absorb the risk of loss of funds due to bank operations. Jamian Purba (2019) stated that CAR has a significant and positive influence on Dividend Payout Ratio. This is consistent with the idea that when a bank has a high or healthy capital portion, earnings initially retained for capital will not be used if the bank's capital is in good shape. Consequently, these funds can be used to pay dividends to shareholders.

H3: Capital Adequacy Ratio (CAR) has a positive influence on Dividend Payout Ratio.

# • The Influence of Non-Performing Loan (NPL) on Dividend Payout Ratio (DPR)

NPL indicates a bank's ability to collect loans that it has disbursed. High NPL can affect a bank's lending policy, making it more cautious. Banks that continue to lend when their NPL is high are considered risky. Ahmad and Muqaddas (2016) found that credit risk has a negative impact on dividend policy.

H4: Non-Performing Loan (NPL) has a negative influence on Dividend Payout Ratio.

# • The Influence of Debt Equity Ratio (DER) on Dividend Payout Ratio (DPR)

According to Prihantoro (2003), one of the ratios included in solvency or leverage ratios is the Debt-to-Equity Ratio (DER). This ratio is used to determine how much of the company's equity capital is used as collateral for the company's total debt or to assess the amount of debt used by the company. Therefore, the lower the DER, the higher the company's ability to pay all of its obligations. If a higher proportion of debt is used in a company's capital structure, the amount of its obligations will be larger. In the Agency Theory, an increase in debt will



affect the amount of net profit available to shareholders, including dividends received, as these obligations take priority over dividend payments. If the debt burden is high, the company's ability to pay dividends will be lower, so the debt to equity ratio has a negative relationship with the dividend payout ratio. This is consistent with the research conducted by Prihantoro (2003) and Pebriani (2008), which state that Debt to Equity Ratio has a negative and significant impact on DPR.

H5: Debt to Equity Ratio has a negative influence on Dividend Payout Ratio.

- The Influence of Third-Party Funds Growth (PDPK) on Dividend Payout Ratio (DPR) According to Nurchasanah (2014), third-party funds refer to funds deposited by customers in banks, including regular savings, checking accounts, and deposits. Third-party funds, as explained by Afrizal (2017), are funds owned by banks that come from external sources or the public and are intended to secure a portion of their assets in banks for safekeeping and withdrawal when needed by customers acting as depositors. Third-party funds have a negative impact on dividend policy because if the debt structure is larger than equity, the dividends to be paid will be lower (Manos, 2001).
  - H6: Third-Party Funds Growth (PDPK) has a negative influence on Dividend Payout Ratio.
- The Influence of Market to Book Value on Dividend Payout Ratio (DPR)

  According to Omran & Pointon (2004), MB is an important factor that affects dividend payout ratio, and Amidu & Abor (2006) found a negative relationship between MB and dividend payout ratio. On the other hand, Gill et al. (2010) found that the market-to-book value ratio positively affects dividend payout ratio. Based on empirical studies, the hypothesis is as follows:

H7: Market to Book Value has a negative influence on Dividend Payout Ratio.

The framework is depicted in a conceptual framework as shown in Figure 1 below.

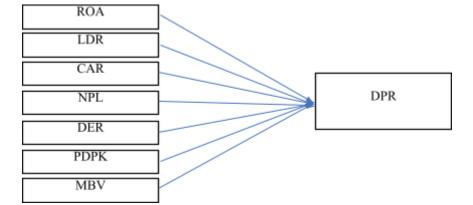


Figure 1. Conceptual Framework



# 2.10 Hypotheses

According to Sugiyono (2017), hypotheses are temporary answers to research problem formulations. By testing hypotheses and confirming the expected relationships, it is hoped that solutions can be found to address the problems at hand. Based on the theoretical review and conceptual framework outlined above, the research hypotheses can be formulated as follows:

- Return On Assets (ROA) has a positive and significant influence on dividend policy in state-owned banks in Indonesia.
- Reserve Requirement (RR) has a negative and significant influence on dividend policy in state-owned banks in Indonesia.
- Capital Adequacy Ratio (CAR) has a positive and significant influence on dividend policy in state-owned banks in Indonesia.
- Non-Performing Loan (NPL) has a negative and significant influence on dividend policy in state-owned banks in Indonesia.
- Debt Equity Ratio (DER) has a negative and significant influence on dividend policy in state-owned banks in Indonesia.
- Third-Party Funds Growth (PDPK) has a negative and significant influence on dividend policy in state-owned banks in Indonesia.
- Market to Book Value has a negative and significant influence on dividend policy in state-owned banks in Indonesia.

## 3. Research Method

The method used in this research is descriptive and verification method. Descriptive method is used to determine the value of a variable independently, either one or more variables, without making comparisons or connecting one variable to another. While the verification method is used to determine the relationship (cause and effect) between two or more variables (Sugiyono, 2016:11). The independent variables in this study are as follows: Return on Assets  $(X_1)$ , Reserve Requirements  $(X_2)$ , Capital Adequacy Ratio  $(X_3)$ , Non-Performing Loans  $(X_4)$ , Debt Equity Ratio  $(X_5)$ , Growth of Third-Party Funds  $(X_6)$ , and Market to Book Value  $(X_7)$ . The dependent variable or the dependent variable is a variable that is influenced or is the result, because of the independent variable (Sugiyono, 2017:39). The dependent variable in this study is the Dividend Payout Ratio (DPR).

Operationalization of variables is a stage that will be carried out by researchers in describing and describing variables in such a way as to be specific, measurable and certain conclusions can be drawn. Broadly speaking, the operationalization definition of the variables used in this study, namely the explanatory variable and the dependent variable, is as follows:

ROA = Net profit after tax / Total Assets

LDR = Current Account with BI/ Third party funds

CAR = Bank Capital/ ATMR

NPL = Non-performing Loans / Total Credit

DER = Total Debt / Total Equity

PDPK = ln (Giro + Savings + Time Deposit)

MBV = Stock Market Value / Book Value

DPR = Dividend per share





# 3.1 Population and Sample

The population is a generalization area consisting of: objects/subjects that have certain qualities and characteristics set by the researcher to be studied and then draw conclusions (Sugiyono, 2017:80). The population in this study is state-owned banking in Indonesia which in this period uses the years 2006 to 2018. The sample is part of the number and characteristics possessed by the population (Sugiyono, 2017:81). Sampling in this study will use a purposive sampling technique, namely a sampling technique with certain considerations (Sugiyono, 2017:85). The criteria for taking the sample are as follows:

- a) State-owned banking in Indonesia for the 2006-2018 period.
- b) Complete related data are available according to the variables to be studied.

Based on the characteristics of the sample selection above, it is obtained that 4 banks will be used as samples. The following is a list of banking names that were sampled and have met the criteria in this study, namely Bank Negara Indonesia (BNI), Bank Rakyat Indonesia (BRI), Bank Mandiri and Bank Tabungan Negara (BTN).

## 3.2 Panel Data Regression Analysis Method

Data analysis method used to test whether Return on Assets (ROA), Loan to Deposit Ratio (LDR), Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), Debt Equity Dividend Payout Ratio (DER), Growth of Party Funds Third (PDPK), and the Market to Book Value of the Dividend Payout Ratio (DPR) has a positive or negative and significant impact as well as its impact on Dividend Policy in State-Owned Banks in Indonesia. The selection of panel data is due to the fact that this study uses a time span of several years and also many companies. The model analysis can be written as follows:

$$Y_{it} = \alpha + \beta X_{it} + \varepsilon_{it}; i = 1, 2, \tag{1}$$

Where:

N = number of observations

T = amount of time

NXT = number of panel data Therefore, the equation can be written as follows:

$$Y_{it} = \alpha + \beta_1 X_1 i t + \beta_2 X_2 i t + \beta_3 X_3 i t + \beta_4 X_4 i t + \beta_5 X_5 i t + \beta_6 X_6 i t + \beta_7 X_7 i t + \varepsilon i t \quad (2)$$

Where:

 $Y_{it}$  = to Dividend Payout Ratio (DPR)

 $\alpha$  = Constant

β = Regression coefficient of each independent variable

 $X_1$  = Return On Assets (ROA)

 $X_2$  = Loan to Deposit Ratio (LDR)

 $X_2$  = Capital Adequacy Ratio (CAR)

 $X_{A}$  = Non-Performing Loan (NPL)

 $X_{5}$  = Debt Equity Dividend Payout Ratio (DER)



 $X_6$  = Growth of Third-Party Funds (PDPK)

 $X_7$  = Market to Book Value

 $\epsilon$  = Error term

t = Time

i = Company

There are three models that can be used to perform panel data regression. The three models are Pooled OLS/Common Effect, Fixed Effect and Random Effect. The first step that must be done is to do the F test to choose which model is the best among the three models, namely by conducting the Chow test, Hausman test, and Lagrange Multiplier test. However, before performing the panel data regression test, it is necessary to analyze the classical assumptions using normality and multicollinearity tests.

#### 4. Results and Discussion

## 4.1 Normality test

In making a decision on the normality test simply by comparing the calculated JB (Jarque-Bera) probability value with an alpha level of 0.05. If the probability value is greater than the Alpha value of 0.05. then normality is normally distributed. The following are the results of normality can be seen in Figure 2.

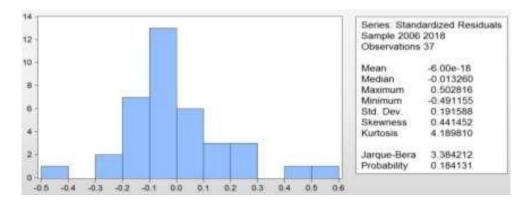


Figure 2. Normality test

Based on the results of the normality test in Figure 4.1, it can be seen from the calculated JB probability value of 0.184131 > 0.05 so it can be concluded that the residuals are normally distributed, which means that the classical assumption of normality has been met.

# 4.2 Multicollinearity Test

ulticollinearity can be said to be a condition where one more independent variable can be said to be a collinear combination of other variables. The multicollinearity test aims to determine whether there is a correlation between the independent variables in this regression. One looks at the multicollinearity test by looking at the correlation coefficient value less than 0.8. If the correlation coefficient value is greater than 0.8. Then there are symptoms of multicollinearity. The following are the results of the multicollinearity test which can be seen in table 1.





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Table 1	Multico	llingarity	Test Results
Table I	- WHITICO	IIIneariiv	Test Resillis

	ROA	RR	CAR	NPL	DER	PDPK	MBV
ROA	1.000000	0.735561	-0.258871	-0.348932	-0.150172	-0.124947	-0.449923
RR	0.735561	1.000000	-0.354797	-0.402587	-0.263017	-0.082776	-0.303748
CAR	-0.258871	-0.354797	1.000000	-0.021726	0.323121	0.122846	0.074211
NPL	-0.348932	-0.402587	-0.021726	1.000000	0.072187	-0.045686	0.113907
DER	-0.150172	-0.263017	0.323121	0.072187	1.000000	-0.556650	-0.358759
PDPK	-0.124947	-0.082776	0.122846	-0.045686	-0.556650	1.000000	0.495697
MBV	-0.449923	-0.303748	0.074211	0.113907	-0.358759	0.495697	1.000000

Table 1 above is the output of the multicollinearity test. One way to see the existence of multicollinearity is with the correlation coefficient value as contained in the matrix. In the matrix it can be seen that the correlation coefficient values of Return On Assets (ROA), Reserve Requirements (RR), Capital Adequacy Ratio (CAR), Non-Performing Loans (NPL), Debt Equity Ratio (DER), Growth of Third Party Funds (PDPK), and the resulting Market to Book Value is less than 0.8, so it can be concluded that there is no multicollinearity between the independent variables.

# 4.3 Panel Data Regression Analysis Results

After the results of the f-test measurement using the Chow test, Hausman test and Lagrange multiplier test, it can be concluded that the best model of the three models, namely the common effect, fixed effect and random effect, was chosen as the best model of random effects.

Table 2. Results of Random Effect Panel Data Regression Analysis

Variable	Coefficient	Std. Error	t-Statistics	Prob.
С	-3.393245	1.323694	-2.563466	0.0158
ROA	-0.024983	0.052570	-0.475236	0.6382
RR	0.447358	0.155574	2.875539	0.0075
CAR	0.046761	0.016324	2.864549	0.0077
NPL	0.050278	0.209108	0.240440	0.8117
DER	0.282288	0.381335	0.740263	0.4651
PDPK	0.399573	0.658994	0.606338	0.5490
MBV	0.005357	0.002912	1.839608	0.0761

Effects		

		S.D.	Kiiu
Period random		0.085992	0.0869
Idiosyncratic random		0.278801	0.9131
	W	eighted Statistics	
R-squared	0.361899	Mean dependent var	0.338035
Adjusted R-squared	0.207875	S.D. dependent var	0.356858
S.E. of regression	0.317751	Sum squared resid	2.928002
F-statistic	2.349624	Durbin-Watson stat	0.892995
Prob (F-statistic)	0.049726		
	Unv	weighted Statistics	
R-squared	0.352535	Mean dependent var	0.381838
Sum squared resid	3.330228	Durbin-Watson stat	0.882305
		·	

Rho



In table 2 above, the results of the random effect model hypothesis test for the Return on Assets (ROA) variable are obtained by obtaining a probability of 0.6382. The probability value is greater than the alpha value of 0.05, so it has no significant effect on the 5% significance level with a probability value of 0.6382 and is negatively related to a coefficient value of -0.024983. So, every 1% increase in ROA will reduce the Dividend Payout Ratio (DPR) by 0.024983%. So, it can be said that Return on Assets (ROA) has a negative effect on the Dividend Payout Ratio (DPR) dividend policy in BUMN banking for the period 2006 to 2018.

Return on Assets (R0A) is a level of net profit that can be obtained by the company as long as it is still running its operations. Return on Assets (ROA) has no significant effect on the 5% significance level with a probability value of 0.6382 and is negatively related with a coefficient value of -0.024983. This is not in accordance with the research of Amidu (2007) which shows a statistically significant and negative relationship between the Return on Assets (ROA) value and the dividend payout ratio. The results of this study are consistent with research conducted by Nuringsih (2005) which obtained negative but not significant results. A negative coefficient can mean that if a bank pays dividends, it can reduce retained earnings which affect internal financing. ROA does not have a significant effect on dividend distribution because managers will consider the level of costs in the future can increase due to the company's growth that occurs.

The results of the random effect model hypothesis test for the Loan to Deeposit Ratio (LDR) variable by obtaining a probability of 0.0075. The probability value is smaller than the alpha value of 0.05 so that it has a significant effect on the 5% significance level with a probability value of 0.0075 and is positively related to a coefficient value of 0.447358. So, every 1% increase in LDR will increase the Dividend Payout Ratio (DPR) by 0.447358%. So, it can be said that LDR has a positive effect on dividend policy (Dividend Payout Ratio) (DPR) in state-owned banking for the period 2006 to 2018. LDR has a positive effect because LDR is BI's policy in regulating the number of reserves that commercial banks must place at the central bank. The increase in the minimum Statutory Reserves causes the reserve requirement to increase, which in turn will increase core money (Satria, 2014) so that banks can pay dividends to shareholders. The results of the random effect model hypothesis test for the Capital Adequacy Ratio (CAR) variable by obtaining a probability of 0.0077. The probability value is smaller than the alpha value of 0.05 so that it has a significant effect on the 5% significance level with a probability value of 0.0077 and is positively related to a coefficient value of 0.046761. So, every 1% increase in CAR will increase the Dividend Payout Ratio (DPR) by 0.046761%. So it can be said that the Capital Adequacy Ratio (CAR) has a positive effect on dividend policy (Dividend Payout Ratio) (DPR) in BUMN banking for the period 2006 to 2018. So, it can be said that the Capital Adequacy Ratio (CAR) has a positive effect on dividend policy (Dividend Payout). Ratio) (DPR). The increasing Capital Adequacy Ratio (CAR) will indicate that the company's ability to manage the company is getting better and it is very possible to distribute dividends.

The greater the Capital Adequacy Ratio (CAR), the better the company's capital position (Achmad and Kusno, 2003). Basically, if the CAR is higher, the profit to be obtained by the company will also be higher, because a bank that has a high or healthy CAR means that the bank has sufficient capital to carry out business activities and bears the risk if the bank is liquidated. The results of this study are in line with previous research by Rasyid (2018) which states that the CAR variable has a significant effect on dividend policy. The higher the CAR, the more capital to cover asset declines. The results of this study are in accordance with Purba (2019) which states that CAR has a significant and positive effect on the Dividend Payout Ratio.



The results of the random effect model hypothesis test for the Non-Performing Loan (NPL) variable by obtaining a probability of 0.8117. The probability value is greater than the alpha value of 0.05 so it has no significant effect on the 5% significance level with a probability value of 0.8117 and is negatively related to a coefficient value of 0.050278. So, every 1% increase in NPL will reduce the Dividend Payout Ratio (DPR) by 0.050278%. So, it can be said that Non-Performing Loans (NPL) have a negative effect on dividend policy (Dividend Payout Ratio) (DPR) in BUMN banking for the period 2006 to 2018. So, it can be said that Non-Performing Loans (NPL) have a negative effect on dividend policy (Dividend Payout). Ratio) (DPR). This NPL shows how big the collectability of the bank in collecting back the credit that has been disbursed. The high NPL can affect the bank's policy in channeling credit, namely the bank becomes more careful. Because a bank that continues to provide credit when its NPL is high means that the bank is considered a risk. Ahmad and Muqaddas (2016) found that credit risk has a significant negative effect on dividend policy.

The results of the random effect model hypothesis test for the Debt Equity Ratio (DER) variable by obtaining a probability of 0.4651. The probability value is greater than the alpha value of 0.05 so it has no significant effect on the 5% significance level with a probability value of 0.4651 and is negatively related to a coefficient value of 0.282288. So, every 1% increase in DER will reduce the Dividend Payout Ratio (DPR) by 0.282288%. So, it can be said that the Debt Equity Ratio (DER) has a negative effect on dividend policy (Dividend Payout Ratio) (DPR) in BUMN banking for the period 2006 to 2018. Debt to Equity Ratio (DER) is the ratio of debt (leverage) to capital. This ratio measures how far the company is financed by debt, where the higher the value of this ratio describes the symptoms that are not good for the company. The increase in debt in turn will affect the size of the net profit available to shareholders, including dividends to be received, because these obligations are prioritized over dividend payments. If the debt burden is high, the company's ability to pay dividends will be lower. These results are in accordance with the results of the study of Al-Twaijry (2007), Deshmukh et al. (2013) Strebulaev and Yang (2013) revealed that the debt policy factor using the debt equity ratio (DER) has a negative effect on dividend payment policy. The results of the random effect model hypothesis test for the Third-Party Fund Growth (PDPK) variable by obtaining a probability of 0.5490. The probability value is greater than the alpha value of 0.05 so it has no significant effect on the 5% significance level with a probability value of 0.5490 and a negative effect with a coefficient value of 0.399573. So, every 1% increase in DER will reduce the Dividend Payout Ratio (DPR) by 0.399573%. So, it can be said that the Growth of Third-Party Funds (PDPK) has a negative effect on dividend policy (Dividend Payout Ratio) (DPR) in state-owned banking for the period 2006 to 2018. Third Party Funds have a negative effect on dividend policy because if the debt capital structure is greater than capital then the dividends to be paid will be lower (Manos, 2001). Third party funds collected from the public are the largest and most reliable source of funds by banks (reaching 80%-90% of all funds managed by banks). The bank's operational activities will run smoothly if the bank has sufficient capital so that if it is in a critical condition, the bank will remain in a safe condition because it has sufficient capital reserves. So, if third party funds increase, there will also be greater funds that must be given to the public so that it will reduce the percentage portion of dividend distribution. The results of the random effect model hypothesis test for the Market to Book Value (MBV) variable by obtaining a probability of 0.0761. The probability value is greater than the alpha value of 0.05 so that it has no significant effect on the 5% significance level with a probability value of 0.0761 and is negatively related to a coefficient value of 0.005357. So, every 1% increase in MBV will reduce the Dividend Payout Ratio (DPR)

# SCA13

# International Sustainable Competitiveness Advantage 2023

by 0.005357%. So, it can be said that Market to Book Value (MBV) has a negative effect on dividend policy (Dividend Payout Ratio) (DPR) in state-owned banking for the period 2006 to 2018. Baker and Powel (2012), Rehman and Takumi (2012), Perretti et al. (2013), Elly and Hellen (2013), Yarram and Dollery (2015), Dewasiri et al. (2019) revealed that the life cycle theory has a negative effect on dividend policy.

Based on table 2, the number of Adjusted R-Square (R2) is 0.207875, this means that the variation in Y changes is influenced by changes in Return On Assets (ROA), Reserve Requirements (RR), Capital Adequacy Ratio (CAR), Non-Performing Loans (NPL). Debt Equity Ratio (DER), Growth of Third Party Funds (PDPK), and Market to Book Value of the dependent variable, namely the Dividend Payout Ratio (DPR) in BUMN Banking for the period 2006 to 2018 is 20.78% or it can be interpreted that the independent variable used in the model is able to explain 20.78% of the dependent variable. While the remaining 79.22% is influenced by other factors outside the regression model.

## 5. Conclusion

This study was conducted with the aim of knowing whether these factors have a significant effect on dividend policy in state-owned or state-owned banks. In this study, researchers used seven explanatory variables, namely: Return on Assets (ROA), Loan to Deposit Ratio (LDR), Capital Adequacy Ratio (CAR), Non-Performing Loans (NPL), Debt Equity Ratio (DER), Growth of Third-Party Funds (PDPK), and Market to Book Value as well as one dependent variable, namely Dividend Policy which has a Dividend Payout Ratio (DPR). The method used in this research is descriptive and verification method. And the data analysis tool used is panel data regression. The results of this study indicate that the seven x variables affect dividend policy by 20, 78%. Variables that have a significant effect on dividend policy are LDR/RR, CAR and MBV. In addition, it has no significant effect on dividend policy. This can be due to several reasons. First, because the data taken is limited to state-owned banks only. It is recommended for further research to choose a wider research subject in banking or non-banking. The second reason could be because there are other factors that influence the dividend policy of state-owned banks which have a special character. It is recommended for further research to choose non-banking subjects.

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