



## Determinants of Market Capitalization with Profitability and Dividend Policy as Intervening Variables of State Owned Banks

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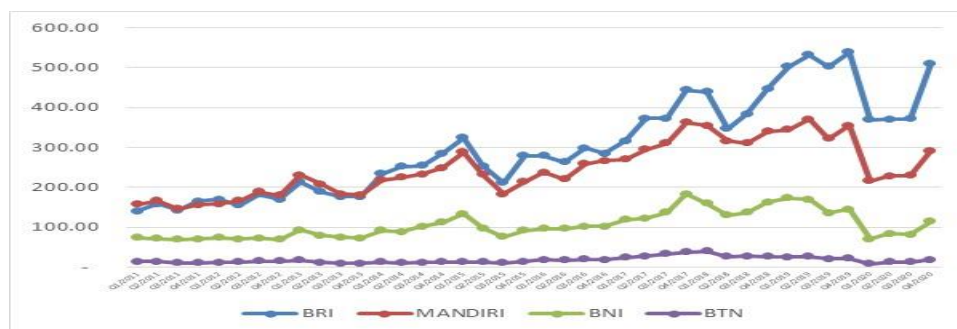
**Abstract:** The purpose of this study is to analyze and empirically prove the influence of the company's external and internal factors of market capitalization with profitability and dividend policy as intervening variables of State Owned Banks. The research period of 2011-2020, with the sampling technique is saturated sampling, in which all members of the population are used as samples. The analytical tool used is Structural Equation Modeling (SEM) supported by AMOS software. The results of the study show that the market capitalization of State Owned Banks is influenced by profitability, dividend policy, economic growth, BOPO and Loan at Risk (LAR). LAR besides having an effect on market capitalization, also has a direct effect on profitability and dividend policy. It is hoped that the results of this study can provide input for banks in maximizing the steps that must be taken to improve the company's performance and market capitalization.

**Keywords:** Loan at Risk (LAR), Profitability, Dividend Policy and Market Capitalization

### INTRODUCTION

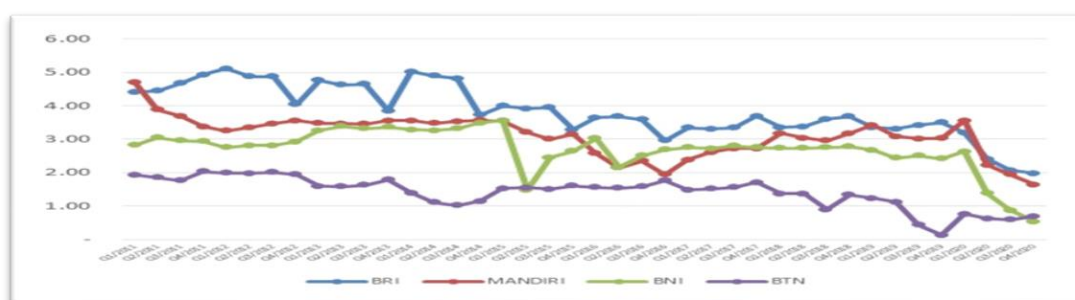
The success of the national economy cannot be separated from the banking sector. Banks besides functioning as financial intermediaries, namely collecting and distributing funds to the public, also function as agents of trust, agents of development, and agents of service (Indonesian Bankers Association, 2016) and (Latumaerissa, 2017).

As a public company that has been listed on the Indonesia Stock Exchange, State Owned Banks consisting of BRI, Mandiri, BNI and BTN will continue to strive to increase their market capitalization value by implementing good governance in each of their operational activities. The market capitalization of State Owned Banks before the Covid-19 pandemic was generally fluctuating and increasing, but the increase in market capitalization was still low due to fluctuating and declining profitability. BRI bank and Mandiri increased their market capitalization quite well when compared to other State Owned Banks as presented in Figure 1.



**Figure 1. Market Capitalization Development of State Owned Banks Period of 2011 -2020**  
Source: IDX and State Owned Banks Financial Report

During the Covid-19 pandemic in 2020, the market capitalization on the Indonesia Stock Exchange decreased by IDR 278.08 trillion (3.83%), from IDR 7,265.02 trillion in 2019 to IDR 6,986.94 trillion. Most of the banking market capitalization in Indonesia has decreased. Likewise, the market capitalization of State Owned Banks, all State Owned Banks experienced a decline in market capitalization. The size of the growth in the market capitalization of State Owned Banks depends on business performance, especially profitability. The profitability of State Owned Banks as shown by the Return on Assets (ROA) fluctuated and decreased as shown in Figure 2.



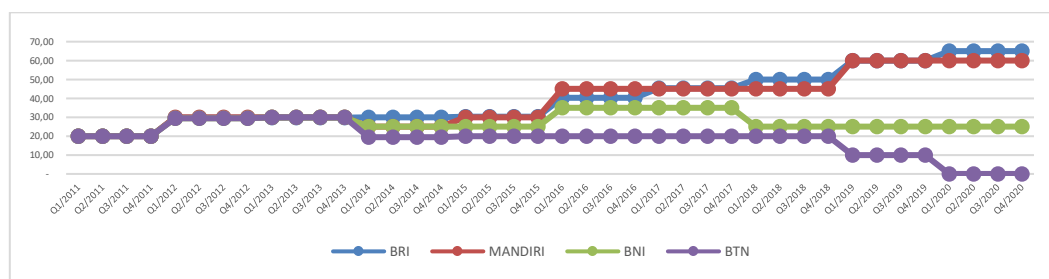
**Figure 2. ROA Development of State Owned Banks for the Period of 2011 - 2020**  
Source: State Owned Banks Financial Report

So far, the profits of State Owned Banks are still largely supported by interest income from lending. For this reason, the provision of sound credit based on the principle of prudence should be carried out properly. Poor credit quality has an impact on declining loan productivity and the amount of allowance for impairment losses (CKPN) that must be established. Poor credit quality, which has been measured by the size of non-performing loans (NPLs), needs to be expanded further by adding Special Mention Loans (DPK) and restructuring current collectibility loans called Loans at Risk (LAR), Assessment of credit quality / credit risk based on Loan at Risk needs to be done so that banks are more careful (conservative) in mitigating credit risk.

Large banks such as State Owned Banks with large enough capital can of course control their non-performing loans (NPLs), namely by write off their bad loans. However, this is not the case with Loan at Risk (LAR). Several State Owned Banks have high Loan at Risk (LAR). Loan at Risk (LAR) State Owned Banks rose in 2020, increasing two to three times during the Covid-19 pandemic because State Owned Banks did a lot of restructuring of debtors affected by Covid-19.

The decline in the profitability of State Owned Banks was actually followed by an increase in the dividend policy of several State Owned Banks (Bank BRI and Mandiri), namely

the Dividend Payout Ratio (DPR) which increased 60% to 65%, but on the other hand there was one State Owned Bank, namely Bank BTN, which did not pay dividend for financial performance in 2020, as presented in Figure 3.



**Figure 3. DPR Development of State Owend Banks for the Period of 2011 – 2020**

Source: LQ45 and Investor Relations of State Owned Banks.

The phenomenon of low market capitalization growth of State Owned Banks, declining profitability and dividend policy of State Owned Banks is interesting for research considering that State Owned Banks' shares include 10 (ten) Big Caps shares on the Indonesia Stock Exchange and the total assets and profit contribution of State Owned Banks are very large in the national economy. By the end of 2020, the total assets of State Owned Banks had reached IDR. 3,819 trillion or 43.49% of the total assets of conventional commercial banks of IDR. 8,781 trillion, while the profit contributed by State Ownned Banks was IDR. 51 trillion or 37.78% of the profit of conventional commercial banks of IDR 135 Trillion (Indonesian Banking Statistics, 2020).

The fluctuations in the profitability of State Owned Banks will have an influence on the company's dividend policy, namely the size of the dividend payout ratio (DPR) which in turn will have an impact on the development of stock prices / market capitalization of State Owned Banks. Investors have an interest in the growth of stock prices and the distribution of large dividends because from the increase in stock prices, investors can get capital gains and from a large dividend policy, investors will get large incomes. The market capitalization of State Owned Banks, besides being influenced by profitability and dividend policy, is also influenced by external factors of the company and other internal (fundamental) factors.

Dividend payment is related to bank profitability. Profitability and dividend policy of State Owned Banks are influenced by the fundamentals of the company's financial performance (internal factors) and also influenced by external factors of the company, namely macroeconomics such as the BI reference interest rate and economic growth. Profitability and dividend policy have a causal relationship to market capitalization through indicators of stock prices traded in the capital market. The results of research by Sharma (2018) and Rawlin et al. (2019) shows that profitability has a positive effect on market capitalization. Furthermore, the results of research by Luvembe et al., (2014), Sharma (2018) and Roman (2019) show that dividend policy has a positive effect on market capitalization.

Market capitalization growth is still low, profitability declines and the dividend policy of State Owned Banks in the industrial 4.0 is interesting to do research. The company's external and internal factors need to be researched. The company's external factors such as the BI reference interest rate and economic growth, while the company's internal factors such as asset quality problems / credit risk, namely Loan at Risk (LAR) which has included credit quality in special mention (DPK) and restructuring of current collectibility loans in addition to NPL, and efficiency problems, namely operational costs to operating income (BOPO) and Net Interest Margin (NIM).

Based on the description presented in the background of the study, the objectives to be achieved in this study are:

1. Analyze and obtain empirical evidence regarding the influence of each company's external factor variables, namely the BI reference interest rate and economic growth as well as the company's internal factors NIM, BOPO and LAR on profitability.
2. Analyze and obtain empirical evidence regarding the influence of each variable of the company's external factors, namely the BI reference interest rate and economic growth as well as the company's internal factors, namely NIM, BOPO and LAR on dividend policy.
3. Analyze and obtain empirical evidence regarding the influence of each variable of the company's external factor, namely the BI reference interest rate and economic growth, the company's internal factors, namely NIM, BOPO and LAR, profitability and dividend policy on market capitalization.
4. Analyze and obtain empirical evidence regarding the influence of each variable of the company's external factors, namely the BI reference interest rate and economic growth as well as the company's internal factors, namely NIM, BOPO and LAR on market capitalization through profitability and dividend policy.

## **LITERATURE REVIEW**

### **Market Capitalization**

The company's goal is to maximize the company's wealth or value for shareholders. The value of companies that go public is reflected in the company's stock price in the market (market capitalization) which is a reflection of the assessment by the public of the company's performance (Wijaya, 2017) and Harmono (2017).

This market capitalization value cannot be used to assess how big the assets are owned by the company. To assess market capitalization, it can be calculated by multiplying the share price by the number of shares outstanding. The market price is one thing that is very easy to measure because it only looks at the current stock price in the market at that time (Hartono, 2016). As a consideration for investment decisions, the value of market capitalization provides an overview for investors about the strength of the company while encouraging investors to include the company's shares in their portfolio. The market capitalization value of a bank is closely related to the level of profitability and dividend policy of the company, in addition to the influence of other external and internal factors of the company. Some investors will prefer to buy stocks that provide / distribute high dividends. The results of research by Luvembe et al., (2014), Sharma (2018) and Roman (2019) show that dividend policy has a positive effect on market capitalization. Furthermore, the results of research by Sharma (2018) and Rawlin et al. (2019), shows that profitability has a positive impact on market capitalization.

### **Profitability**

Profitability is the company's ability to earn profits in relation to sales, total assets and own capital. Profitability analysis is indispensable for long-term investors (Hery, 2019). One of the profitability ratios that is often used in banking is Return On Assets (ROA). ROA is a ratio used to measure the performance of banks in managing their assets to generate profits (Indonesian Bankers Association, 2016).

ROA is a ratio that shows the effectiveness of a company or bank in managing its assets to earn income for the bank. The greater this ratio indicates the greater the level of effectiveness of the bank in managing its assets. ROA is influenced by profits and total assets in a company or bank.

## **Dividend Policy**

One good way to communicate a bank's financial performance to its shareholders is by paying dividends. Dividends act as a signaling tool to convey bank performance (Kabbani et al., 2020) and (Sharma, 2018) Dividends are also used as a basis company valuation and stock recommendation (Omar and Ecchabib, 2019).

According to Gumanti (2013), dividends can be paid in the form of cash dividends or in the form of stock dividends. Cash dividends, also called regular dividends, are usually paid four times, twice or once a year. There are times when companies distribute special dividends, namely dividends paid in addition to regular dividends. One measure of dividend policy is the dividend payout ratio (DPR), which is the amount of net income distributed to shareholders. According to the bird in the hand theory, investors prefer cash dividends rather than being promised a return on investment (capital gain) in the future because receiving cash dividends is a form of certainty which means reducing risk.

## **Company External Factors**

### **BI Reference Interest Rate**

BI Reference Interest Rate is a policy interest rate that reflects the monetary policy stance taken by central bank (Bank Indonesia) and implemented in monetary operations through liquidity management in the money market (www/bi.go.id, 2021).

A high central bank reference interest rate will increase the cost of funds and credit risk which will have an impact on decreasing bank profitability (Geng et al., 2016) and (Al-Homaidi et al., 2018). The opposite result is obtained by Avci and Yucel (2017) that monetary policy through changes in interest rates has a positive effect on profitability. High interest rates will also affect the company's dividend policy and market capitalization. Bank interest rates have a negative effect on the company's dividend policy (Goe, 2016). Interest rates also have a negative effect on market capitalization (Ellaboudy, 2008), (Phuong, 2020) and (Farooq et al., 2016).

## **Economic Growth**

Economic growth can be interpreted as a process of changing the economic conditions of a country on an ongoing basis towards a better state during a certain period (Hasyim, 2016). The indicator commonly used to measure economic growth is gross domestic product (GDP) data, which measures the total income of everyone in the economy. The existence of economic growth is an indication of the success of economic development in people's lives.

Positive economic growth has an impact on banking profitability (Sufian, 2012), (Adelopo et al., 2017), (Yuksel et al., 2018), (Jreisat (2020), (Elekdag et al., 2020) and Phan et al., 2020), while the opposite results were obtained by Dayag and Trinidad (2020), Touny (2014) Al Homaidi et al (2018) that economic growth has a negative effect on profitability

Direct economic growth also has a positive effect on the company's dividend policy (Oluwasolape, 2019) but the opposite results are obtained by Abor and Bokpin (2010) and Nadeem et al. (2018), that economic growth has a negative effect on dividend policy. Economic growth provides a positive climate for business development, which affects market capitalization (Shahbaz and Afza, 2016), Negi (2020) and Phuong (2020), the opposite result was obtained by Boshkovska et al. (2016), that economic growth has a negative effect on market capitalization and is not sufficient for capital market development.

## **Company Internal Factors**

### **Net Interest Margin**

Interest income is the main source in the banking industry. Interest income is interest income derived from earning assets. The amount of interest income depends on the interest rate



prevailing in the market and the composition of the category of bank earning assets. The decrease or increase in interest income can be caused by changes in the bank's strategy in managing its credit portfolio and is influenced by market interest rates in general (Indonesian Bankers Association, 2016). Net Interest Margin (NIM) is interest income minus interest expense. NIM has a significant positive effect on profitability (Iloska, 2014), (Raharjo et al., 2014), Nguyen (2020), Hasan et al. (2020) and Karamoy and Tulung (2020). While the results of Serwadda's research (2018) show that NIM does not have a positive impact on bank profitability.

The size of the NIM will also affect the company's dividend policy. The results of research by Rahma and Syarif (2020) and Yesyurun (2021), show that NIM has a negative effect on the company's dividend payout ratio. The general objective of banking is to produce the best NIM which leads to an optimal level of market capitalization. NIM has a positive effect on market capitalization (Derbali, 2011), (Al-Muharrami and Murthy, 2017) and (Nasution and Lingga (2019).

### **Operating Costs to Operating Income**

One of the indicators in looking at the efficiency of a bank is the ratio of Operating Costs to Operating Income (BOPO). The lower BOPO illustrates that the bank maximizes its operating income compared to its relatively small operating costs or that the bank's operations are more efficient.

To reduce the BOPO, especially during the Covid-19 pandemic, banks need to diversify their income, especially those from non-interest income. Banks should also maintain the quality of the loans (Loan at Risk) they disburse, so that the provision for losses (CKPN) can be controlled, considering that the formation of CKPN has a very large effect on increasing operational costs which results in a decrease in bank profitability and an increase in BOPO. Increased BOPO will reduce bank profitability (Topak and Talu, 2017), (Hasan et al., 2020) and (Karamoy and Tulung, 2020). BOPO also affects the company's dividend policy and market capitalization. The results of Purba's research (2019), show that BOPO has a positive effect on the company's dividend policy. Efficiency (cost to revenue ratio) has a negative impact on market capitalization (Capraru et al, 2020).

### **Loan at Risk (LAR)**

Poor credit quality in the bank's business are commonplace, but banks must take action to prevent / minimize the emergence of non-performing loans in banks. So far, the quality of credit in banks (Poor credit quality ) is calculated based on the amount of non-performing loan (NPLs), which consists of collectibility credit 3 (substandard), collectibility 4 (doubtful) and collectibility 5 (bad), both gross NPLs and net NPLs. after deducting the allowance for losses.

In reality, performing loans (PL), especially loans under special mention and restructured loans that have returned to current collectibility, have deteriorated again. Especially in 2020, during the Covid-19 pandemic, many banks restructured debtors affected by Covid-19 which caused an increase in Banking Loan at Risk (LAR) so that the loan risk increased.

Poor credit quality in this case is still proxied by NPLs, which causes credit risk to increase which will have a negative impact on bank profitability (Salike and AO, 2017), (Sarwedda, 2018), (Jreisat, 2020) and (Elekdag, 2020). The opposite result is obtained by Sufian (2012) that credit risk has a positive impact on bank profitability.

Poor credit quality has a negative impact on the company's dividend policy. (Ahmad and Muqoddas (2016), (Silalahi et al., 2020) and Budagaga (2020). The opposite result is obtained by Rahma and Syarif (2020), that non-performing loans have a positive effect on dividend policy. Poor credit quality has a negative effect on market capitalization (Mohanty, 2018) while the opposite result is obtained by Rawlin et al. (2019), that credit quality has a positive, but not

significant, effect.

## Framework

This study is intended to examine the influence of the company's external factors, namely the BI reference interest rate and economic growth and the company's internal factors, namely NIM, BOPO, and Loan at Risk (LAR) on market capitalization, profitability (ROA) and dividend policy (DPR) and examine the direct influence of profitability and dividend policy on market capitalization and indirect influence of the company's external and internal factors on market capitalization through profitability and dividend policy. Based on the theory and literature review on the relationship between the variables mentioned above, a framework of thought is drawn up as presented in Figure 4.

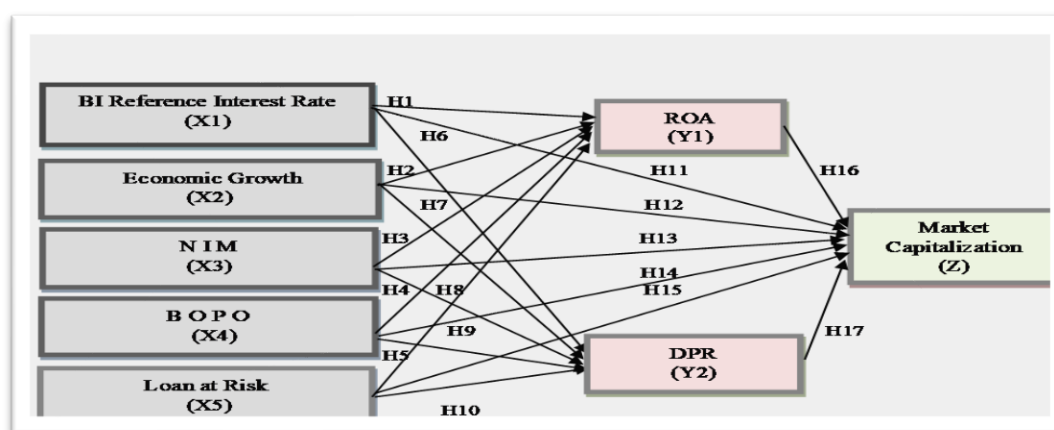


Figure 4. Framework

## Research Hypothesis

Based on the framework of thought and the description of the variables mentioned above, the researchers tried to conclude tentatively through the following hypotheses:

1. H1 : BI Reference Interest Rate has a negative effect on ROA.
2. H2: Economic growth has a positive effect on ROA.
3. H3 : NIM has a positive effect on ROA
4. H4 : BOPO has a negative effect on ROA
5. H5 : LAR has a negative effect on ROA
6. H6 : BI reference interest rate has a negative effect on DPR.
7. H7 : Economic growth has a positive effect on DPR
8. H8 : NIM has a positive effect on DPR
9. H9 : BOPO has a negative effect on DPR
10. H10: LAR has a negative effect on DPR
11. H11 : BI reference interest rate has a negative effect on market capitalization.
12. H12 : Economic growth has a positive effect on market capitalization.
13. H13 : NIM has a positive effect on market capitalization.
14. H14 : BOPO has a negative effect on market capitalization.
15. H15 : LAR has a negative effect on market capitalization.
16. H16: ROA has a positive effect on market capitalization.
17. H17 : DPR has a positive effect on market capitalization.

## METHOD

The population in this study is State Owned Banks or also known as government banks located in Indonesia and listed on the Indonesia Stock Exchange (IDX), as many as 4 (four)

banks, namely BRI, Mandiri, BNI and BTN Banks. The sample in this study is saturated sampling, that is, all members of the population are used as samples. The data used in the form of quantitative data which is secondary data for 10 (ten) years in a quarterly period of 2011 – 2020. In this study the analysis design or data processing uses the Structural Equation Model (SEM) with the AMOS program and Descriptive Statistics with SPSS (Gozali, 2017) and Widarjono (2020).

## RESULT AND DISCUSSION

### Descriptive statistics

Descriptive statistics are used to see an overview of the data used. Descriptive statistical analysis that includes the mean (mean), extreme values (maximum and minimum values) and standard deviations, as presented in Table 1.

**Table 1. Descriptive statistics**

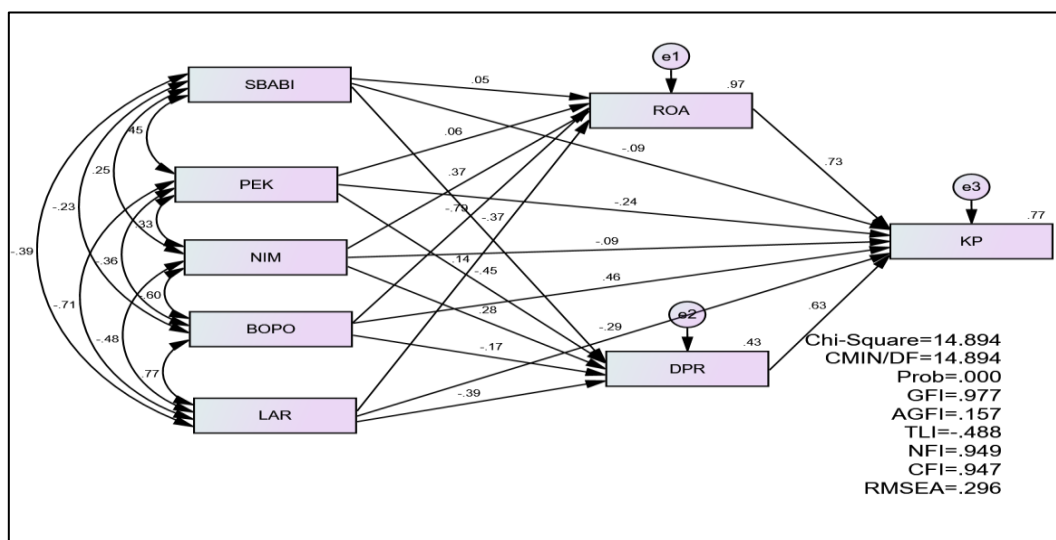
Variable	N	Minimum	Maximum	mean	Std. Deviation
Market Capitalization	160	8.90	538.47	167.96	132.85
ROA	160	0.13	5.11	2.76	1.09
DPR	160	0.00	65.00	31.35	13.90
BI Reference Interest Rate	160	3.75	7.75	5.90	1.19
Economic growth	160	-5.32	6.50	4.68	2.46
NIM	160	3.06	10.24	5.97	1.46
BOPO	160	57.46	98.12	73.86	8.95
LAR	160	6.24	34.11	13.05	5.73
Valid N (listwise)	160				

Source: SPSS data processing results

BRI's largest market capitalization is IDR 538.47 trillion because it is supported by BRI's good performance and a high dividend policy of up to 65%, while Bank BTN's lowest market capitalization is IDR 8.90 trillion due to its low performance.

### Goodness of Fit Test

The results of SEM-AMOS data processing on the model that has been presented in the form of a path diagram produce a structural model as shown in Figure 5.



**Figure 5. Structural Model**

Source: AMOS Data Processing Results



Note : SBABI = BI reference interest rate      PEK = Economic growth      KP = Market Capitalization.

The structural model describes the alignment of the model and the causality relationship that has been built in the model being tested. The resulting model is then tested for feasibility. According to Widarjono (2020), from several feasibility tests of the model, the model is said to be fit or feasible if at least one of the criteria for the model's feasibility test is met. There are three criteria that meet the requirements, namely GFI, NFI and CFI with a value of  $\geq 0.90$ . Thus, it can be concluded that the variables used in this study were modified models fit with existing data, therefore the results showed that the model used was acceptable.

## Hypothesis test

### 1. The Influence of the Company's External and Internal Factors on Profitability

The company's external factors, namely the BI reference interest rate and economic growth as well as the company's internal factors, namely NIM, BOPO and LAR have an effect on the profitability of State Owned Banks as presented in Table 2.

**Table 2. The Influence of External and Internal Factors of the Company on Profitability**

Hypothesis	variable	Estimate	CR	P	Remark
H1	ROA < --- SBABI	0.054	3.073	0.002	Significant
H2	ROA < --- PEK	0.061	2.410	0.016	Significant
H3	ROA < --- NIM	0.368	18.509	***	Significant
H4	ROA < --- BOPO	-0.786	-26.652	***	Significant
H5	ROA < --- LAR	0.144	4.072	***	Significant

Source: AMOS data processing results

An increase in the BI reference interest rate to a certain level will affect the exchange rate and inflation which in turn will also have an impact on increasing bank profitability. The BI reference interest rate is used as an instrument by the regulator (BI), to control monetary policy. Bank Indonesia will increase the BI reference interest rate if inflation is high. On the other hand, Bank Indonesia will reduce inflation if inflation falls or is controlled. The Bank Indonesia reference interest rate has a positive effect on profitability. This is in accordance with the results of research from Avci and Yucel (2017) that monetary policy through changes in interest rates has a positive effect on liquidity and profitability. However, the opposite result was obtained by Geng et al. (2016) and Al-Homaidi et al., (2018) that a high central bank reference interest rate will increase the cost of funds and credit risk which will have an impact on decreasing bank profitability.

High and stable economic growth is certainly expected by our nation, so that the performance of banking and other industries is maintained. High and unstable inflation will complicate people's decisions to consume, invest and produce which will certainly have an impact on the ups and downs of economic growth. During the research period before the Covid-19 pandemic, Indonesia's economic growth ranged from 5.00 to 6%, but in 2020 during the Covid-19 pandemic period, Indonesia's economic growth fell drastically to minus 5.32% in Q2/2020. The minus economic growth eroded the profitability of State Owned Banks which fell drastically as indicated by the ROA in 2020 which was only 1.43%. Increased economic growth has a positive effect on bank profitability. The results of this study are consistent with research conducted by Sufian (2012), Adelopo et al., (2017), Yuksel et al., (2018), Jreisat (2020), Elekdag et al., (2020) and Phan et al., (2020).

The income of State Owned Banks is largely supported by interest income from lending, so the rise and fall of bank profitability is highly dependent on the quality of the credit disbursed. A bank's NIM is not only influenced by interest income, but also by its cost of funds. To reduce the cost of funds, State Owned Banks must focus on obtaining cheap funds, better

known as CASA (Current Account Saving Accounts) which relies on the collection of current accounts and savings. State Owned Banks' CASA is still low, ranging from 55.00% to 68.00%, especially for Bank BTN's CASA, which on average is still below 50%. The NIM of State Owned Banks ranged from 4.5% to 7.00%, with an average NIM of State Owned Banks of 5.96%, quite good and still high when compared to the NIM of ASEAN countries ranging from 1.7% - 3.7 %. The acquisition of a large NIM certainly affects the profitability of State Owned Banks. Where the ROA acquisition before Covid-19 was still above 2.5%, which ranged from 2.7% - 3.6%. NIM has a positive effect on bank profitability. The results of this study are consistent with previous researchers, namely Iloska (2014), Raharjo et al., (2014), Nguyen (2020), Hasan et al. (2020) and Karamoy and Tulung (2020).

The rise and fall of BOPO depends on the fluctuation of operational costs and operating income. The bank's operating income is still supported by income from loan interest and the fluctuation in operating costs is largely influenced by the size of the allowance for losses (CKPN) formed due to the high level of high-risk loans (LAR). Increasing BOPO will reduce profitability. The results of this study strengthen the research conducted by Topak and Talu (2017), Hasan et al., (2020) and Karamoy and Tulung (2020). To reduce BOPO, especially during the Covid 19 pandemic, banks need to diversify their income, especially those from non-interest income / fee base income (fbi). State Owned Bank's fbi is still low, ranging from 9% - 13%, even Bank BTN's FBI is still below 5.00%. State Owned Banks should also maintain the quality of the loans (Loan at Risk) they disburse, so that the provision for losses (CKPN) can be controlled. State Owned Banks are also expected to be able to quickly carry out digital transformation to improve customer service and efficiency.

The LAR of State Owned Banks before Covid-19, namely 2011 – 2019, varied and decreased slightly. Bank BRI's LAR in 2011 was 11.74% to 9.79% in 2019. In the same period, Bank Mandiri's LAR decreased from 11.45% to 9.62%. Bank BNI from 11.80% to 9.26%, while Bank BTN's LAR stagnated from 19.45% to 19.54%. Although there was a slight decrease in the LAR, the LAR of the State Owned Banks was still relatively high. During the Covid-19 pandemic in 2020, all State Owned Bank LARs crawled up due to the large number of credit restructurings carried out in order to save debtors affected by COVID-19.

NIM and BOPO have a very large effect on the profitability of State Owned Banks. The magnitude of the squared multiple correlation from the company's external factors, namely the BI reference interest rate and economic growth as well as the company's internal factors, namely NIM, BOPO and LAR to profitability, is 0.969. This shows that 96.90% profitability performance can be explained by the BI referenc interest rate variable, economic growth, NIM, BOPO and LAR, while the remaining 0.031 or 3.10% is explained by other variables not examined.

## 2. The Influence of the Company's External and Internal Factors on Dividend Policy

The company's external factors, namely the BI reference interest rate and economic growth, as well as the company's internal factors, namely NIM and LAR, have an effect on the dividend policy of State Owned Banks as presented in Table 3.

**Table 3. The Influence of the Company's External and Internal Factors on Dividend Policy**

Hypothesis	variable	Estimate	CR	P	Remark
H6	DPR < --- SBABI	-0.367	-4,875	***	Significant
H7	DPR < --- PEK	-0.445	-4,155	***	Significant
H8	DPR < --- NIM	0.277	3,268	0.001	Significant
H9	DPR < --- BOPO	-0.172	-1.364	0.173	Not Significant
H10	DPR < --- LAR	-0.391	-2,595	0.009	Significant

Source: AMOS data processing results

BI reference interest rate has a negative effect on dividend policy. A high central bank reference interest rate will increase the cost of funds and credit risk which will have an impact on decreasing bank profitability (Geng et al., 2016) and (Al-Homaidi et al., 2018). The decline in bank profitability, of course, has an impact on the small amount of profit that can be shared. This is in accordance with the results of research from Goe (2016), showing that interest rates have a negative effect on the company's dividend policy.

During the study period, economic growth varied each year and decreased slightly. In 2011 Indonesia's economic growth was 6.43% and decreased to 4.97% at the end of 2019 and in 2020 during the Covid-19 Pandemic it fell again and even had minus 5.32% in Q2/2020 and at the end of 2000 is still minus 2.07%. The decline in economic growth did not necessarily decrease their dividend policy, even some State Owned Banks, especially BRI and Mandiri, continued to increase their dividend policy by up to 60% - 65%. Economic growth has a negative effect on dividend policy, strengthening the results of research from Abor and Bokpin (2010) and Nadeem et al. (2018).

Increasing NIM will increase profitability. The increase in profitability, the greater the profit that can be shared, which results in a larger dividend policy. The results of this study contradict the results of research conducted by Rahma and Syarif (2020) and Yesyurun (2021), that NIM has a negative effect on dividend policy.

There is an increase in the BOPO of State Owned Banks, but their dividend policy (DPR) continues to increase, such as BRI and Mandiri, but there are also relatively stagnant and even declining in recent years such as Bank BNI and Bank BTN. This means that the rise and fall of BOPO does not affect the size of the dividend payout ratio. The opposite result is obtained from Purba (2019)'s research, which shows that BOPO has a positive effect on the company's dividend policy.

An increase in LAR will reduce NIM and increase BOPO, resulting in a decrease in profitability. The decline in profitability certainly has an impact on the least profit that can be shared with shareholders. This is in accordance with the results of research from Ahmad and Muqoddas (2016), Silalahi et al. (2020) and Budagaga (2020), show that credit quality has a negative effect on the company's dividend policy.

The magnitude of the squared multiple correlation from the company's external factors, namely the BI reference interest rate and economic growth as well as the company's internal factors, namely NIM, BOPO and LAR to dividend policy (DPR), is 0.430. This shows that 43.00% of the dividend policy (DPR) can be explained by the BI reference interest rate, economic growth, NIM, BOPO and LAR variables, while the remaining 0.570 or 57.00% is explained by other variables not examined.

### 3. The Influence of Company External Factors, Company Internal Factors, Profitability and Dividend Policy on Market Capitalization

The company's external factors, namely economic growth, and as well as company's internal factors, namely LAR, BOPO, profitability and dividend policy affect the market capitalization of State-Owned Banks as presented in Table 4.

**Table 4. Influence of Company External Factors, Company Internal Factors, Profitability and Dividend Policy on Market Capitalization**

Hypothesis	variable	Estimate	CR	P	Remark
H11	KP < --- SBABI	-0.092	-1.809	0.070	Not Significant
H12	KP < --- PEK	-0.237	-3.423	***	Significant
H13	KP < --- NIM	-0.087	-0.898	0.369	Not Significant
H14	KP < --- BOPO	0.461	2.328	0.020	Significant
H15	KP < --- LAR	-0.288	-2.945	0.003	Significant
H16	KP < --- ROA	0.728	3.058	0.002	Significant

H17	KP < --- DPR	0.632	11.335	***	Significant
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Source: AMOS data processing results

BI reference interest rate and NIM do not directly affect the company's market capitalization, but play a major role in profitability, where profitability has a direct effect on market capitalization. The BI reference interest rate has a negative correlation and does not directly affect the market capitalization of State Owned Banks. The opposite results were obtained by Ellaboudy (2008), Farooq et al., (2016) and Phuong (2020), showing that interest rates have a negative effect on market capitalization. NIM in this study is negatively correlated and has no effect on market capitalization. The opposite result is obtained from Derbali (2011), Al-Muharrami and Murthy (2017) and Nasution and Lingga (2019) that NIM is positively effect with market capitalization. Efficiency (cost to income ratio) has a positive impact on diversification, but has a negative impact on market capitalization (Capraru et al, 2020).

Economic growth has a negative effect on market capitalization. This strengthens the results of research from Boshkovska et al. (2016). The opposite result was obtained by researchers Shahbaz et al. (2016), Negi (2020) and Phuong (2020), show that economic growth has a positive effect on market capitalization.

The increase in LAR will reduce profitability. The decline in profitability has an impact on the development of the company's stock price. Poor credit quality (high LAR), which is indicated by poor credit quality, has a negative effect on market capitalization. This is in accordance with the results of Mohanty's research (2018).

The market capitalization value of a bank is closely related to the level of company profitability, in addition to the influence of other company internal factors. Banks that produce high profitability, generally the value of market capitalization will also be high, and vice versa for banks that produce low profitability, generally the value of market capitalization is also low. So, there is a positive relationship between profitability and the company's market capitalization value. The results of this study consistently strengthen the results of research by Sharma (2018) and Rawlin et al. (2019), shows that profitability has a positive impact on market capitalization.

The market capitalization value of a bank is closely related to the company's dividend policy in addition to the influence of other company internal factors. Some investors will prefer to buy stocks that provide / distribute high dividends. The results of this study indicate that dividend policy has a positive effect on the market capitalization of State Owned Banks. This is in accordance with the bird in the hand theory and strengthens the results of previous studies from Luvembe et al., (2014), Sharma (2018) and Roman (2019).

The magnitude of the squared multiple correlation from the company's external factors, namely the BI reference interest rate and economic growth as well as the company's internal factors, namely NIM, BOPO and LAR as well as ROA and DPR to market capitalization, is 0.771. This shows that 77.10% of market capitalization can be explained by the BI reference interest rate, economic growth, NIM, BOPO and LAR, ROA and DPR, while the remaining 0.229 or 22.90% is explained by other variables not examined.

#### 4. Indirect Effect of Company's External and Internal Factors on Market Capitalization Through Profitability and Dividend Policy

The results of the study indicate that there is a standardized indirect effect of the company's external factors, namely the BI reference rate and economic growth as well as the company's internal factors, namely NIM, BOPO and LAR on market capitalization through profitability and dividend policy as presented in table 5.

**Table 5. Indirect Effects of the Company's External and Internal Factors on Market Capitalization Through Profitability and Dividend Policy**

KP	LAR	BOPO	NIM	PEK	SBABI	DPR	ROA
Direct effects	-0.288	0.461	-0.087	-0.237	-0.092	0.632	0.728
Indirect effects	-0.143	-0.681	0.444	-0.238	-0.193	.000	0.000
Total effects	-0.431	-0.220	0.357	-0.475	-0.285	0.632	0.728

Source: AMOS Data Processing Results

From Table 5, it can be seen that the indirect effect of the BI reference interest rate, economic growth, NIM and BOPO is greater than the direct effect. This proves that profitability and dividend policy are able to increase the influence of the BI reference interest rate, economic growth, NIM and BOPO on the market capitalization of State Owned Banks.

## CONCLUSSION AND RECOMMENDATION

### Conclusion

1. The profitability of State Owned Banks is influenced by the company's external factors, namely the BI reference interest rate and economic growth as well as the company's internal factors, namely Net Interest Margin (NIM), operational costs to operating income (BOPO) and Loan at Risk (LAR). BI reference interest rate, economic growth, NIM and LAR have a positive effect on the profitability of State Owned Banks, while the BOPO has a negative effect. The biggest influence on the profitability of State Owned banks are NIM and BOPO.
2. The dividend policy of State Owned Banks is influenced by the company's external factors, namely the BI reference interest rate and economic growth as well as the company's internal factors, namely Net Interest Margin (NIM) and Loan at Risk (LAR). The BI reference interest rate, economic growth and LAR have a negative effect on dividend policy, while the NIM has a positive effect.
3. The market capitalization of State Owned Banks is influenced by the company's external factors, namely economic growth, the company's internal factors, namely BOPO, Loan at Risk (LAR), profitability and dividend policy. Economic growth and LAR have a negative effect on the market capitalization of State Owned Banks, while BOPO, profitability and dividend policy have a positive effect.
4. Profitability and dividend policy are able to increase the influence of BI reference interest rate, economic growth, Net Interest Margin (NIM) and operating costs to operating income (BOPO) on the market capitalization of State Owned Banks.

### Recommendation

1. The biggest influence that affects the profitability of State Owned Banks is the acquisition of Net Interest Margin (NIM) and operating costs on operating income (BOPO). For this reason, State Owned Banks are advised to maintain good loan productivity by credit expansion with the principle of high prudence and if the realized loan has entered the Loan at Risk (LAR) category so that corrective measures are taken as soon as possible, such as: restructurisation. Furthermore, looking for new sources of income beyond loan interest and accelerating digital transformation.
2. Loan at Risk (LAR) besides having an effect on market capitalization, it also has a direct effect on profitability and dividend policy. For this reason, future LAR handling must be integrated and supported by technology (digitalization) to be more effective.
3. The dividend policy has been able to boost the market capitalization value of State Owned Banks. For this reason, State Owned Banks must pay close attention to their dividend policy, of course while paying attention to the company's internal needs for expansion.



4. For investors, this research is expected to be a reference in making an investment decision about the factors that affect the capitalization value of a company.
5. This research is expected to be able to redevelop concepts or theories that support the development of science, especially Loan at Risk (LAR) by researching more broadly such as LAR coverage, marginal LAR, and others.

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