



# Market Capitalization and Financial Performance: Evidence from Banking Listed Company in Indonesia

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Abstract										
Keywords:	Market capitalizati	on is a vital performance tool for	or the banking compa	nies, the current						
Market	profit and the futur	e earnings of the banks also hav	ve an important impa	ct on the market						
Capitalization	capitalization of th	ne banks. This study aimed to	determine Return c	on Equity effect,						
ROE; CAR; NPL;	Capital Adequacy	Ratio, Non Performing Loan a	and Firm Size on the	banking sectors						
Firm Size	market capitalization	on listed on the Indonesia Stoc	k Exchange 2010-202	20. This research						
	method used mult	The second line model of the	with data processing	, using the tools						
	Stata 15 program.	The sampling method of this	research used a pur	Equity Capital						
	Adequacy Ratio	Non Performing Loan and F	irm Size had a sign	ificant effect on						
	market capitalizati	on with a significance value of	<sup>2</sup> 0.0%. The test resul	ts with the t-test						
	show that Capital	Adequacy Ratio and Firm Siz	e has a significant p	ositive effect on						
	market capitalization	on with a significance level less	than 0,0%.							
	Abstrak									
Kata kunci:	Kapitalisasi pasar ad	dalah alat kinerja penting bagi p	erusahaan perbankan,	laba saat ini dan						
Kapitalisasi Pasar;	pendapatan masa de	epan bank juga memiliki dampa	k penting pada kapita	lisasi pasar bank.						
ROE; CAR; NPL;	Penelitian ini bertuju	an untuk mengetahui pengaruh R	eturn on Equity, Capita	l Adequacy Ratio,						
Ukurran	Non Performing Loa	n dan Firm Size pada kapitalisasi	pasar sektor perbankar	n yang terdaftar di						
Perusahaan	Bursa Efek Indonesia	tahun 2010-2020. Metode peneliti	an ini menggunakan ar	ialisis regresi linier						
	berganaa aengan per	igolanan aata menggunakan tools	program Stata 15. Me moling Hasil uii Ema	etode pengambilan						
	secara simultan Retu	menggunukun ternik purposive su rn on Fauity Canital Adeauacy Re	ntpung. 11usu uji 1º me itio. Non Performing I (	nunjukkun bunwu van dan Firm Size						
	hernenoaruh sionifik	pan terhadan kanitalisasi nasar	denoan nilai sionifika	ansi 0.0% Hasil						
	pengujian dengan uit	i t menunjukkan bahwa Capital A	dequacy Ratio dan Uk	uran Perusahaan						
	berpengaruh positif	signifikan terhadap kapitalisasi	pasar dengan tingkat s	ignifikansi kurang						
	dari 0,0%		0 0							

# 1. Introduction

The recent boom in technology companies has made the stock market capitalization of the issuers of the technology sector on the international exchange very fast. Apple recorded the highest market capitalization on the US stock exchange, with a value of US\$ 2.02 trillion (Andrea, 2021). However, in Indonesia, issuers with large market capitalization are dominated by the banking sector, where 5 out of 10 extensive cap stocks are shares of issuers in the banking sector. The most considerable market capitalization value is still led by PT. Bank Central Asia, Tbk (BBCA) during the last ten years (Puspitasari, 2022). Even at the end of 2021, BBCA's market capitalization value is predicted to touch Rp. 1,000T. BBCA's achievement this time beat the market capitalization at the end of 2020, which was Rp. 834.57T. So it is very feasible for this issuer to be included in the bluechip company cluster, which fundamentally can provide huge profits.

BBCA's success was also followed by several state-owned banking issuers, where PT. Bank Rakyat Indonesia, Tbk. (BBRI) maintains its position below BBCA with a market capitalization of Rp. 648.67T. This achievement has beaten the market capitalization value at the end of 2020 by Rp. 514.35T because, since the beginning, BBRI's shares have strengthened 6.31% and in the last week green at 3.88%. The next position is PT. Bank Mandiri, Tbk. (BMRI) with a market capitalization of Rp. 331.33T. This amount has also exceeded the market capitalization realization in the previous year of Rp. 295.16T. The final position is PT. Bank Negara Indonesia, Tbk. (BBNI) with a market capitalization of Rp. 124.48T and exceeded the achievement in 2020 with a capitalization value of Rp. 115.15T.

The intense competition in market capitalization indicates that the banking sector has made the capital market a space to gain access to funding and attract investors. According to Gianfrate and Gouigoux (2015), the larger the private equity fund in the bank, the more influential the company's operations would be. Investors can consider companies with high market capitalization values to invest in them.

Market capitalization is an aggregate measure of a company, where the level of market capitalization is highly dependent on the outstanding share released in the market. Figure 1 illustrates the development of Indonesian banking capitalization over the last ten years. This signals that banking stocks in the big cap ranks are in extreme condition. In addition, banking market capitalization is also strongly influenced by public/community sentiment; for example, banking consistency in dividend distribution will positively increase the level of banking market capitalization. As trust agents for the public, banks always prioritize the precautionary principle in operational activities, both in capital market activities and in the real sector. As agents of development, banks are required to maintain their financial performance in prime condition, which will later be used as the basis for decisions for stakeholders, without exception for investors.

4 Banks with The Largest Market Cap



Figure 1. Market Capitalization Development of Top 4 Indonesian Banking in 2010-2020 Source: Indonesian Stock Exchange, 2021

This is in line with the signaling theory, which asserts that investors consider information related to profitability, solvency, liquidity, and even the company's ability to manage its assets. As a measure of profitability, Return On Equity / ROE is used to assess the company's ability to earn profits in a certain period. This ratio also reflects the effectiveness of the company's management, which can be shown from the profit made from sales or investment income. According to Sufian and Habibullah (2010) concluded that income diversification has a positive effect on bank profitability, so that stock prices will also increase, and market capitalization will automatically increase.

Capital Adequacy Ratio / CAR is one indicator in assessing a bank's health. Based on Bank Indonesia (BI) regulations, a bank declared a healthy bank must have a CAR of at least 8%. From an investor's point of view, the higher the CAR value, the higher the bank will protect against possible losses due to risky assets. Because investors generally avoid the too high risk, a high CAR value will make the stock more attractive to investors, causing stock prices to rise. Again, the increase in stock prices will have implications for obtaining higher market capitalization, and CAR has no impact on stock returns in the banking sector (Qurashi & Zahoor, 2016)

Banks must pay attention to internal conditions to represent the health of a bank's assets, one of which can be assessed from the NPL (Non-Performing Loan). NPL is a ratio to measure non-performing loans compared to total loans. The primary source of income for banks is interest income from lending. The risk of bad credit is considerable, mainly since banks use external financing sources in lending; therefore, Bank Indonesia as the banking supervisory authority has set the maximum NPL ratio at 5% to maintain banking stability and health. The higher the NPL will impact the health condition of the bank because it cannot receive back the money that has been disbursed. As a result, the bank will suffer losses. In their research Yurttadur et al. (2019) found that NPL significantly impacts the banking sector, capital adequacy, asset quality, and profitability.

Firm size could be one of the most important factors which affect firm performance. In common sense, big firms are supposed to be stronger than the small ones. By their large capacity, big companies have the better access to capital market to fulfil their financing needs (Prasetyantoko & Parmono, 2009). Firm size is reflected by the value of total assets stated company's balance sheet. The greater amount of total assets, the larger the size of company, and vice versa. The size of company may affect the company's operating capabilities that will affect the share returns of companies (Sudibyo & Basuki, 2017).

This study tries to find answers to problems in market capitalization and identify variables that have a significant impact on fluctuations in market capitalization values in the banking sector (Figure 2). The discrepancy between the theory and several existing empiricists, it is very interesting to analyze the relationship between the financial performance of the banking sector and its contribution to increasing market capitalization.





# 2. Literature Review

One of the main objectives of financial analysis is precisely to identify a relationship between changes in the financial trend and the companies performance (A. S. Sultan, 2014). However, the relationship between companies profits and the price of shares can be difficult: high profits do not necessarily mean a high share price, and so large losses do not always lead to low share price. Undoubtedly the price of shares would be explained not only by the current profits but also promise of future earnings. Furthermore, signalling theory can be applied to explain this relationship. Companies with high value management created from assets formed from the capital and resources owned by the company will give a positive signal to investors to increase the return on their investment (Anam et al., 2011). The companies with good values are likely to signal their values with more voluntary disclosure. Investors, financial managers and top executives responsible for their stock price need to focus on presidential signalling as these directly affect market volatility. In particular, investors and financial managers can predict stock price volatility based upon signals from the president (Yasar et al., 2020).

Market Capitalization are the most basic classification when referring to investment managers and the stocks they own. The Market Capitalization of a company is arrived at by multipliying the number of outstanding shares of common stock in that company by its current market price per share to arrive at the total value of all shares outstanding (Imperiale, 2005; Widiatmoko et al., 2020). Although other metrics such as total assets, sales and earnings are also used to measure a firm's size, but market capitalization is the only market based metric (Zhou & Shon, 2012).

Market Capitalization is the value of public company in the stock market, based on the current share price and the total of number of outstanding shares of a company. Market Capitalization plays an important role in determining the size of company, including for banking industries. It gives an investors an insight and signal to the future prospects of the company an wether or not they should invest (Kumar & Kumara, 2020; Pavone, 2019). It also lets us know how much an investor is willing to pay for the shares of the company.

Market Capitalization gives a clear picture of company's value, the risk involved and helps diversifying portfolios with company of different sizes. The Market Capitalization of a company determines which broad category of publicly traded company, and devided by:

- (i) Large Cap: these are fully fledged, developed, and well-known companies within established industries with a market value of \$10 billion or more. Large cap stocks are likely to act as leader and major players in their industries, with higher sales and profits, more employees, and a larger market share than their competitors and they tend to grow at a slower pace.
- (ii) Mid-Cap : these are established companies whose industries are expected to experience rapid growth with a market value of between \$2 billion and \$10 billion
- (iii) Small-Cap: these are young companies that serve emerging industries with a market value less than \$2 billion. Small cap stocks, tend to be younger nimbler and full of both potential and risks.

Market capitalization is not the same thing as shareholder's equity. Since share are owned by investors and not the company, and market capitalization changes with stock's price. Equity changes with the addition of profits. As a general rule, the greater dollar value of market capitalization, the more stability and less risk is involved with owning shares. The key issue about capitalization is that the larger number (price per share multiplied by shares outstanding), the more stability you are likely to find in the investment (Thomsett, 2015).

The company which large cap stocks are more closely monitored by investors and regulators due to their influence on the overall economy and the investment dollars they absorb. They also have a large sell side analyst following, which ensures that they are very knowledgeable information intermediaries that are constantly monitoring ang publishing their thoughts and opinions aboute the companies. This implies that large cap stocks are less likely to surprise investors duting their earnings announcement because much of the information that the company releases during the announcement has already trickled into the marketplace. On the other hand, small cap stocks companies are often "off the radar", have a very thin analyst following and hence more likely to surprise investors with the information contained in their earnings announcement (Zhou & Shon, 2012).

# 3. Method

The population in this study are all banking sector companies listed on the Indonesia Stock Exchange (IDX) from 2010 to 2020, as many as 36 companies. The sampling technique used is purposive sampling, namely companies included in the big cap category (with a market capitalization value above Rp. 10T). Only four banks meet this criterion : PT. Bank Central Asia, Tbk (BBCA), PT. Bank Rakyat Indonesia, Tbk (BBRI), PT. Bank Mandiri, Tbk (BMRI), and PT. Bank Negara Indonesia, Tbk (BBNI). The research approach used is a quantitative approach by exposing data measurements and testing hypotheses. This quantitative approach uses the linear regression method of panel data. The data used cover the period 2010-2020 sourced from the Annual Reports of each bank and uses the Stata 15 tool. The panel data analysis model built is:

(1)

 $Yit = \alpha it + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + e_{it}$ 

- Yit : market capitalization of company i year t
- $X_1$  : ROE of company-i year-t
- $X_2$  : CAR of company-i year-t
- $X_3$  : NPL of company-i year-t
- $X_4$ : Firm Size of company-i year-t
- $\alpha$  : konstanta
- $\beta$  : coefficient estimate
- e : standart eror

Through the panel data regression model above, the researcher wants to get a realistic answer to the designed hypothesis, namely:

H<sub>1</sub>: it is assumed that financial performance (ROE, CAR, NPL, and Firm Size) have a significant effect on the capitalization of the banking sector simultaneously

H<sub>2</sub>: it is assumed that ROE has a significant effect on the capitalization of the banking sector

 $H_3$ : it is assumed that CAR has a significant effect on the capitalization of the banking sector  $H_4$ : it is assumed that NPL has a significant effect on the capitalization of the banking sector  $H_5$ : it is assumed that Firm Size has a significant effect on the capitalization of the banking sector sector

The steps that must be taken before answering the hypothesis are estimating the panel data regression model, regression model selection, classic assumption test, and hypothesis test. The estimation of the panel data regression model is divided into three models, namely: Comment Effect Model, Fixed Effect Model, and Random Effect Model. They tested the selection of the best model by performing the Chow Test, Hausman Test, and Lagrange Multiplier Test. Next is the classical assumption test is met, then the regression estimation with Ordinary Least Square (OLS) will be BLUE (Best Linear Unbiased Estimator), meaning that decision making through the F test and T-test should not be biased.

# 4. Result and Discussion

This study aims to examine and analyze the effect of ROE, CAR, NPL, and Firm Size variables on the market capitalization of the banking sector. Before testing the hypothesis, it is necessary to carry out the following stages:

a. Identification of imported data in Stata program and obtained strongly balanced results as shown in the following table:

```
egen Prsh = group(Perusahaan)
sort Prsh Tahun
tsset Prsh Tahun
    panel variable: Prsh (strongly balanced)
    time variable: Tahun, 2010 to 2020
        delta: 1 unit
```

b. Estimating Panel Data Regression Models

Selection of the best model by comparing three tests (Chow Test, Hausman Test, and Lagrange Multiplier Test) and the following results are obtained :

1) Chow Test

```
testparm i.Prsh
( 1) 2.Prsh = 0
( 2) 3.Prsh = 0
( 3) 4.Prsh = 0
F( 3, 36) = 9.13
Prob > F = 0.0001
```

The Chow Test is used to compare CEM and FEM, and the results are Prob > F = 0.0001, so H<sub>0</sub> is rejected and H<sub>1</sub> is accepted, which means that the Fixed Effect Model is more acceptable in this test.

2) Hausman Test

chi2(4) = (b-B)'[(V\_b-V\_B)^(-1)](b-B) = 25.04 Prob>chi2 = 0.0000 (V\_b-V\_B is not positive definite) The Hausman test is used to compare REM and FEM and the results obtained are Prob > chi2 = 0.0000, so  $H_0$  is rejected and  $H_1$  is accepted, which means that the Fixed Effect Model is more acceptable in this test.

#### 3) LM Test

Breusch	and	Pagan	Lagr	angi	an mult	tiplier	test	for	random	effects
	Kapi	talis	asiPa	sar[	Prsh,t	] = Xb	+ u[P	rsh]	+ e[Pr	sh,t]
	Esti	mated	resu	lts:						
		-				Var	sd	= squ	rt(Var)	
		Kaj	pital	~r	3.6	2e+10		19025	57.9	
				e	7.01	8e+09		84140	0.93	
				u		0			0	
	Test	: V	ar(u)	= 0						
					chil	bar2(01	) =	0	.00	
					Prob >	chibar	2 =	1.00	000	

The Lagrange Multiplier Test is used to compare CEM and REM, and the results are Prob > chibar2 = 1.0000, so H<sub>0</sub> which states the Comment Effect Model is accepted and H<sub>1</sub> is rejected.

Based on the three tests above, it can be concluded that Fixed Effect Model is the best model on these regression. It is evident from the results of the Chow Test and Hausman Test less then 5%.

# c. Classical Assumption Test

In panel data, the classical assumption test used is the data normality test, multicollinearity test, and heteroscedasticity test, and the following results are obtained:

1) Normality test

simpan_dat~l	44 0.	95290	2.004	1.471	0.07059
Variable	Obs	W	V	Z	Prob>z
	Shapiro-Wilk	W test	for normal	data	

The data normality test used is the Shapiro-Wilk W test, and the result is that Prob > z = 0.07059 (residual data are normally distributed).

2) Multicollinearity test

. vif

VIF 1/V	Variable
2.28 0.4392 1.94 0.5149 1.94 0.5150 1.28 0.7824	CAR Size ROE NPL
1.86	Mean VIF

Multicollinearity test, with VIF value of each variable < 10 or with tolerance value > 0.1, concluded that there is no indication of multicollinearity in the model taken.

## 3) Heteroscedasticity test

Model 2.5 Residual 4.4		SS	df		MS	Number of obs		=	44
		5886e+21 4909e+22	1 42	2.588 1.069	6e+21 3e+21	F(1, 42) Prob > F R-squared	red	$= 2.42 \\ = 0.1272 \\ = 0.0545 \\ = 0.0320$	
Total	4.1	7498e+22	43	1.104	6e+21	Root MSE	reu	= 3	.3e+10
residual_kuad	irat	Coef.	Std.	Err.	t	P> t	[95%	Conf.	Interval]
yprediksi_kuad	irat cons	.0849305 1.27e+10	.054	5854 e+09	1.56 1.74	0.127 0.089	025 -2.04	2273 e+09	.1950882 2.75e+10

The heteroscedasticity test used in this study is the Koenker-Basset test, and the results obtained are Probs> F = 0.1272, which means that there is no indication of heteroscedasticity or the variance of variables in the regression model is the same.

#### d. Hypothesis Test

Fixed-effects (within) regression Group variable: <b>Prsh</b>					of obs = of groups =	44 4
R-sq: within = between = overall =	= 0.7441 = 0.1011 = 0.4423			Obs per	group: min = avg = max =	11 11.0 11
corr(u_i, Xb)	= -0.3050			F( <b>4,36</b> ) Prob > F	; =	26.17 0.0000
Kapitalisa~r	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
ROE CAR NPL Size _cons	9650.678 30350.17 39086.06 238369.1 -5446542	5494.648 7384.514 27589.37 93333.42 2002656	1.76 4.11 1.42 2.55 -2.72	0.088 0.000 0.165 0.015 0.010	-1492.985 15373.68 -16867.76 49080.15 -9508115	20794.34 45326.66 95039.89 427658.1 -1384968
sigma_u sigma_e rho	143131.36 84140.93 .74317553	(fraction	of varian	nce due to	ou_i)	

The impact of financial perfomance on market capitalization, can be drawn as follows:

- a. F test results, namely Prob > F = 0.0000, indicate that financial performance (ROE, CAR, NPL, and Firm Size) have a simultaneous effect on market capitalization
- b. Based on T-test results, ROE with P-value > |t| = 0.088; so it can be concluded that ROE has no effect on market capitalization partially
- c. CAR with T-test results P-value > |t| = 0.0000; so it can be concluded that CAR partially affects market capitalization, as well as the dominant variable that affects market capitalization
- d. Based on T-test results, NPL with P-value > |t| = 0.165; so it can be concluded that NPL has no effect on market capitalization partially
- e. In line with CAR, the Firm Size variable partially affects market capitalization with a P-value > | t | = 0.015

Based on Estimating Panel Data Regression Models, it was concluded that the Fixed Effect Model was the best choice in this study. Keep in mind that the Fixed Effect Model in the panel data performs tests on individual intercepts and time intercepts. Stata 15 testing through the Fix Effect Model approach in this study obtained the results that:

a. F test

F test results show Prob > F = 0.0000, or sig level F < 0.005, indicating that ROE, CAR, NPL, and Firm Size simultaneously affect market capitalization in the banking sector. So that the first hypothesis in this study is proven true. Positive values in F statistics indicate that ROE, CAR, NPL, and Firm Size are directly proportional to market capitalization or, in other words, when ROE, CAR, NPL, and Firm Size increase, the market capitalization of the banking sector also increases.

b. T Test

The t-statistic value of each variable in the table is positive, meaning that partially ROE, CAR, NPL, and Firm Size are directly proportional to the market capitalization of the banking sector. However, only two variables, namely Capital Adequacy Ratio and Firm Size, partially have a significant effect on market capitalization, with P value > | t | < 0.05. Of the two, CAR is the variable that partially has the most substantial/most dominant effect with a sig level of 0.000. This also answers the second hypothesis in this study that CAR has the most dominant impact on market capitalization, which is proven to be true.

i.Prsh	_IPrsh_1-	4	(naturally	<pre>coded;</pre>	_IPrsh_	1 omit	tted)
Source	SS	df	MS	Numb	er of ob	s =	44
				- F(7,	36)	=	26.27
Model	1.3016e+12	7	1.8595e+11	. Prob	) > F	=	0.0000
Residual	2.5487e+11	36	7.0797e+09	R-sq	uared	=	0.8363
				- Adj	R-square	d =	0.8044
Total	1.5565e+12	43	3.6198e+10	) Root	MSE	=	84141
Kapitalisa~r	Coef.	Std. Err.	. t	P> t	[95%	Conf.	Interval]
ROE	9650.678	5494.648	1.76	0.088	-1492.	985	20794.34
CAR	30350.17	7384.514	4.11	0.000	15373	. 68	45326.66
NPL	39086.06	27589.37	1.42	0.165	-16867	.76	95039.89
Size	238369.1	93333.42	2.55	0.015	49080	.15	427658.1
IPrsh 2	-242416.9	62972.98	-3.85	0.000	-370	132	-114701.8
IPrsh 3	-322205.8	89948.61	-3.58	0.001	-504	630	-139781.6
IPrsh 4	-271020.5	72120.43	-3.76	0.001	-41728	7.6	-124753.5
_cons	-5237631	1976408	-2.65	0.012	-9245	972	-1229290

#### c. R-squared

The results of the discrimination test ( $R^2$ ) in the table above is R-squared = 0.8363, indicating that the contribution of the independent variables, namely ROE, CAR, NPL, and Firm Size to market capitalization, is 83.63%, and only 16.37% is influenced by other variables outside the regression model building.

Individual intercept values in the Fixed Effect Model differ from one individual. This means that when there is a change in one of the independent variables, the impact on the market capitalization value of each bank will be different, namely:

a.	PT. Bar	nk Central Asia	a, Tbk					
	$Y_{1t} =$	-5237631 +	9650.678ROE <sub>1t</sub>	+	30350.17CAR <sub>1t</sub>	+	39086.06NPL <sub>1t</sub>	+
		238369.1Size	$_{1t} + e_{1t}$					
b.	PT. Bar	ık Rakyat Indo	onesia, Tbk.					
	$Y_{2t} =$	-242416.9 +	9650.678ROE <sub>2t</sub>	+	30350.17CAR <sub>2t</sub>	+	39086.06NPL <sub>2t</sub>	+
		238369.1Size	$_{2t} + e_{2t}$					
c.	PT. Bar	ık Mandiri, Th	k					
	$Y_{3t} =$	-32205.8 +	9650.678ROE <sub>3t</sub>	+	30350.17CAR <sub>3t</sub>	+	39086.06NPL <sub>3t</sub>	+
		238369.1Size	$_{3t} + e_{3t}$					
d.	PT. Bar	nk Negara Indo	onesia, Tbk					
	$Y_{4t} =$	-5237631 +	9650.678ROE <sub>4t</sub>	+	30350.17CAR <sub>4t</sub>	+	39086.06NPL <sub>4t</sub>	+
		238369.1Size	$_{4t} + e_{4t}$					

ROE provides how efficiently banks handle money management, which contributes to its shareholders. Higher the ROE means banks are efficient in generating income and growth from its equity financing (Y. Sultan, 2021). ROE as a profitability ratio indicates the issuer's ability to generate profits, if ROE increases, then market capitalization also increases, and vice versa; in other words, ROE and market capitalization have a unidirectional relationship (Zhou & Shon, 2012). Insignificant results have been observed between ROE and the market capitalization, so the hypothesis is rejected and it is stated no relationship exists between ROE and market capitalization for big cap banking in Indonesia. Current results are not in line with the empirical results because other researchers have found the positive significance between two variables (Al-Nimer, 2017; Almumani, 2018; Putri et al., 2020)

Signaling theory can explain that the signal of a stable customer condition then the debtor will be interested to lend the credit. The assessment of the prospects of the business sector which should really have good prospects so that the possibility of non performing loans is relatively small (Sakti et al., 2017). Conversely, if it has bad prospects it will increase the risk of non performing loans more and more. The more non performing loan, the less opportunity for banks to generate profits, so a high NPL will cause investors to be less interested in buying shares (Sambul, 2016). Lack of interest from investors for stocks will lower stock prices, affecting the market capitalization value. The test results, which show that NPL does not affect banking market capitalization, can be due to the average sample of the research object having the highest proportion of long-term lending, such as housing loans, working capital loans, and investments in SMEs and corporations. In addition, the sample of 4 banks in this study are banks that have a solid liquidity and capital position and have a relationship management team that is grouped based on particular expertise and experience in each field to minimize the risk of bad loans.

# 5. Conclussion

Market capitalization is a vital performance tool for the banking companies, the current profit and the future earnings of the banks also have an important impact on the market capitalization of the banks. The intense competition in market capitalization indicates that the banking sector has made the capital market a space to gain access to funding and attract investors. This study tries to find answers to problems in market capitalization and identify variables that have a significant impact on fluctuations in market capitalization values in the banking sector. The study aimed to identifying the most important factors in financial performance to affect market capitalization, by finding a model that helps to explain the extent of this impact. In addition to this, the study aimed at providing some results and recommendations that would be useful for another researcher to develop this study. Simultaneous test results show that the variables ROE, CAR, NPL, and Firm Size have a significant effect on the market capitalization value of the banking sector on the Indonesia Stock Exchange (IDX) in 2010-2020. With an R-squared value of 83%, this shows that several variables of banking financial ratios have a very large influence on market capitalization. Findings from the regression analysis indicates that the CAR and Firm Size are has been found most significant while other variables were not that much significant.

Of course, research wants to contribute to the object of study or the development of science in general. Based on the results of the research that has been done, it is expected that the banking sector will be able to maintain the achievements that have been achieved in increasing the value of market capitalization. The market capitalization of the banking sector can be increased by increasing CAR and firm value to provide a positive signal to investors.

In a study, there are research limitations. This can be taken into consideration for future researchers to develop it further. This study has not discussed macroeconomic and monetary issues that can affect fluctuations in the market capitalization of the banking sector, such as interest rates and GDP. In addition, the internal management of the banking sector can impact policy and market capitalization so that the intellectual capital and good corporate governance variables, as well as macroeconomic variables can be added for further research.

# Authors' Declaration

#### Authors' contributions and responsibilities

The authors made substantial contributions to the conception and design of the study. The authors took responsibility for data analysis, interpretation and discussion of results. The authors read and approved the final manuscript.

#### Funding

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#### Availability of data and materials All data are available from the authors.

#### **Competing interests**

The authors declare no competing interest.

### Additional information

No additional information from the authors.

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