

**FAKTOR-FAKTOR NU NANGTUKEUN NILAI PAUSAHAAN SARTA  
PANGARUHNA KANA HARGA SAHAM KALAWAN DIMONERASI KU  
STRUKTUR MODAL  
(Studi dina Bank Nu Kaasup Papan Utama di Bursa Éfék Indonésia  
Periode 2020–2024)**

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**ABSTRAK**

**ANUM NURYANI NPM. 209010059. “Faktor-Faktor Nu Nangtukeun Nilai Pausahaan Sarta Pangaruhna Kana Harga Saham Kalawan Dimonerasi Ku Struktur Modal (Studi dina Bank Nu Kaasup Papan Utama di Bursa Éfék Indonésia Periode 2020–2024)”, dina pangapingan Prof. Dr. H. Azhar Affandi, SE., M.Sc salaku Promotor sarta Assoc. Prof. Dr. Hj. Liza Laila Nurwulan, S.E., M.Si., Ak., CA. salaku Co-Promotor.**

Bank-bank papan utama di Bursa Éfék Indonésia miboga fundamental anu kuat, ditingalikeun ku ningkatna aset jeung profitabilitas salila période 2020–2024. Sanajan kitu, kenaekan kinerja éta henteu dibarengan ku kanaékan nilai pausahaan anu kaciri tina turunna Tobin’s Q, sahingga némbongkeun ayana kateu saluyuan antara fundamental pausahaan jeung réson pasar. Panalungtikan ieu miboga tujuan pikeun nganalisis pangaruh *Capital Adequacy Ratio (CAR)*, *Return on Assets (ROA)*, ukuran pausahaan (*Size*), jeung kurs kana nilai pausahaan Pangaruhna Kana Harga Saham Kalawan Dimonerasi Ku Struktur Modal (Studi dina Bank Nu Kaasup Papan Utama di Bursa Éfék Indonésia Periode 2020–2024), kalayan *Non-Performing Loan (NPL)* minangka variabel kontrol.

Panalungtikan ngagunakeun pendekatan kuantitatif kalayan data sékundér. Populasi dina ieu panalungtikan ngawengku 29 pausahaan perbankan anu kadaptar dina papan utama BEI. Sampel anu digunakeun ditangtukeun ngaliwatan téhnik purposive sampling nepi ka kapilih 16 pausahaan. Data observasi anu dicangking diolah ngagunakeun parangkat lunak EViews. Analisis data dilakukeun ku métode régresi data panel. Aya lima sub-struktur anu dianalisis, nyaéta sub-struktur I, II, III, IV, jeung V. Unggal sub-struktur ngalaksanakeun uji pamilihan modél, uji asumsi klasik, uji hipotésis, sarta uji kelayakan modél. Dina sub-struktur IV jeung V, panalungtik ngagunakeun *Moderated Regression Analysis (MRA)* kalayan pendekatan régresi data panel.

Hasil panalungtikan némbongkeun yén sacara simultan, CAR, ROA, ukuran pausahaan, jeung kurs USD miboga pangaruh signifikan kana nilai pausahaan. Sacara parsial, CAR jeung ROA miboga pangaruh positip sarta signifikan kana nilai pausahaan, ukuran pausahaan miboga pangaruh positip tapi henteu signifikan, sedengkeun kurs USD miboga pangaruh négatif sarta signifikan kana nilai pausahaan. Satuluyna, nilai pausahaan miboga pangaruh positip sarta signifikan kana harga saham. Pangaruh éta tetep signifikan sanggeus mertimbangkeun NPL minangka variabel kontrol. Hasil panalungtikan ogé némbongkeun yén struktur modal mampu ngamoderasi pangaruh nilai pausahaan kana harga saham.

Kecap Konci : CAR, ROA, ukuran pausahaan, kurs USD, NPL, DAR, Tobin's Q, harga saham, MRA, perbankan.

**DETERMINAN NILAI PERUSAHAAN SERTA DAMPAKNYA  
TERHADAP HARGA SAHAM YANG DIMODERASI OLEH  
STRUKTUR MODAL  
(Studi Pada Bank Yang Termasuk Papan Utama Di Bursa Efek Indonesia  
Periode 2020-2024)**

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## **ABSTRAK**

**ANUM NURYANI NPM. 209010059. “Determinan Nilai Perusahaan Serta Dampaknya Terhadap Harga Saham Yang Dimoderasi Oleh Struktur Modal (Studi Pada Bank Yang Termasuk Papan Utama Di Bursa Efek Indonesia Periode 2020-2024)”**, dibawah bimbingan Prof. Dr. H. Azhar Affandi, SE., M.Sc sebagai Promotor dan Assoc. Prof. Dr. Hj. Liza Laila Nurwulan, S.E., M.Si., Ak., CA. Sebagai Co-Promotor.

Bank-bank papan utama di Bursa Efek Indonesia memiliki fundamental yang kuat, ditunjukkan oleh peningkatan aset dan profitabilitas selama periode 2020–2024. Namun, perbaikan kinerja tersebut tidak diikuti oleh peningkatan nilai perusahaan yang tercermin dari penurunan Tobin’s Q, sehingga menunjukkan adanya ketidakkonsistenan antara fundamental perusahaan dan respons pasar. Penelitian ini bertujuan untuk menganalisis pengaruh *Capital Adequacy Ratio (CAR)*, *Return on Assets (ROA)*, ukuran perusahaan (*Size*), dan kurs terhadap Nilai Perusahaan Serta Dampaknya Terhadap Harga Saham Yang Dimoderasi Oleh Struktur Modal (Studi Pada Bank Yang Termasuk Papan Utama Di Bursa Efek Indonesia Periode 2020-2024), dengan NPL sebagai variabel kontrol.

Penelitian menggunakan pendekatan kuantitatif dengan data sekunder. Populasi pada penelitian ini sebanyak 29 perusahaan perbankan yang tercatat pada papan utama di BEI. Sampel yang digunakan diperoleh menggunakan teknik *purposive sampling* sehingga didapatkan sebanyak 16 sampel perusahaan. Data observasi yang didapatkan diolah menggunakan perangkat lunak berupa Eviews. Penelitian ini dianalisis menggunakan regresi data panel. Terdapat 5 (lima) sub struktur yang dilakukan yakni sub struktur I, II, III, IV dan V. Setiap sub struktur dilakukan pengujian pemilihan model, asumsi klasik, uji hipotesis dan kelayakan model. Pada sub struktur IV dan V peneliti menggunakan *Moderated Regression Analysis (MRA)* dengan pendekatan regresi data panel.

Hasil penelitian menunjukkan bahwa secara simultan, CAR, ROA, ukuran perusahaan, dan kurs USD berpengaruh signifikan terhadap nilai perusahaan. Secara parsial, CAR dan ROA berpengaruh positif dan signifikan terhadap nilai perusahaan, ukuran perusahaan berpengaruh positif namun tidak signifikan, sedangkan kurs USD berpengaruh negatif dan signifikan terhadap nilai perusahaan. Selanjutnya nilai perusahaan berpengaruh positif dan signifikan terhadap harga saham. Pengaruh tersebut tetap signifikan setelah mempertimbangkan NPL sebagai variabel kontrol. Hasil penelitian juga menunjukkan bahwa struktur modal yang mampu memoderasi pengaruh nilai perusahaan terhadap harga saham.

Kata Kunci : CAR, ROA, ukuran perusahaan, kurs USD, NPL, DAR, Tobin's Q, harga saham, MRA, perbankan

**DETERMINANTS OF FIRM VALUE AND THEIR IMPACT ON STOCK  
PRICES MODERATED BY CAPITAL STRUCTURE  
(Study on Banks Listed on the Main Board of the Indonesia Stock  
Exchange for the Period 2020–2024)**

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**ABSTRACT**

***ANUM NURYANI NPM. 209010059. “Determinants of Firm Value and Their Impact on Stock Prices Moderated by Capital Structure (Study on Banks Listed on the Main Board of the Indonesia Stock Exchange for the Period 2020–2024)”***, under the supervision of ***Prof. Dr. H. Azhar Affandi, S.E., M.Sc as Promotor and Assoc. Prof. Dr. Hj. Liza Laila Nurwulan, S.E., M.Si., Ak., CA as Co-Promotor.***

*Main-board banks on the Indonesia Stock Exchange have strong fundamentals, demonstrated by increasing assets and profitability during the 2020–2024 period. However, this improved performance was not accompanied by an increase in firm value, as reflected in a decrease in Tobin's Q, indicating an inconsistency between company fundamentals and market response. This study aims to analyze the effect of the Capital Adequacy Ratio (CAR), Return on Assets (ROA), company size, and exchange rate on Firm Value and Their Impact on Stock Prices Moderated by Capital Structure (Study on Banks Listed on the Main Board of the Indonesia Stock Exchange for the Period 2020–2024), with Non-Performing Loans (NPL) as a control variable.*

*The study employed a quantitative approach with secondary data. The population consisted of 29 banking companies listed on the main board of the Indonesia Stock Exchange. The sample was obtained using a purposive sampling technique, resulting in 16 companies for study. The obtained observational data was processed using Eviews software. This study was analyzed using panel data regression. There are 5 (five) sub-structures carried out, namely sub-structures I, II, III, IV and V. Each sub-structure is tested for model selection, classical assumptions, hypothesis testing and model feasibility. In sub-structures IV and V, the researcher uses Moderated Regression Analysis (MRA) with a panel data regression approach.*

*The results show that simultaneously, CAR, ROA, firm size, and the USD exchange rate have a significant effect on firm value. Partially, CAR and ROA have a positive and significant effect on firm value, firm size has a*

*positive but insignificant effect, while the USD exchange rate has a negative and significant effect on firm value. Furthermore, firm value has a positive and significant effect on stock prices. This effect remains significant after considering NPL as a control variable. The results also indicate that capital structure is able to moderate the effect of firm value on stock prices.*

*Keywords: CAR, ROA, firm size, USD exchange rate, NPL, DAR, Tobin's Q, stock price, MRA, banking*

## Firm Value Determinants and Their Implications for Stock Prices: Evidence from Main Board Banks in Indonesia

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### ABSTRACT

This study aims to analyze the effect of capital adequacy (Capital Adequacy Ratio/CAR), profitability (Return on Assets/ROA), firm size (assets), and market risk (USD exchange rate) on firm value (Tobin's Q) and their impact on stock prices of banks listed on the Main Board of the Indonesia Stock Exchange during the 2020–2024 period. This study was analyzed using panel data regression involved model selection testing, classical assumption testing, hypothesis testing, and model feasibility testing. The results show that simultaneously, CAR, ROA, firm size, and the USD exchange rate have a significant effect on firm value. Partially, CAR and ROA have a positive and significant effect on firm value, firm size has a positive but insignificant effect, while the USD exchange rate has a negative and significant effect on firm value. Furthermore, firm value has a positive and significant effect on stock prices.

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## **INTRODUCTION**

The banking industry has a strategic role in the financial system and the national economy. This makes the performance and sustainability of banks a matter of concern for regulators, investors, and the public. Banks are required to conduct their business activities based on prudential principles to maintain public trust and the stability of the financial system. Compliance with banking regulations not only affects the operational stability of banks but also has direct implications for investors' perceptions in the capital market. Moreover, banks are not only required to adhere to prudential banking principles but are also obliged to consider the interests of investors as shareholders. Compliance with prudential principles and good corporate governance as mandated by laws and regulations will create a positive perception of the bank's quality and prospects. This perception is subsequently reflected in the stock price, which serves as an indicator of the market's assessment of the bank's performance, stability, and sustainability in the future. Bank stock prices are not merely the result of market mechanisms (capital markets) but also a reflection of the bank's fundamental performance.

An investor who has an interest in a company's stock essentially signals that the company has high value. Within the framework of the theory of the firm, the main goal of a company is to maximize its value (Wiyono, 2017). Jensen and Meckling (1976) also emphasized that company operations are carried out to obtain marginal profits or the present value of the cash flows generated. The value of a company becomes an important indicator for investors because it reflects perceptions of the company's performance and future prospects. Thus, the value of a company serves as a primary reference in investment decision-making, as it represents the potential long-term profits that an investor can obtain.

In the banking industry, one of the fundamental indicators that plays an important role in shaping investor perception is the Capital Adequacy Ratio (CAR). CAR represents the level of a bank's capital adequacy in bearing the risk of risk-weighted assets (RWA). A higher capital adequacy ratio (CAR) increases the company's value (Jagirani, 2023). The higher the CAR, the stronger the bank's capital adequacy structure and the lower the risk of bankruptcy.

In addition to capital adequacy, the level of profitability is also one of the main triggers in determining a company's value. A high level of profitability indicates the bank's ability to generate profit from the assets it manages, thereby increasing market confidence and driving up the company's valuation. The higher the ROA, the more efficiently the bank manages its productive resources, thereby enhancing positive investor perception and ultimately strengthening the company's value. ROA indicates the company's effectiveness in managing assets to generate profit. This support signaling theory, where high profitability serves as a positive signal to investors about the company's future prospects, thereby increasing investment interest and ultimately strengthening the company's value (Dangin, 2024).

Banks with large total assets generally have a wider scale of operations, more service networks, as well as a stronger third-party fund base. Large banks

tend to have broader access to funding as well as higher levels of trust from the public and investors. The larger the total assets owned, the stronger the company's health and performance, thereby increasing investor confidence. Large companies become attractive to investors because they are considered capable of generating more consistent profits and increasing the company's value (Marlisa, 2023).

In addition to the three fundamental variables of capital adequacy, profitability, and company size, macroeconomic variables can also be one of the factors in determining the company's value. One of the macro variables that plays an important role is the USD exchange rate, which reflects the stability of the rupiah exchange rate against the United States dollar. The depreciation of the rupiah has the potential to increase the burden of obligations in foreign currency as well as raise the risk of default, which ultimately lowers the perceived value of the company. Conversely, exchange rate stability can strengthen investor confidence and increase market valuation. Exchange rate fluctuations affect firm value through transaction and economic exposure mechanisms that impact future cash flow expectations, where the appreciation of the domestic currency tends to provide a positive signal for an increase in market price per share (Khan, 2023).

Based on the strategic role of the banking industry in maintaining financial system stability and supporting economic growth, firm value and stock prices become important indicators that reflect market confidence in bank performance and sustainability. Firm value is influenced by various internal and external factors, including capital adequacy, profitability, firm size, and macroeconomic conditions such as the USD exchange rate. Strong capital structure, high profitability, large asset ownership, and stable exchange rates are expected to enhance investor confidence and increase firm value, which in turn may affect stock prices in the capital market.

## **LITERATURE REVIEW**

### *The Effect of Capital Adequacy on Firm Value*

The Capital Adequacy Ratio (CAR) reflects a bank's ability to absorb risk through sufficient capital. According to Mishkin (2019), capital serves as a buffer against credit and market risks, meaning higher CAR strengthens stability and depositor confidence. From a Signaling Theory perspective, strong capital adequacy sends a positive signal to the market, indicating management's ability to sustain operations and reduce bankruptcy risk. In line with the Trade-Off Theory, optimal capital use balances risk and return, thereby enhancing firm value. Financial management views firm value as the market's perception of performance and prospects, so higher CAR is logically associated with greater firm value due to increased investor trust in stability and solvency. Empirical studies consistently show CAR's significant role in influencing firm value in the banking sector. Research by Safarina & Sudarto (2024), Tahir Saeed et al., Sri Murni et al., and Jonardy & Avionita (2023) confirms that CAR provides a positive signal of financial health, boosting firm value as measured by PBV, Tobin's Q, and market capitalization.

H1: Capital adequacy has a positive effect on firm value.

*The Effect of Profitability on Firm Value*

Return on Assets (ROA) is a key profitability indicator that reflects a company's ability to generate earnings from its total assets. A higher ROA signals efficient resource management and stronger profitability. From a Signaling Theory perspective, high profits act as positive signals to investors, demonstrating good prospects and effective management, which in turn increase stock demand and firm value. In financial management theory, firm value represents market expectations of future cash flows; thus, higher ROA implies greater cash flow potential and stronger firm value. In the banking sector, ROA also measures the effectiveness of managing productive assets such as loans, with higher ROA indicating better management quality and lower risk, thereby boosting investor confidence. Empirical studies by Kewo (2018), Pratiwi (2024), Gautam (2021), and Henny (2021) consistently confirm that ROA has a significant positive impact on firm value.

H2: Profitability has a positive effect on firm value.

*The Effect of Firm Size on Firm Value*

Firm size reflects the scale of a company, commonly measured by total assets, sales, or the natural logarithm of assets. Larger firms typically possess stronger resources, broader diversification, and easier access to funding compared to smaller firms. From a Signaling Theory perspective, firm size signals financial strength and stability, with large firms perceived as more established, reputable, and resilient to economic shocks—enhancing investor confidence and firm value. According to the Trade-Off Theory, larger firms face lower bankruptcy risk due to diversified assets and stable cash flows, enabling them to secure external financing at lower costs, which supports higher firm value.

Empirical studies consistently show that ROA positively influences firm value. Research by Stella Theodora Kewo & Rosiana Gaghenggang (2018), Madhusudan Gautam (2021), Dangin Nyoman Krishna Pratiwi & Candraningrat Ica Rika (2024), and Medyawati Henny & Muhamad Yunanto (2021) confirm that higher profitability strengthens shareholder value creation. This reflects efficient asset utilization in generating earnings, ultimately boosting investor trust in a firm's performance and future prospects.

H3: Firm Size has a positive effect on firm value.

*The Effect of Exchange rate on Firm Value*

Market risk from exchange rate fluctuations, particularly USD against Rupiah can significantly affect company performance and value by influencing cash flows, operating costs, foreign currency liabilities, and profitability. From a Signaling Theory perspective, high exchange rate volatility signals macroeconomic instability, prompting investors to avoid firms with large foreign exchange exposure, which may reduce stock prices and firm value. Empirical evidence supports this: research by Shamsuddeen Muhammad Ahmad, Rosni Bakar, and Mohd Zukime Bin Mat Junoh (2020) in Nigeria shows that exchange rate fluctuations are a key macroeconomic factor affecting firm value. Similarly, Medyawati, Henny, and Yunanto (2021) in Indonesia found

that exchange rate movements, together with ROA, positively influence the value of banking firms.

H4: Exchange Rate has a negative effect on firm value.

*The Effect of Firm Value on Stock Price*

Stock prices reflect investor expectations of a company's future performance, while firm value represents how the market assesses the company's ability to create added value from its assets. Within Signaling Theory, an increase in firm value serves as a positive signal that drives stock prices upward, as investors respond to stronger growth prospects. Empirical evidence supports this: Danarji Nirmolo and Kesi Widjajanti (2024) found that firm value, proxied by PBV, has a significant positive effect on stock prices, with DER, DPR, and EPS influencing firm value as intervening variables. Meanwhile, Widya Warisman and Andi Yudha Amwila P (2020) reported that capital structure negatively affects stock prices, though firm value itself remains positively associated with stock prices

H4: Firm value has a direct influence on stock price.

Referring to the literature above, the research framework is shown in the following figure:

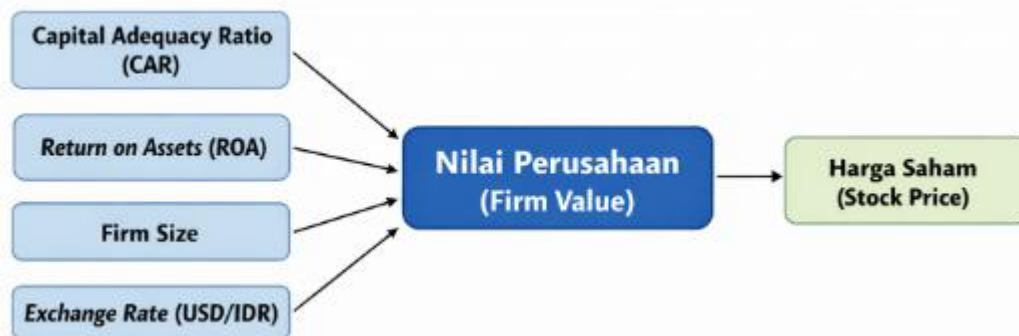


Figure 1. Conceptual Framework

## METHODOLOGY

The population of this study consists of banking companies listed on the main board of the Indonesia Stock Exchange (IDX). Using a purposive sampling technique, the sample includes 16 banks observed during the 2020–2024 period, resulting in 80 observations. Data were processed with Eviews Software.

The research framework is divided into two substructures. The first examines the influence of CAR, ROA, firm size, and exchange rate on firm value. The second tests the effect of the predicted firm value on stock price. Both substructures were analyzed using panel data regression, preceded by model selection tests, classical assumption tests, goodness-of-fit evaluation, hypothesis testing, and model feasibility tests.

## RESULTS AND DISCUSSION

### Classic Assumption

#### 1. Normality Test

Normality test on sub-structure I and II use the Jarque-Bera probability (p-value). The results of the normality test on structure I and II can be seen in the following figure:

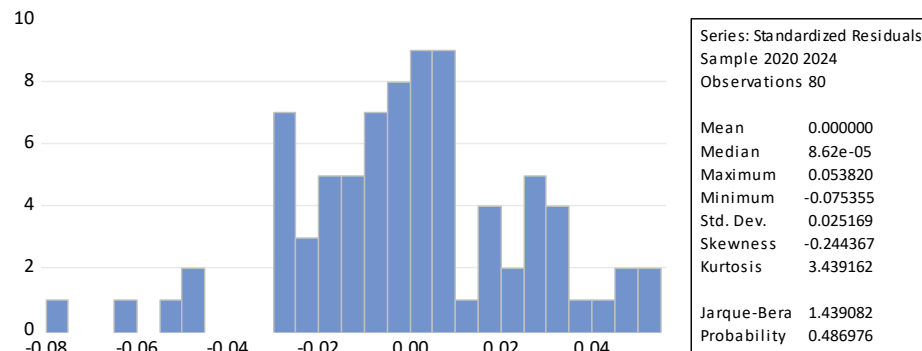


Figure 2. The results of the normality test on sub-structure I

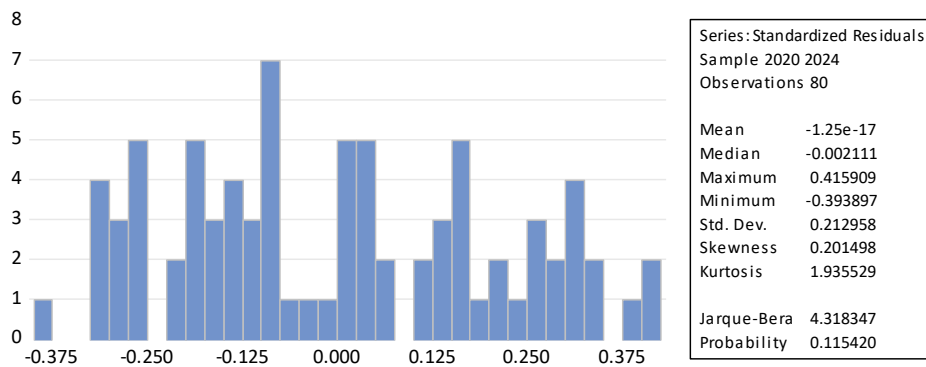


Figure 3. The results of the normality test on sub-structure II

In figures 2 and 3, the p-value obtained from JB is 0.486976 and 0.115420, both values  $> 0.005$ , which means both pass the normality test.

#### 2. Heteroskedasticity Test

Heteroscedasticity test on sub-structure I and II using regression of absolute residual values. The results of the heteroscedasticity test are shown in the following table:

Table 1. The results of the heteroscedasticity test on sub-structure I

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.445396	0.657499	0.677409	0.5008
CAR	-0.000154	0.000893	-0.172808	0.8634
ROA	0.000918	0.005383	0.170592	0.8651
SIZE	-0.013870	0.025896	-0.535606	0.5942
LN_KURS	0.003525	0.053401	0.066015	0.9476

**Table 2. The results of the heteroscedasticity test on sub-structure II**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.305606	0.433522	-0.704937	0.4834
TQ_HAT	0.458949	0.423147	1.084610	0.2822

In the table above, the probability values for the variables CAR, \_ROA, SIZE, LN\_KURS (ER) and TQ\_HAT are 0.8634, 0.8651, 0.5942, 0.9470, 0.2822 > 0.05, which means that there is no heteroscedasticity problem in sub-structure I and II.

### 3. Multicollinearity Test

Multicollinearity testing on sub-structure I was conducted using the correlation “r”. In substructure II, no test was conducted because there was only one determinant variable. The results of the multicollinearity test on sub-structure I are shown in the following table:

**Table 3. The results of the multicollinearity test on sub-structure I**

	CAR	ROA	SIZE	LN_KURS
CAR	1.000000	0.115512	-0.309072	0.137710
ROA	0.115512	1.000000	0.690034	0.272981
SIZE	-0.309072	0.690034	1.000000	0.054581
LN_KURS	0.137710	0.272981	0.054581	1.000000

In the table above, the r values for the variables CAR, ROA, Size, and Exchange Rate are obtained sequentially as 0.115512; |0.3090772|; 0.69003; 0.137710; 0.272981; and 0.054581. These values are < 0.8, which means that there is no multicollinearity problem in structure I.

### 4. Autocorrelation Test

Autocorrelation test on sub-structure I and II using the Durbin-Watson (DW) value. The results of the autocorrelation test are shown in the following table:

**Table 4. The results of the autocorrelation test on sub-structure I**

R-squared	0.982263	Mean dependent var	1.024376
Adjusted R-squared	0.976646	S.D. dependent var	0.188986
S.E. of regression	0.028881	Akaike info criterion	-4.038959
Sum squared resid	0.050046	Schwarz criterion	-3.443453
Log likelihood	181.5584	Hannan-Quinn criter.	-3.800204
F-statistic	174.8795	Durbin-Watson stat	2.215450
Prob(F-statistic)	0.000000		

**Table 5. The results of the autocorrelation test on sub-structure II**

Weighted Statistics			
R-squared	0.986303	Mean dependent var	10.49017
Adjusted R-squared	0.982825	S.D. dependent var	5.888598
S.E. of regression	0.238471	Sum squared resid	3.582723
F-statistic	283.5439	Durbin-Watson stat	1.961126
Prob(F-statistic)	0.000000		

In the table above, the dw values for EUB structures I and II are obtained as 2.215450 and 1.961126, respectively; both values are between 1.5 and 2.5, which means that both sub-structures pass the autocorrelation test.

5. Model Selection

In Substructure I, the researcher selected a model to examine the influence of capital adequacy (CAR), profitability (ROA), firm size, and market risk (exchange rate) on firm value. In sub-structure II, the prediction results of the company's value from sub-structure I against the stock price were tested. The following are the model selection results for these two sub-structures:

**Table 6. Recapitulation of Model Selection for Substructure I**

Test	P-value	Result
<b>Sub-Structure I</b>		
Chow	0.0000	FEM
Hausman	0.0368	FEM
Lagrange Multiplier	0.0000	REM
<b>Sub-Structure II</b>		
Chow	0.0000	FEM
Hausman	0.0081	FEM
Lagrange Multiplier	0.0000	REM

Based on Table above, the selected model is the Fixed Effect Model. The resulting regression equation for Substructure I and II can be expressed as follows:

$$TQ = 1,64 + 0,01*CAR + 0,03*ROA + 0,07*SIZE - 0,34*LN\_KURS + e \dots (i)$$

$$Price = 0,97 + 6,0*TQ\_HAT + e \dots (ii)$$

From equation (i), the constant value of 1.64 indicates that if all independent variables are held constant or equal to zero, the firm's Tobin's Q is estimated at 1.64. The CAR coefficient (0.01) shows that a one-unit increase in CAR raises Tobin's Q by 0.01, suggesting that higher capital adequacy strengthens firm value by signaling greater risk absorption and financial stability. The ROA coefficient (0.03) implies that a one-unit increase in ROA boosts Tobin's Q by 0.03, meaning higher profitability enhances investor perception of the firm. The Firm Size coefficient (0.07) indicates that a one-unit

increase in size raises Tobin's Q by 0.07, reflecting that larger firms are valued higher due to stronger assets, stability, and funding access. Meanwhile, the Exchange Rate (LN\_KURS) coefficient (-0.34) shows that a one-unit increase in the logarithm of the exchange rate reduces Tobin's Q by 0.34, highlighting that currency depreciation negatively impacts firm value, especially for firms exposed to foreign debt, imports, or international transactions.

From equation (ii), the intercept (0.97) represents the baseline level of the natural log of the stock price when Tobin's Q (TQ\_HAT) is zero. The coefficient of 6.0 indicates a strong positive effect: for every one-unit increase in Tobin's Q, the natural log of the stock price increases by 6.0 units. This emphasizes Tobin's Q as a dominant factor in explaining stock price movements.

#### 6. Hypothesis Test

In sub-structure I, hypothesis testing was obtained both simultaneously and partially as shown in the following table:

**Table 7. Hypothesis Testing**

<b>Sub-Structure I</b>	<b>Statistik</b>	<b>P-value</b>	<b>Result</b>
CAR, ROA, Size, ER --> TQ	174.880	0.0000	Accepted
CAR --> TQ	3.073909	0.0032	Accepted
ROA --> TQ	2.799048	0.0069	Accepted
Size --> TQ	1.557691	0.1246	Rejected
Kurs (ER) --> TQ	3.403864	0.0012	Accepted
<b>Sub-Structure II</b>	<b>Statistik</b>	<b>P-value</b>	<b>Result</b>
<b>TQ-HAT -- &gt; Price</b>	5.520065	0.000	Accepted

The regression results indicate that CAR, ROA, firm size, and exchange rate collectively have a significant effect on Tobin's Q, with the overall model strongly accepted. Individually, CAR (p=0.0032), ROA (p=0.0069), and exchange rate (p=0.0012) each show significant relationships with Tobin's Q, while firm size (p=0.1246) does not demonstrate a statistically significant effect. This suggests that capital adequacy, profitability, and currency fluctuations are key drivers of firm value, whereas company size alone does not play a decisive role in influencing Tobin's Q. The results from substructure II obtained a hypothesis test with a statistic of 5.520065 and a p-value of 0.000, which indicates that the predicted company values are able to influence stock prices.

#### 7. Model feasibility test

To assess the suitability of the model, the adjusted R-squared value was used for the model in substructure I and the R-squared for substructure II. Based on the processing results, the following results were obtained:

**Table 8. The Result of Feasibility Tes**

<b>Sub-Structure I</b>	<b>Adjusted R<sup>2</sup></b>	<b>SE. Reg</b>	<b>Result</b>
Size --> TQ	0.977	0.029	Strength
<b>Sub-Structure II</b>	<b>R<sup>2</sup></b>	<b>P-value</b>	<b>Result</b>
TQ-HAT -- > Price	0.986	0.241	Strength

In evaluating the model feasibility, Sub-structure I demonstrates exceptional reliability with an Adjusted R<sup>2</sup> of 0.977 and a very low standard error of regression (0.029), indicating that nearly all variation in the dependent variable is explained with high precision and minimal residual error. Meanwhile, Sub-structure II shows an even higher R<sup>2</sup> of 0.986, confirming that 98.6% of the variation is accounted for, but its larger standard error of 0.241 suggests less precision in prediction compared to Sub-structure I. Overall, both models are statistically feasible and highly explanatory, yet Sub-structure I is superior in terms of accuracy and predictive consistency, while Sub-structure II emphasizes explanatory strength with slightly reduced precision.

## DISCUSSION

Capital adequacy (CAR), profitability (ROA), firm size, and exchange rate risk collectively have a positive and significant impact on firm value in the banking sector. This supports Signalling Theory, showing that strong financial performance signals stability to investors, while Agency Theory highlights effective managerial oversight. This aligns with Siti Safarina & Tris Sudarto and Tahir Saeed Jagirani, who found CAR positively affects Tobin's Q, and with Miftakhul Fadhillah & Tituk Diah Widajantie, who confirmed ROA's positive impact. Similarly, Nanik Linawati et al. reported firm size contributes positively, while Abd El-Aziz highlighted exchange rate effects. Together, these findings reinforce Signalling Theory and Agency Theory, showing that integrated financial health drives investor confidence and stock price appreciation.

CAR plays a central role in determining firm value by signaling financial resilience. A strong capital base reassures investors of a bank's ability to absorb risks, comply with regulations, and sustain growth. Empirical studies consistently show CAR's positive effect on firm value, aligning with Signalling and Trade-off Theory. Studies by Sari & Sudjarni (2021), Sri Murni et al., and Prasetyo (2022) consistently demonstrate CAR's positive effect, emphasizing that strong capital structures reduce agency costs and enhance investor trust. This supports Signalling Theory and Trade-off Theory, showing that adequate capital strengthens long-term valuation.

ROA is a crucial determinant of firm value, reflecting management's efficiency in generating profits from assets. High profitability signals sustainable growth, attracts investors, and strengthens market confidence. Empirical evidence confirms ROA's positive impact, making it one of the most dominant drivers of firm value. Evidence from Nanda & Panda (2018), Wulandari (2023), and Gustina Hidayat et al. confirms ROA's positive impact,

while Dewa Ayu Yunia Devi & Ketut Alit Suardana show its effect on PBV. These studies reinforce that profitability signals sustainable growth, attracts investors, and boosts stock prices.

Firm size shows a positive but statistically insignificant effect on firm value. Larger banks tend to be perceived as more stable and resourceful, but investors prioritize profitability and efficiency over sheer asset size. Thus, while firm size contributes to stability, it is not a decisive factor in valuation. Research by Indra Arifin Djashan & Yosua Agustinus found similar results, indicating that asset size alone is not decisive without profitability and efficiency. While larger firms are perceived as more stable, investors prioritize earnings quality and risk management over sheer scale.

Exchange rate fluctuations negatively affect firm value, as currency depreciation increases operational costs, credit risks, and investor uncertainty. This aligns with Arbitrage Pricing Theory, showing that exchange rate volatility is a systematic risk that reduces investor confidence and stock prices. Exchange rate volatility negatively impacts firm value, consistent with Hidayat (2020), Prasetyo (2022), and Medyawati & Muhamad Yunanto, who found currency depreciation increases operational costs and investor uncertainty. This supports Arbitrage Pricing Theory, showing that exchange rate risk is systematic and reduces investor confidence, leading to lower stock prices.

Firm value, often proxied by Tobin's  $Q$ , acts as a critical determinant of investor confidence and directly influences stock price movements. When firm value rises driven by strong capital adequacy, profitability, efficient risk management, and stable growth investors perceive the company as more resilient and attractive, which translates into higher demand for its shares and consequently an increase in stock prices. Studies such as Tahir Saeed Jagirani and Stella Theodora Kewo & Rosiana Gaghenggang confirm that higher firm value translates into stronger investor confidence and higher share prices, while weak fundamentals or macroeconomic risks depress stock valuations. Conversely, when firm value weakens due to risks such as exchange rate volatility or inefficiencies in asset management, market perception deteriorates, leading to downward pressure on stock prices. In essence, firm value serves as a signal of long-term sustainability and managerial effectiveness, and the stock market responds by adjusting prices to reflect these expectations.

## **CONCLUSIONS AND RECOMMENDATIONS**

The findings demonstrate that capital adequacy (CAR), profitability (ROA), firm size, and exchange rate risk collectively exert a significant influence on firm value in the banking sector. CAR and ROA consistently show strong positive effects, reinforcing their role as fundamental drivers of investor confidence and firm valuation. Firm size, while positively associated, does not exhibit significant statistical impact, suggesting that asset scale alone is insufficient without efficiency and profitability. Meanwhile, exchange rate volatility has a negative effect, highlighting the sensitivity of firm value to macroeconomic risks. Overall, the results confirm that firm value is not determined by a single factor but by the integration of financial resilience,

profitability, and effective risk management, which in turn directly shapes stock price performance.

Based on the findings, several recommendations can be formulated to strengthen firm value and stock price performance in the banking sector. Banks should prioritize maintaining strong capital adequacy (CAR) above regulatory thresholds, as this signals resilience and builds investor trust. At the same time, management must enhance profitability (ROA) through operational efficiency, digital transformation, and effective cost control, since profitability remains the most dominant driver of firm value. Although firm size shows a positive but insignificant effect, banks should focus on optimizing asset utilization rather than merely expanding total assets, ensuring that growth translates into real value creation. Given the negative impact of exchange rate volatility, it is crucial to implement robust risk management strategies, such as hedging and diversification, to mitigate exposure to currency fluctuations. Finally, consistent and transparent communication with investors regarding financial health and risk management practices will reinforce market confidence and sustain long-term stock price growth.

#### **ADVANCED RESEARCH**

For advanced research, future studies should move beyond static regression and adopt dynamic, comparative, and nonlinear approaches to better capture the complexity of financial performance and market valuation in the banking sector. Applying dynamic panel models such as GMM would help address endogeneity and reveal how CAR, ROA, and exchange rate fluctuations influence firm value over time. Researchers could also explore moderating variables like Good Corporate Governance, liquidity ratios, or macroeconomic indicators to test whether they strengthen or weaken the relationship between financial performance and firm value. Comparative cross-country studies would provide insights into whether these effects are consistent across different regulatory and economic environments, while nonlinear and threshold analyses could uncover diminishing returns of firm size or capital adequacy beyond certain levels. Additionally, market efficiency testing through event studies could examine how quickly the Indonesian capital market incorporates financial information into stock prices. Finally, integrating the role of digital transformation in profitability and risk management would highlight how technological adoption reshapes firm value and investor perception. Collectively, these directions would enrich the literature by offering a more nuanced understanding of how firm value translates into stock price movements under diverse conditions.

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