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DETERMINANTS OF STOCK RETURNS IN INDONESIAN PROPERTY AND REAL ESTATE FIRMS, 2020–2024

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Abstract

This study aims to examine the partial influence of firm size, firm value, and systematic risk on stock returns of companies in the property and real estate sector listed on the Indonesia Stock Exchange during the 2020 –2024 period. The research employs a quantitative approach and utilizes documentation methods. The population of this study consists of all property and Real estate sector companies within the 2020 –2024 period, The sample was selected using purposive sampling based on predetermined criteria, resulting in 14 companies. Panel data regression analysis was conducted using the Economic Views (EViews) version 12 software. The findings of the study reveal that, Firm size has a positive and significant effect on stock returns of property and real estate sector companies during the 2020–2024 period. Furthermore, firm value (PBV) is shown to have a positive and significant effect on stock returns, and systematic risk (Beta) likewise exerts a positive and significant influence on stock Returns within the same period.

Keywords: *Stock Returns, Firm size, Firm Value, Systematic Risk.*

1. INTRODUCTION

The existence of the national stock exchange in Indonesia plays an important role in driving the economy, as it is a means for companies to obtain investment and strengthen financial structures. In the modern economy, the capital market functions like a "financial nerve center" that allows economic activities to run effectively, organized, and connected globally. The capital exchange rate is often used as an indicator that reflects the health and vitality of a country's economy. (Rorizki *et al.*, 2022).

Property sector and *real estate* is one of the sectors that attracts great attention from investors because it is considered to be able to hedge against inflation and has the potential for long-term capital appreciation. The performance of stocks in this sector not only reflects the dynamics of the housing and commercial markets, but also becomes an important indicator of the overall macroeconomic growth prospects. *(Vernando et al.,* 2024).

Investors who invest in securities certainly expect returns or *Return* of the investments they make. However, rational investment decisions must consider the potential *Return* as well as the risks that come with it. *Return* is the difference between the profit or loss obtained from the ownership of financial assets and basically follows the principle that the higher the

return It is hoped that the greater the risk that must be beared. Thus, the investment process always involves balancing the desire to maximize profits with the ability to bear price fluctuations due to risk. In general, the total *return* consists of cash income, such as dividends, and *capital gain* from the increase in asset prices. (Multazam) *et al.,* 2023).

Table 1. *Stock Returns* of Energy Sector, Industrial Sector, Property and *Real Estate Sector*

Energy Sector			**Industrial Sector**			**Property and *Real estate Sector***		
Code	**Year**	***Return (%)***	**Code**	**Year**	***Return (%)***	**Code**	**Year**	***Return (%)***
	2020	-4		2020	56		2020	-48
	2021	57		2021	18		2021	36
NURSERY	2022	71	ARNA	2022	24	APLN	2022	26
	2023	-38		2023	-33		2023	-16
	2024	2		2024	4		2024	-29
	2020	-32		2020	-16		2020	2
	2021	-21		2021	4		2021	-33
MEDC	2022	118	ASGR	2022	23	ASRI	2022	-1
	2023	14		2023	-13		2023	3
	2024	-5		2024	-3		2024	-18
	2020	-24		2020	-13		2020	17
	2021	-17		2021	-5		2021	23
PGAS	2022	28	ASII	2022	0	BCIP	2022	-26
	2023	-36		2023	-1		2023	-12
	2024	41		2024	-13		2024	-2
	2020	21		2020	54		2020	-17
	2021	66		2021	77		2021	-38
ITMG	2022	69	HEXA	2022	-16	BEST	2022	19
	2023	-34		2023	21		2023	3
	2024	4		2024	-33		2024	-26
	2020	-50		2020	3		2020	0
	2021	87		2021	4		2021	-18
ABMM	2022	131	JTPE	2022	-75	BSDE	2022	-9
	2023	4		2023	17		2023	17
	2024	4		2024	-29		2024	-13

Source: Data processed by researchers, 2026

Based on stock *return data* for the 2020–2024 period, the energy sector showed the strongest performance with a dominance of *positive returns*, especially in 2022 when issuers such as ADRO, MEDC, ITMG, and ABMM recorded a significant surge of more than 70-130%, driven by high global energy demand and rising commodity prices. The industrial sector also recorded positive performance through issuers such as ARNA, ASGR, and

HEXA which experienced increased *returns* in 2021–2022, reflecting the recovery of manufacturing activities post-pandemic. In contrast, the property and *real estate sectors* were dominated by *negative returns* for most of the period, with significant declines in issuers such as APLN, ASRI, and BSDE due to weak demand, high interest rates, and economic slowdown. Overall, the energy sector was the most profitable, the industrial sector was relatively stable, while the property sector showed the weakest performance during the period.

Company size (*Firm size*) is an important variable in analyzing performance and *return* stocks. This size is usually measured through total assets, sales, or market capitalization. Companies with large assets generally have stronger competitiveness thanks to economies of scale, financial resilience, and wider access to resources, making them more stable by investors. However, the phenomenon of the size effect also suggests that small companies can offer *return* higher due to the potential for more aggressive growth. (Fajriah et al., 2022).

Company value also affects *return* stocks, because it is directly reflected through the stock price in the capital market. This market value is influenced by investors' expectations of future growth opportunities. The more prospective the company's investment opportunities, the higher the company's value and *return* that investors receive. One widely used measure is Price to Book Value (PBV), which reflects how the market assesses a company's growth potential and prospects. (Franita, 2018).

Systematic risk, measured using beta, illustrates the sensitivity of movement *return* a share against *return* market. In investment management, risk is understood as a deviation between expected *return* and *return* which describes the level of uncertainty that investors have to bear. Thus, beta becomes an important indicator in assessing how much market fluctuations can affect *Return* stock. (Yusnia & Purwatiningsih, 2025).

Signal Theory (*Signaling Theory*) by Spence (1973) explains that the company's management strives to convey positive information to the market through indicators that are easy to observe, such as the size of the company (*Firm size*) and corporate value (PBV), to increase investor confidence. *Firm size* is seen as a signal of financial strength and operational stability, while a high PBV indicates that the market is assessing the company's prospects positively and believing in its growth potential. (Fauziah, 2017)

Efficient Market Theory (*Efficient Markets Hypothesis*/EMH) popularized by Eugene Fama (1970) states that the stock price reflects all relevant information, both historical and public. In this theory, systematic risk (Beta) is the main indicator to measure sensitivity *Return* stocks against market changes. Beta reflects macro risks such as inflation, interest rates, and political conditions that cannot be eliminated through diversification, so the higher the beta, the higher the *Return* that investors expect as compensation for these risks. (Farhan, 2021)

Previous research has shown mixed results regarding the influence of *Firm size*, *Price to Book Value* (PBV), and systematic risk (Beta) to *Return* stock. (Sinaga et al., 2020) found that the size of the company had a significant effect on *Return* stocks, while (Fitroh & Fauziah, 2022) found that *Firm size* did not have a significant effect on mining companies. Variation in yield was also seen in the PBV variable, where (Jaya & Kuswanto, 2021) shows a positive and significant influence, but research (Putri et al., 2024) in the property sector, it was found that PBV is not always relevant in influencing *Return* stocks. Similar

inconsistencies appear in the Beta variable; (Azhari et al., 2020) prove that Beta has a significant effect on *Return* stocks, while (Yusnia & Purwatiningsih, 2025) found the opposite in the energy sector. This difference in results shows that there is a *research gap* that need to be further examined, especially in the context of the property sector and *Real estate*.

Based on these theories and empirical findings, fluctuations in the stock performance of property and *real estate* companies during 2020 – 2024 reflect variations in internal factors such as company size, company value as depicted through the PBV ratio, and systematic risk levels measured by beta. Therefore, it is important to conduct further research to understand the relationship between these three factors on the performance of property sector stocks.

2. RESEARCH METHODS

Types of Research

This study uses a quantitative method with a correlational design that aims to measure and analyze the relationship between variables statistically using numerical data. This approach is specifically applied to test and measure the extent to which firm size, company value (PBV), and systematic risk (beta) have an influence on the stock *return* of companies in the property and *real estate* sector on the IDX during the period 2020–2024, where data analysis is carried out systematically using statistical software such as EViews to obtain objective and measurable results.

Variable Operational Definition

Return saham

Stock return is the level of profit earned by investors from changes in the share price of companies in the property and *real estate sectors* listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 research period. *This return* reflects investment returns measured from the difference between stock prices in the current period compared to stock prices in the previous period. *Stock returns* are used to assess the extent to which a company's performance provides benefits to its shareholders.

$$Return\ saham = \frac{Pt - P_{t-1}}{P_{t-1}}$$

Firm Size

Firm Size describes the size of a company in the property and *real estate* sector as measured by the total assets it owns. The size reflects the company's capacity to manage resources and shows the level of financial strength and operational stability. In the context of this study, this variable is used to assess the extent to which the scale of the company affects the level of *return* on the shares generated.

$$Total\ Aset$$

Company Values

Company value is the level of market appreciation of the performance and prospects of companies in the property and *Real Estate* sectors as reflected in the stock price relative to the book value per share. In this study, the value of a company shows how much the market values a company above or below its book value.

$$PBV = \frac{Harga\ Saham}{Nilai\ Buku\ Saham}$$

Systematic Risk

Systematic risk is an uncertainty that arises due to changes in overall market conditions that affect all stocks, including the property and *real estate* sectors. This uncertainty cannot be eliminated through portfolio diversification because it comes from external factors such as interest rate fluctuations, inflation, and changes in macroeconomic conditions. In this study, variables were measured using beta (β) which reflects the level of sensitivity of the company's stock price movements to overall market dynamics.

$$\beta_i = \frac{\sigma_{iM}}{\sigma^2{}_M}$$

Population and Sample

The research population includes all companies in the property and *Real Estate sectors* listed on the Indonesia Stock Exchange for the period 2020–2024. This population consists of 92 issuers that have specific characteristics according to the focus of the research, so that all attributes attached to the analysis unit are the basis for understanding the overall condition of the industry. The sample was selected as a representation of the population so that the research results can be generalized scientifically. This study uses *purposive sampling techniques*.

Based on the sample selection criteria, this study sets several specific requirements to ensure that the data used is relevant and can be analyzed accurately. (1), the selected company must have complete financial statements during the period 2020–2024 (2), companies included in the special monitoring list are excluded from the sample because they are considered to have unstable financial or operational conditions. (3), companies that do not have complete financial statements during the study period are also eliminated because they can cause bias in the analysis results. (4), only companies that do not suffer losses or continue to generate profits during the 2020–2024 period are included in the sample in order to reflect a more representative financial performance. Based on all these criteria, as many as 14 companies were obtained as research samples.

Table 2. Research Sample

No.	Company	Company Code
1	Bumi Citra Permai Tbk.	BCIP
2	Bumi Serpong Damai Tbk.	BSDE
3	Ciputra Development Tbk.	CTRA
4	Puradelta Lestari Tbk.	DMAS
5	Duta Pertiwi Tbk	DUTY
6	Perdana Gapuraprima Tbk.	GPRA
7	Jaya Real Property Tbk.	JRPT
8	Jababeka Industrial Estate Tbk.	KIJA
9	Metropolitan Kentjana Tbk.	MKPI

No.	Company	Company Code
10	Metropolitan Land Tbk.	MTLA
11	Pakuwon Jati Tbk.	PIONS
12	Suryamas Dutamakmur Tbk.	SMDM
13	Summarecon Agung Tbk.	SMRA
14	Urban Jakarta Propertindo Tbk.	URBN

Source : Data processed by researchers, 2026

Data Collection Techniques

This study uses a documentation method to collect financial and stock market data from public documents published online, in order to analyze the influence of *firm size*, company value, and systematic risk on stock *returns* in property and *Real Estate companies* on the IDX for the 2020–2024 period. The collected data is selected and verified to ensure consistency and completeness before being analyzed with EViews, so that the results of the analysis are expected to represent empirical conditions in the Indonesian capital market, especially the property and *Real Estate sectors*.

Data Analysis Techniques

1. Descriptive Statistical Analysis

Descriptive statistical analysis is used to describe, describe, and classify research data systematically without generalization, so that the data obtained can be presented in a simpler form through tables or tabulations. In this study, descriptive statistics contain minimum, maximum, mean, and standard deviation values to provide an initial overview of the characteristics of each research variable and compare it with industry standards or sector averages in order to determine whether the resulting values are in normal conditions or deviated from the industry's performance. Thus, descriptive statistics are an important basis for understanding the relative position of research variables more comprehensively before further analysis is carried out.

2. Panel Data Regression Analysis

Panel data regression analysis is a method that combines *cross-section* and *time series* data to test the linear relationship between independent variables and dependent variables using multiple linear regression. In this study, the analysis was used to determine whether SIZE, PBV, and BETA affect stock *returns* through regression equations

$$\mathbf{Y = \alpha + \beta_1 SIZE + \beta_2 PBV + \beta_3 BETA + \varepsilon}$$

where α is constant, β shows the magnitude of the influence of independent variables, and ε is *the error term*. This technique allows researchers to gain a more accurate understanding of the direction and strength of the influence of each independent variable on the bound variable.

3. Selection of Regression Models

The selection of regression models in the panel data is carried out using three tests, namely the Chow Test, the Hausman Test, and the Lagrange Multiplier Test, to determine if the most appropriate model is CEM, FEM, or REM. The Chow test is used to choose between Common Effect and Fixed Effect based on a probability value of < 0,05 for FEM and > 0.05 for CEM; then the Hausman Test determines whether the appropriate model is FEM or REM

based on p-value > 0.05 for REM and < 0.05 for FEM; finally, the Lagrange Multiplier Test is used if Chow selects CEM and Hausman selects REM, i.e. to determine whether REM is more accurate than CEM, with a decision based on p-values < 0.05 for REM and > 0.05 for CEM. These three tests ensure that the panel data regression model used is the most accurate model for the data analyzed.

4. Classic Assumption Test

According to (Basuki, 2021), not all classical assumption tests are mandatory in OLS linear regression, as their relevance depends on the characteristics of the data and the model. In the context of panel data, linearity and normality tests are not absolutely necessary, while multicollinearity tests are important when more than one independent variable is present, and heteroscedasticity tests need to be considered because panel data have similar characteristics to data *cross-section*. Autocorrelation was not considered relevant in the panel because the focus was not on pure time series, so in this study only two tests were applied, namely multicollinearity and heteroscedasticity, to ensure the model met the requirements of good estimation and did not produce biased values.

5. Uji Hypothesis

The T test is used to test the partial influence of each independent variable on the dependent variable at a significance level of $\alpha = 0.05$. If the probability value < 0.05 then the independent variable has a significant influence on the stock *return*, while if the probability value is > 0.05 then the variable is considered to have no significant effect. This test helps identify which variables actually contribute to the change in the dependent variable.

The Coefficient of Determination (R^2) measures how capable an independent variable is to explain the variation of dependent variables in a regression model. A low R^2 value indicates that an independent variable is only able to explain a small percentage of the variation *in Stock Return*, while an R^2 value close to 1 indicates that the model is able to explain almost all dependent variations. This study uses the R-squared value on the regression output as the main indicator of the model's explanatory strength.

3. RESULTS AND DISCUSSION

3.1 Results

a. Descriptive Statistical Analysis

Table 3. Results of Descriptive Statistical Analysis

	X1	X2	X3	Y
Mean	29.88259	0.967624	0.921240	-0.006110
Median	29.94663	0.741854	0.830756	-0.065100
Maximum	31.96206	5.751441	7.088478	1.706186
Minimum	27.50776	0.170863	-4.169039	-0.752679
Std. Dev.	1.184874	1.034665	1.529421	0.324554
Skewness	-0.247051	2.906152	0.763359	2.382075
Kurtosis	2.345986	11.66837	8.117047	13.71447
Jarque-Bera	1.959626	317.6938	83.16886	401.0329
Probability	0.375381	0.000000	0.000000	0.000000
Sum	2091.781	67.73365	64.48678	-0.427719
Sum Sq. Dev.	96.87091	73.86666	161.3998	7.268133
Observations	70	70	70	70

Source: Data processed by researchers, 2026

Based on descriptive statistical analysis, the characteristics of the four variables show a diverse profile. Firm Size (X1) has the largest average (29.88), with a maximum value of 31.96 achieved by BSDE (2024) as the company with the largest assets, and a minimum value of 27.50 recorded by BCIP (2022) as the company with the smallest assets. The Company's Value (X2) averages 0.96, with a maximum of 5.75 in MKPI (2022), and a minimum of 0.17 in BCIP (2024). Systematic Risk (X3) averages 0.92, with a maximum of 7.08 in PT JRPT (2020) indicating extreme sensitivity to the market, and a minimum - 4.16 in MKPI (2022) indicating the movement of stocks in the opposite direction of the market. Meanwhile, the average return of Shares (Y) is -0.006, with a maximum of 1.70 in SMDM (2024) as the best performer, and a minimum of -0.75 in URBN (2020) as the largest price decrease. These results illustrate the high heterogeneity in the property and *Real Estate sectors* in Indonesia.

b. Panel Data Regression Analysis

Panel data regression analysis is a method that combines *cross section* and *time series* data in one multiple regression model. The main goal is to test the linear relationship between independent variables and dependent variables using multiple linear regression approaches. Through this analysis, researchers can see whether independent variables, namely profitability and company value, have a positive or negative effect on stock prices.

Table 4. Panel Data Regression Analysis Test Results

Sample: 2020 2024
Periods included: 5
Cross-sections included: 14
Total panel (balanced) observations: 70

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-47.75860	15.41930	-3.097326	0.0031
X1	1.580158	0.514041	3.073991	0.0033
X2	0.488991	0.116367	4.202155	0.0001
X3	0.065249	0.024229	2.693015	0.0095

Source: Data processed by researchers, 2026

$$\mathbf{Y = - 47.758602625 + 1.58015842575X1 + 0.488990984933X2 + 0.0652493586098X3 + \varepsilon}$$

Based on the results of the multiple linear regression equation, it can be interpreted that:

The constant value of -47.7586 indicates that if the variables Firm Size (X1), Company Value (X2), and Systematic Risk (X3) are zero, then the Stock Return (Y) is predicted to be worth -47.7586.

A Firm Size Coefficient (X1) of 1.5802 indicates that every one unit increase in the size of the company will increase the Stock's return by 1.5802, assuming the other variables are constant. This reflects that larger companies tend to provide higher stock returns, presumably because investors view large companies as more stable and potentially profitable.

The Company Value Coefficient (X2) of 0.4890 indicates that every one unit increase in Price to Book Value (PBV) will increase the return of the stock by 0.4890, assuming other variables remain the same. These findings confirm that companies with a high market value (which reflects investors' positive perceptions of the company's prospects) do indeed tend to provide greater stock returns.

A Systematic Risk Coefficient (X3) of 0.0652 indicates that each increase of one beta unit will increase the Stock's return by 0.0652, assuming other variables remain the same. These results are consistent with financial theory where investors expect higher returns as compensation for the greater market risk they are incurring.

c. Selection of Regression Models

1. Chow Test

According to Basuki (2021 : 61) The Chow test is a method used to determine whether the Fixed Effect or Common Effect model is the most suitable for estimating the panel data. If the results of the Chow test show a probability value of < 0.05, the Fixed Effect model is considered more appropriate to use. On the other hand, if the probability value is > 0.05, the Common Effect model is considered more suitable for use.

Table 5. Chow Test Results

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	3.417137	(13,53)	0.0007
Cross-section Chi-square	42.613770	13	0.0001

Source: Data processed by researchers, 2026

Based on the results of the Chow (Redundant Fixed Effects Test) test displayed in the table, a probability value of 0.0007 and probability were obtained. The probability value is smaller than the significance level of α = 0.05. The right model is used is the Fixed Effect Model and will be followed by a thirst test.

2. Hausman Test

The Hausman test is used to determine the most suitable model between Fixed Effect and Random Effect in the analysis of panel data. If the results of the Hausman test show a probability value of < 0.05, then the Fixed Effect model is considered more appropriate to use. On the other hand, if the probability value is > 0.05, then the Random Effect model is considered more suitable for use.

Table 6. Hausman Test Results

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	15.276080	3	0.0016

Source: Data processed by researchers, 2026

Based on the results of the Hausman (Correlated Random Effects Test) in the table above, a probability value of 0.0016 was obtained. Because the probability value is smaller than the significance level of α = 0.05, it can be concluded that the Fixed Effect model is more appropriate than the Random Effect model in this study. In addition, because the results of the chow test and the thirst test both show that the Fixed Effect model is the most suitable model, the Lagrange Multiplier (LM) test does not need to be continued, because the two previous tests have given consistent results.

d. Classic Assumption Test

1. Multicollinearity Test

According to Basuki (2021 : 62), multicollinearity is a condition when independent variables have a linear relationship with each other in a regression model. Detection of multicollinearity can be done through the value of the correlation coefficient, where a correlation of > 0.85 indicates the presence of multicollinearity, while a correlation < 0.85 indicates that the model does not experience multicollinearity.

Table 7. Multicollinearity Test Results

	X1	X2	X3
X1	1.000000	0.125686	0.214092
X2	0.125686	1.000000	-0.250709
X3	0.214092	-0.250709	1.000000

Source: Data processed by researchers, 2026

Based on the results of the multicollinearity test in the table above, the entire value of the correlation coefficient between independent variables (X1, X2, and X3) is below 0.85, namely 0.125686 for X1–X2, 0.214092 for X1–X3, and -0.250709 for X2–X3. Refer to Basuki (2021 : 62) stating that multicollinearity occurs if the correlation between variables exceeds 0.85, it can be concluded that this regression model does not experience multicollinearity because all the correlation values are relatively low.

2. Heteroscedasticity Test

The heteroscedasticity test was used to find out whether the residual variance in the regression model was constant in each observation. In this study, the heteroscedasticity test was carried out using the Glejser method.

Table 8. Heteroscedasticity Test Results

Sample: 2020 2024
Periods included: 5
Cross-sections included: 14
Total panel (balanced) observations: 70

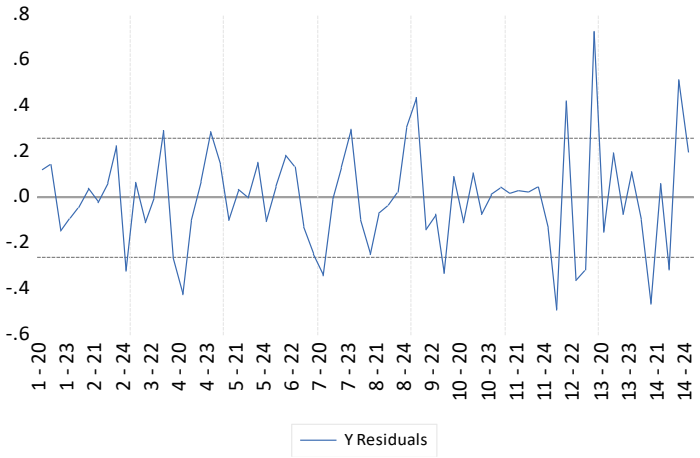
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-11.42444	6.819622	-1.675231	0.0998
X1	0.384601	0.227349	1.691673	0.0966
X2	0.081551	0.051466	1.584553	0.1190
X3	0.024455	0.010716	2.282098	0.0265

Source: Data processed by researchers (2026)

Based on the results of the Glejser test in the table above, the probability value for variable X1 is 0.0966 and X2 is 0.1190, both of which are greater than 0.05 so it can be concluded that they do not experience heteroscedasticity. Meanwhile, variable X3 has a probability value of 0.0265 (< 0.05), which indicates the presence of symptoms of heteroscedasticity.

Nevertheless, referring to Napitupulu et al (2021: 143), if the residual value Y does not pass the range between 500 and –500, then the residual variance is still considered constant. Thus, although the Glejser test shows an indication of heteroscedasticity in X3, the residual range check results still support that the residual variance in the model is under reasonable or relatively constant conditions.

Figure 1. Residual Y Test Results



Source : Data processed by researchers, 2026

Based on the residual graph, it can be seen that the residual value is in the range of 8 to –6 and does not cross the reasonable limit, so it can be concluded that heteroscedasticity does not occur. The residual pattern also does not show any particular irregularities, indicating a constant variance. This finding is in line with the results of the Glejser test, where most variables have a probability value above 0.05. Thus, the regression model is declared free from heteroscedasticity problems and meets classical assumptions to produce a good estimate.

e. Uji Hypothesis

1. Partial Test (t-test)

The t-test is used to see the significance of the influence of each independent variable on the partially bound variable at a significance level of 0.05. Through this test, it can be found whether the relationships found in the model are really significant and trustworthy.

Table 9. Results of the t-test (partial)

Sample: 2020 2024
Periods included: 5
Cross-sections included: 14
Total panel (balanced) observations: 70

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-47.75860	15.41930	-3.097326	0.0031
X1	1.580158	0.514041	3.073991	0.0033
X2	0.488991	0.116367	4.202155	0.0001
X3	0.065249	0.024229	2.693015	0.0095

Source : Data processed by researchers, 2026

Based on the results of the partial test (t-test) presented, the interpretation for the H1, H2, and H3 hypotheses can be carried out as follows:

a. **H1:** *Firm Size* has a positive and significant effect on *stock returns. This is evidenced by the value of the coefficient of 1.580158, the probability of 0.0033 (< 0.05), and the t-statistic of 3.073991 which is larger than the t-table.*
b. **H2:** The company value (PBV) has a positive and significant effect on the stock return. The value of the coefficient 0.488991, the probability of 0.0001 (< 0.05), and the t-statistic of 4.202155 > the t-table support this conclusion.
c. **H3:** Systematic risk (Beta) has a positive and significant effect on stock *returns*. This is indicated by a coefficient of 0.065249, a probability of 0.0095 (< 0.05), and a t-statistic of 2.693015 which exceeds the t-table.

2. Determination Coefficient Test (R2)

The Coefficient of Determination (R^2) is used to see the extent to which the model is able to explain variations in dependent variables. The closer the number 1, the stronger the ability of the independent variable to explain the changes that occur in the dependent variable.

Table 10. Determination Coefficient Test Results

Effects Specification			
Cross-section fixed (dummy variables)			
R-squared	0.509658	Mean dependent var	-0.006110
Adjusted R-squared	0.361630	S.D. dependent var	0.324554
S.E. of regression	0.259312	Akaike info criterion	0.345943
Sum squared resid	3.563871	Schwarz criterion	0.892006
Log likelihood	4.891983	Hannan-Quinn criter.	0.562846
F-statistic	3.442989	Durbin-Watson stat	2.227275
Prob(F-statistic)	0.000351		

Source: Data processed by researchers, 2026

Based on the results in the table, the Adjusted R Square value of 0.361630 indicates that 36.16% of stock return variations can be explained by independent variables in the model, while the remaining 63.84% are influenced by other factors outside of this study.

3.2 Discussion

Firm Size has a positive and significant effect on _stock returns._

The larger the size of the company, the stronger the financial stability and asset capacity it has, so that the company is better able to deal with market fluctuations and attract investors. This condition encourages an increase in stock returns.

The Company's value has a positive and significant effect on stock returns.

Companies with high market value reflected in large PBVs provide positive signals regarding performance and growth prospects. This increases investor confidence and has an impact on rising stock returns.

Systematic Risk has a positive and significant effect on _stock returns._

The higher the market risk a company bears, the greater the potential return that investors expect. This relationship reflects the principle that higher risk is followed by higher return opportunities.

4. CONCLUSION

The results of this study show that *firm size,* company value, and systematic risk both have a positive and significant influence on stock returns. Companies with larger sizes tend to have more stable financial conditions and are able to attract investors, thus having an impact on increasing stock returns. In addition, high company values provide positive signals regarding future performance and prospects, which ultimately increases investor confidence. On the other hand, higher systematic risk is also followed by the potential for greater returns, in line with the basic principles of investing. Thus, these three factors are important considerations for investors in making investment decisions.

For further research, it is recommended to expand the scope of the sample to various sectors and increase the observation period so that the research results are more comprehensive and able to reflect market conditions in the long term. In addition, the results of this research can also be used by investors as a consideration in making investment decisions by paying attention to firm size, company value, and systematic risks in assessing prospects and compiling portfolios more precisely.

REFERENCE

Azhari, F., Suharti, T., & Nurhayati, I. (2020). The Effect of Beta on Stock Returns in Companies in the Trade, Services and Investment Sectors. Manager: Journal of Management Sciences, 3(4), 509–519. https://doi.org/10.32832/manager.v3i4.3925

Basuki, A. T. (2021). Panel Data Analysis in Economic and Business Research (Equipped with the Use of Eviews).

Dr. Fenty Fauziah, M. S. A. C. A. (2017). Bank Health, Dividend Policy and Corporate Value: Theory and Empirical Review. Horizon Library. https://books.google.co.id/books?id=7X2mDwAAQBAJ

Fajriah, A. L., Idris, A., & Nadhiroh, U. (2022). The Effect of Sales Growth, Company Growth, and Company Size on Company Value. Scientific Journal of Management and Business, 7(1), 1–12. https://doi.org/10.38043/jimb.v7i1.3218

Fama, E. F. (1970). Efficient capital markets: A Review of Theory and Empirical Work. In The Journal of Finance (Vol. 25, pp. 384–417).

Farhan, A. (2021). Accounting Theory – A Philosophical Journey of Accounting from Theory to Practice. CV Globalcare. https://books.google.co.id/books?id=9ixqEAAAQBAJ

Fitroh, A. K., & Fauziah, F. E. (2022). The Effect of Return on Asset, Firm Size and Price Earning Ratio on Stock Returns. Yogyakarta, BPFE, 1(1), 135–146.

Franita, R. (2018). Mechanisms of Good Corporate Governance and Corporate Value: A Study for Telecommunication Companies. AQLI Institute for Research and Scientific Writing. https://books.google.co.id/books?id=fxeZDwAAQBAJ

Jaya, E. P., & Kuswanto, R. (2021). The Effect of Return on Assets, Debt to Equity Ratio and Price to Book Value on the Stock Return of Lq45 Listed Companies on the Indonesia Stock Exchange for the Period 2016 – 2018. Journal of Bina Akuntansi, 8(1), 51–67. https://doi.org/10.52859/jba.v8i1.136

Mas, L. P., Miryani, & Kepramareni, P. (2024). The Effect of Price to Book Value, Price Earnings Ratio, Leverage, Liquidity and Profitability on Property Stock Returns. Journal of Business Economics, Management and Accounting (JEBMA), 4(1), 360–370. https://doi.org/10.47709/jebma.v4i1.3648

Muhammad Multazam, S. E. C., Dr. Muammar Gaddafi, S. E. M. S. A., & Dr. Rico Nur Ilham, S. E. M. M. R. S. A. C. (2023). The Role of Good Corporate Governance in the Growth of Stock Returns of State-Owned Companies. PT. Radja Intercontinental Publishing. https://books.google.co.id/books?id=zt21EAAAQBAJ

Napitupulu, R. B., Simanjuntak, T. P., Hutabarat, L., Damanik, H., Harianja, H., Sirait, R. T. M., Tobing, L., & Ria, C. E. (2021). Business Research, Engineering and Analysis with SPSS - STATA - Eviews. Madenatera.

Nauli Sinaga, A., Eric, Rudy, & Wiltan, V. (2020). Current Ratio, Debt To Equity Ratio, Return On Equity, Dividend Payout Ratio and Size to Stock Return of Indonesian Trade, Service & Investment Companies. 3(2), 311–318.

Rorizki, F., Dalimunthe, A., & Ramadhani Silalahi, P. (2022). Economic Reviews Journal of Indonesian Capital Market Development and Challenges. Economic Reviews Journal, 1(2), 147–157.

Spence, M. (1973). Job market signaling. Quarterly Journal of Economics, 87(3), 355–374. https://doi.org/10.2307/1882010

Vernando, Y., Malau, H., & Sinaga, J. (2024). The Effect of Liquidity, Solvency and Profitability on Stock Prices in the Property and Real Estate Sector in 2019-2022. Scientific Journal of Management, Economics, & Accounting (MEA), 8(1), 921–939. https://doi.org/10.31955/mea.v8i1.3776

Yusnia, El., & Purwatiningsih. (2025). The Effect of Liquidity, Profitability, and Systematic Risk on Stock Returns in Energy Companies on the Indonesia Stock Exchange for the 2021-2024 period. 3(4), 27–40.