

THE EFFECT OF PROFITABILITY, LEVERAGE AND INFLATION ON STOCK RETURNS

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Abstract

This research was conducted at Building Construction Sub-Sector Companies Listed on the Indonesia Stock Exchange for the 2017-2021 period. The purpose of this study was to determine the effect of profitability, leverage and inflation on stock returns. The sample in this study were 8 Building Construction Sub-Sector Companies Listed on the Indonesia Stock Exchange (IDX) for the 2017-2021 period, this research method uses descriptive and verification methods. Profitability, leverage and inflation variables as independent variables and stock returns as the dependent variable. Data were analyzed using Eviews 9.0. Based on the results of the F test, profitability, leverage and inflation simultaneously affect stock returns. The results of the t test show that profitability (ROA) has a positive and significant effect on stock returns, leverage (DER) has an insignificant positive effect on stock returns, inflation has a negative and insignificant effect on stock returns.

Keywords: Profitability (ROA), Leverage (DER), Inflation and Stock Return.

Abstrak

Penelitian ini dilakukan pada Perusahaan Sub Sektor Konstruksi Bangunan yang Terdaftar di Bursa Efek Indonesia periode 2017-2021. Tujuan penelitian ini adalah untuk mengetahui pengaruh profitabilitas, leverage dan inflasi terhadap return saham. Sampel dalam penelitian ini sebanyak 8 Perusahaan Sub Sektor Konstruksi Bangunan yang Terdaftar di Bursa Efek Indonesia (BEI) periode 2017-2021, metode penelitian ini menggunakan metode deskriptif dan verifikatif. Variabel profitabilitas, leverage dan inflasi sebagai variabel bebas dan return saham sebagai variabel terikat. Data dianalisis menggunakan Eviews 9.0. Berdasarkan hasil uji F, profitabilitas, leverage dan inflasi secara simultan berpengaruh terhadap return saham. Hasil uji t menunjukkan profitabilitas (ROA) berpengaruh positif dan signifikan terhadap return saham, leverage (DER) berpengaruh positif tidak signifikan terhadap return saham, inflasi berpengaruh negatif dan tidak signifikan terhadap return saham.

Keywords: Profitabilitas (ROA), Leverage (DER), Inflasi dan Return Saham.

INTRODUCTION

The Capital Market has an important role for a country's economy because the capital market has two functions, namely as a means for business funding and as a means for companies to obtain funds from the capital community or investors. Property, real estate and building construction companies have bright prospects in the future considering the potential for a population that continues to grow. The increasing number of developments in the housing sector, apartments, shopping centers, and office buildings that make investors interested in investing their funds so that the prospects for trade stocks are expected to continue to rise (Sudarsono, 2014).

Table 1 Average Stock Return of Companies in the Building Construction Sub-Sector 2017-2021

Code	Stock Return					
	2017	2018	2019	2020	2021	2022
ACST	-0.1277	-0.3679	-0.3762	-0.5464	-0.5227	-0.0243
ADHI	-0.0938	-0.1592	-0.2587	0.3064	-0.4169	-0.0205
NRCA	0.1515	0.0158	-0.0052	-0.0156	-0.2328	0.0397
PBSA	0.3566	-0.5971	-0.0071	-0.1500	0.2269	-0.0282
PTPP	-0.3071	-0.3163	-0.1219	0.1767	-0.4692	-0.0133
SSIA	0.1866	-0.0291	0.3100	-0.1221	-0.1583	-0.0083
TOTL	-0.1373	-0.1515	-0.2214	-0.1514	-0.1459	-0.0064
WSKT	-0.1333	-0.2398	-0.1161	-0.0303	-0.5590	0.0078

Source : data processed 2023

From table 1 in on can known that *return share* sub sector companies construction building for 6 years final fluctuating . This is because of existence increase and decrease in company profits added with condition economy that is not stable and less Good because of existence pandemic *Covid-19* in Indonesia.

According to research conducted (Suarniti & Widnyana, 2021), *Return on Asset (ROA)* has a positive and significant effect on stock *returns* . Meanwhile, according to(Iradianty, 2018) *Return On Asset (ROA)* affects stock *returns* .

According to Zakaria (2017), *the Debt to Equity Ratio (DER)* does not affect stock *returns* . Meanwhile, according to(Suarniti & Widnyana, 2021) *Debt to Equity Ratio (DER)* has a negative and significant effect on stock *returns* .

According to Haryani (2018) stated inflation influential negative and significant to *return shares* . Meanwhile , according to

(Agung et al., 2020) inflation influential negative No significant to *return share* .

LITERATURE REVIEW

Signal Theory

According to Brigham and Houston (2011) a signal is an action taken by a company to provide investors with instructions on how management views the company's prospects. Information is an important element for investors and business people because information essentially presents information, notes or descriptions for past, current and future conditions for the survival of a company and how the market effects it. Complete, relevant, accurate and timely information is needed by investors in the capital market as an analytical tool for making investment decisions (Suarniti & Widnyana, 2021).

Stock Return

According to Samsul (2016), return is stated income in presentation from initial capital investment . The income in question is income investment in the form of benefits gained from activity buy and sell shares , can in the form of profit or capital gain and loss or capital loss

Profitability

Profitability describes the company's ability to earn profit through all existing capabilities and resources such as sales activities, cash, capital, number of employees, number of branches and so on (Harahap, 2013). Profitability describes the company's ability to earn profit through all existing capabilities and resources such as sales activities, cash, capital, number of employees, number of branches and so on (Harahap, 2013).

Leverage

According to Atmaja (2008) said the leverage ratio shows how much debt is used by the company. The higher DER shows the greater proportion of debt to equity so that it reflects the relatively high risk of the company and the risk that must be borne by investors will also be higher. In the end, investors will avoid shares of companies that have high DER.

Inflation

According to Tandelilin (2010), inflation is a tendency for overall product prices to

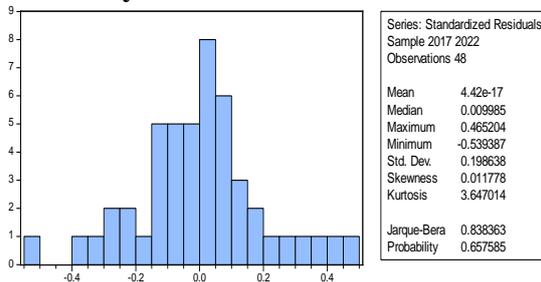
increase. High inflation reduces the level of real income obtained by investors from investments.

METHODOLOGY

In this study, the population is the building construction sub-sector companies listed on the IDX in 2017-2022, namely 18 companies. The sample was taken based on several criteria, namely (1) Building construction sub-sector companies listed on the Indonesia Stock Exchange for the 2017-2022 period. (2) Building construction sub-sector companies that have complete financial data during the 2017-2022 period. Based on these criteria, the research sample is 8 companies x 6 years = 48 financial reports of building construction sub-sector companies.

RESEARCH RESULT

Normality Test



Source: Eviews 9.0 Output

Figure 1 Normality Test Results

From the results of Figure 1 above, it can be seen that Prob > 0.05 which is 0.657585. This means that the data is normally distributed or H_0 can be accepted while H_a is rejected.

Multicollinearity Test

Table 2 Multicollinearity Test Results

	X1	X2	X3
X1	1,000,000	-0.531658	0.190240
X2	-0.531658	1,000,000	-0.132243
X3	0.190240	-0.132243	1,000,000

Source: Eviews 9.0 Output

The standard correlation value is 0.08. Based on the table above, the correlation value between X1, X2 and X3 < 0.08, so there is no

multicollinearity or H_0 is accepted and H_a is rejected.

Heteroscedasticity Test

Table 3 Heteroscedasticity Test Results

Heteroskedasticity Test: White

F-statistic	1.237313	Prob. F(9,38)	0.3022
Obs *R-squared	10.87841	Chi-Sq Prob. (9)	0.2841
Scaled explained SS	12.09858	Chi-Sq Prob. (9)	0.2078

Source: Eviews 9.0 Output

Based on table 3 above, the value of Prob. Chi Square > 0.05 is 0.2841, so there is no heteroscedasticity so that H_a can be accepted and H_0 is rejected.

Autocorrelation Test

Table 4 Autocorrelation Test Results

	Mean	dependent	
R-squared	0.077113	variable	4.87E-17
Adj . R-squared	-0.032755	SD dependent var	0.198627
SE of regression	0.201854	Akaike information	
Sum squared residual	1.711288	criterion	-0.246077
		Black criterion	-0.012177
		Hannan-Quinn criter	
Log likelihood	11.90586	.	-0.157686
F-statistic	0.701869	Durbin-Watson stat	2.031114
Prob(F-statistic)	0.625148		

Source: Eviews 9.0 Output

Based on table 4 above, the *durbin watson value* is 2.031114. With 3 variables X and a sample of 48 data, $dl < dw < 4-du$, namely $1.4064 < 2.031114 < 2.3411$, there is no autocorrelation and H_0 is accepted and H_a is rejected.

Panel Data Regression Model Selection Test

Chow Test Results

Cross-section fixed effects test

Effects Test	Statistics	df	Prob.
Cross-section F	1.051989	(7.37)	0.4130
Cross-section Chi-sq.	8.712418	7	0.2740

Source: Eviews 9.0 Output

Based on table 5 above, the results of the chow test show that the F test Significance P value > 0.05 is 0.2740. So H_0 is accepted H_a is rejected which means the *Common Effect* model is better than the *Fixed Effect model*.

Table 6 Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. df	Prob.
Random cross-section	4.491457	3	0.2131

Source: Eviews 9.0 Output

Based on the table above, the results of the Hausman test show that $P > 0.05$, namely $0.2131 > 0.05$, so H_0 is accepted, H_a is rejected, so the *random effect model* is selected.

<i>Breusch-Pagan LM Test Results</i>			
	<i>Hypothesis Testing</i>		
	<i>Cross section</i>	<i>Time</i>	<i>Both</i>
Breusch Pagan	0.396784 (0.5288)	4.173902 (0.0411)	4.570685 (0.3325)
Honda	-0.629908 --	2.043013 (0.0205)	0.999216 (0.1588)
King-Wu	-0.629908 --	2.043013 (0.0205)	1.153773 (0.1243)
Standardized Honda	-0.313862 --	3.092557 (0.0010)	-1.462038 --
Standardized King-Wu	-0.313862	3.092557	-1.233491

	--	(0.0010)	--
Gourierieux et al.*	--	--	4.173902 (< 0.10)

*Mixed chi-square asymptotic critical values:

1%	7.289
5%	4.321
10%	2,952

Source: Eviews 9.0 Output

From the test results above, it can be seen that *the Breusch-Pagan Prob. value* is $0.3325 > 0.05$, so H_0 is accepted, H_a is rejected, or in other words, the most suitable model is the *common effect model*.

chow test and the *Breusch Pagan LM test*, the *common effect* was chosen as the best model to answer the hypothesis in the study. Therefore, the estimation of the *common effect model* in this study is as follows.

<i>Common Effect Model Estimates</i>				
<i>Variable</i>	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-Statistic</i>	<i>Prob.</i>
C	-0.221917	0.088042	-2.520573	0.0154
X1?	1.029755	0.388786	2.648642	0.0112
X2?	0.002170	0.017431	0.124493	0.9015
X3?	-2.967620	2.366350	-1.254092	0.2164
<i>R-squared</i>	0.223055	<i>Mean dependent var</i>		-0.116882
<i>Adjusted R-squared</i>	0.170082	<i>S.D. dependent var</i>		0.225343
<i>S.E. of regression</i>	0.205287	<i>Akaike info criterion</i>		-0.249163
<i>Sum squared resid</i>	1.854277	<i>Schwarz criterion</i>		-0.093229
<i>Log likelihood</i>	9.979903	<i>Hannan-Quinn criter.</i>		-0.190235
<i>F-statistic</i>	4.210691	<i>Durbin-Watson stat</i>		2.748074
<i>Prob(F-statistic)</i>	0.010558			

Source: Eviews 9.0 Output

From the estimation results in table 8, the following equation can be formed:

$$Y_{it} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon_{it}$$

$$Y_{it} = -0.221917 + 1.029755 + 0.002170 - 2.967620 + \varepsilon_{it}$$

Coefficient of Determination

Based on table 8, it is known that the *adjusted R-Square value* is obtained at 0.170082. then it can be concluded that the percentage of profitability (X1), *leverage* (X2), inflation (X3) on stock returns (Y) is 17%. While the remaining 83% is influenced by other variables outside the model.

Simultaneous Test (F Test)

Based on table 8, the F_{count} result is 4.210691 with Sig 0.010558. The F_{table} value for a sample of 48 data is 2.81. Therefore, the probability of Sig. $0.010558 < 0.05$ and $F_{\text{count}} 4.210691 > F_{\text{table}} 2.81$, then the hypothesis H_0 is rejected and H_a is accepted. This means that profitability, *leverage* and inflation have a simultaneous effect on stock returns, especially in Building Construction Sub-Sector companies listed on the Indonesia Stock Exchange (IDX) for the 2017-2022 period.

Partial Test (t-Test)

Partial hypothesis testing for profitability (X1) on stock returns (Y) in the t table produced a significant value of 0.0112 and a calculated t value

of 2.648642. The t_{table} value for a sample of 48 data was 1.68. The significant value of 0.0112 < 0.05 and the calculated t value of 2.648642 $> t_{table}$ 1.68, then the hypothesis H_0 is rejected and H_a is accepted, namely profitability has a positive and significant effect on stock returns of building construction sub-sector companies.

The partial hypothesis test for *leverage* (X2) on stock returns (Y) produced a significant value of 0.9015 and a calculated t value of 0.124493. The t_{table} value for a sample of 48 data was 1.68. The significant value of 0.9015 > 0.05 and the calculated t value of 0.124493 $< t_{table}$ 1.68, then the hypothesis H_0 is accepted and H_a is rejected, namely *leverage* has a positive but insignificant effect on stock returns of construction sub-sector companies.

The partial hypothesis test for inflation (X3) on stock returns (Y) produced a significant value of 0.2164 and a calculated t value of -1.254092. The t_{table} value for a sample of 48 data was 1.68. The significant value of 0.2164 > 0.05 and the calculated t value of -1.254092 $< t_{table}$ 1.68, then the hypothesis H_0 is accepted and H_a is rejected, namely inflation has a negative and insignificant effect on the stock returns of companies in the building construction sub-sector.

DISCUSSION

The Influence of Profitability on Stock Returns

The first hypothesis states that profitability is calculated using *Return On Assets* (ROA) has a positive and significant effect on stock returns of construction and building sub-sector companies listed on the Indonesia Stock Exchange (IDX) in 2017-2022. Based on the results of the multiple regression test, the coefficient value obtained was t count 2.648642 $> t_{table}$ 1.68 with a significance value of 0.0112 < 0.05 so that H_1 is accepted. The results of the partial research analysis state that Profitability (ROA) has a positive and significant effect on stock returns of building construction sub-sector companies listed on the Indonesia Stock Exchange (IDX) in 2017-2022.

The Effect of Leverage on Stock Returns

The second hypothesis states that *leverage* calculated using *the Debt To Equity Ratio* (DER) has a positive and significant effect on

stock returns of building construction sub-sector companies listed on the Indonesia Stock Exchange (IDX) in 2017-2022. Based on the results of the multiple regression test, the coefficient value was obtained as t count 0.124493 $< t_{table}$ 1.68 with a significance value of 0.9015 > 0.05 so that H_2 was rejected. The results of the partial research analysis stated that *Leverage* (DER) has a non-significant positive effect on stock returns of building construction sub-sector companies listed on the Indonesia Stock Exchange (IDX) in 2017-2022.

The Effect of Inflation on Stock Returns

The third hypothesis states that inflation taken from the Central Statistics Agency (BPS) has a negative and significant effect on stock returns of building construction sub-sector companies listed on the Indonesia Stock Exchange (IDX) in 2017-2022. Based on the results of the multiple regression test, the coefficient value obtained was t count -1.254092 $< t_{table}$ 1.68 with a significance value of 0.2164 > 0.05 so that H_3 is accepted. The results of the partial research analysis state that inflation has no significant negative effect on stock returns of building construction sub-sector companies listed on the Indonesia Stock Exchange (IDX) in 2017-2022.

The Influence of Profitability, Leverage and Inflation on Stock Returns

The fourth hypothesis states that profitability (ROA), *leverage* (DER) and inflation have a joint effect on stock returns of building construction sub-sector companies listed on the Indonesia Stock Exchange (IDX) in 2017-2022. Based on the results of the multiple regression test, the coefficient value obtained was f count 4.210691 $> f_{table}$ 2.81 with a significance value of prob Sig. 0.010553 < 0.05 so that H_4 is accepted. The results of this research analysis state that profitability (ROA), *leverage* (DER) and inflation have a joint effect on stock returns of building construction sub-sector companies listed on the Indonesia Stock Exchange (IDX) in 2017-2022.

CONCLUSION

Based on the results of the research and discussion, it can be concluded as follows: (1) Profitability (ROA) has a positive and significant effect on stock *returns* of building construction sub-sector companies listed on the IDX in 2017-2022; (2) *Leverage* (DER) has a positive and insignificant effect on stock *returns* of building construction sub-sector companies listed on the IDX in 2017-2022; (3) Inflation has a negative and insignificant effect on stock *returns* of building construction sub-sector companies listed on the IDX in 2017-2022; and (4) Profitability (ROA), *Leverage* (DER) and Inflation have a joint effect on stock *returns* of building construction sub-sector companies listed on the IDX in 2017-2022.

IMPLICATIONS

The implication of this study is that investors should consider ROA as an important indicator in investing in building construction companies, while companies need to focus on improving their profitability. Although DER is not significant individually, debt management is still important, and companies should monitor the impact of inflation. Further research can expand the scope of variables for a more comprehensive understanding, including a more in-depth analysis of debt management in building construction companies.

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