

**The effect of gross profit margin, liquidity ratio, earning ratio, and solvency ratio on profit growth and stock return in *property and real estate sub-sector service companies published and listed on the Indonesia Stock Exchange (IDX) for the 2017-2019 period***

Rifani Akbar Sulbahri<sup>1</sup>, Firmansyah Arifin<sup>2</sup>

<sup>1</sup>Tridinanti University, Faculty of Economics and Business

<sup>2</sup> Tridinanti University, Faculty of Economics and Business

Correspondence

[rifaniakbar.sulbahri@univ-tridinanti.ac.id](mailto:rifaniakbar.sulbahri@univ-tridinanti.ac.id)

[firmansyah\\_arifin@univ-tridinanti.ac.id](mailto:firmansyah_arifin@univ-tridinanti.ac.id)

**Abstract:**

**Objective:** This study aims to investigate the influence of gross profit margin, liquidity ratio, earning ratio, and solvability ratio on profit growth and stock return.

**Design/Methods/Approach:** The population consists of companies in the property and real estate sector during the period 2017-2019. Multiple regression analysis using panel data is employed as a statistical method strategy.

**Findings:** The research results indicate that in the first model, only earning ratio and solvability ratio have a significant impact on profit growth, whereas gross profit margin and liquidity ratio do not influence profit growth significantly. In the second model, liquidity ratio and solvability ratio are found to affect stock return, while gross profit margin and earning ratio do not have a significant impact on stock return.

**Originality/Value:** This study introduces two research models, contrasting with previous studies that utilized a single model to explore relationships between variables. The use of multiple regression analysis with panel data adds a strategic dimension to the statistical methodology.

**Practical/Policy Implication:** The implications of this study are expected to benefit investors, company management, and stakeholders in enhancing profit growth and stock return. Additionally, this research contributes to the literature in the field of corporate finance and serves as a reference for future studies.

**Keywords:** gross profit margin, liquidity ratio, earning ratio, solvability ratio, profit growth, stock return.

JEL Classification: M1, M2

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**Introduction**

Capital markets serve as a means for companies to fulfill their long-term funding needs by issuing stocks or bonds (Han et al., 2018). To attract buyers and sellers to participate, capital markets need to be liquid and efficient (Ye et al., 2020). Liquidity in a capital market is defined by the ability of sellers to quickly sell securities and buyers to purchase them (Gbalam, 2019). An efficient capital market accurately reflects the value of securities (Ali et al., 2018). Liquidity

ensures smooth trading, while efficiency ensures that prices accurately reflect a company's value, instilling confidence in investors and preventing abnormal gains.

Information about a company's financial position, performance, cash flow, and other relevant financial data can be obtained from its financial statements (Osadchy et al., 2018). Financial statement analysis is crucial for companies and other stakeholders to understand the financial health of a business (Int, 1997). This analysis involves calculating and interpreting financial ratios (Myšková & Hájek, 2017). Financial statement analysis aids business stakeholders, including governments and other financial statement users, in assessing the financial condition of companies, including those in the Property and Real Estate Service Sub-Sector. Evaluation of financial performance can involve various assessment aspects such as gross profit margin (GPM) (Mahdi & Khaddafi, 2020), (Kurniawan & Ariawan, 2022), liquidity ratio (CR) (Husna & Satria, 2019), price-earning ratio (PER) (Marsha & Murtaqi, 2017), (Jermsittiparsert et al., 2019), and solvency ratio (DER) (Ningsih & Sari, 2019), (Kusmawati, 2020).

This research is crucial as understanding the impact of financial ratios on stock returns can assist investors in making investment decisions (Widagdo et al., 2020). Positive influences on stock returns can influence investor decisions to invest in a particular company (Jihadi et al., 2021). Conversely, if financial ratios have a negative impact and considering profit growth predictions, the use of financial ratios as predictors becomes important (Liang et al., 2016). Financial statement analysis is valuable for anticipating future conditions, including profit forecasts (Schleicher et al., 2007). It also provides performance assessments for company managers (Bourguignon & Chiapello, 2005), addressing the needs of various stakeholders involved in managing organizational operations effectively and efficiently (Safkaur & Sagrim, 2019).

## I. Theoretical Foundation

### Signaling theory

Signalling Theory or signal theory developed by (Ross, 1978) That company executives have better information about their company will be encouraged to convey the information to potential investors so that the company's stock price increases. Signalling Theory states that there is information content in the disclosure of information, which can be a signal for investors and other parties in making management decisions, (Musleh Al-Sartawi & Reyad, 2018). Signals or signals are actions taken by management to find out more complete and accurate information about the company's internal and future prospects than investors, (Rose & Thomsen, 2004). Therefore, managers are obliged to give signals about the condition of the company to stakeholders. The signals provided can be made through disclosure of accounting information such as the publication of financial statements.

### Understanding Investment

Investment is a commitment to a number of funds or other resources carried out at this time with the aim of obtaining a number of benefits in the future, (Triani & Tarmidi, 2019). According to Hartono (2008) investment is a delay in current consumption that is put into an efficient production process for a certain period of time which results in future consumption, (Lange et al., 2020). An investor buys a stock now in the hope of profiting from an increase in the stock price or a number of dividends in the future.

## **Gross Profit Margin(GPM)**

GPM is the ratio or balance between gross profit (gross profit) obtained by the company with the level of sales achieved in the same period, (Raharjo et al., 2021). A large GPM in a company shows that the company is able to carry out its operations efficiently because the cost of goods sold is relatively lower than sales, (Rinaldo & Endri, 2020). The higher the GPM, the better the company's operating state. Margin is this ratio useful for measuring the level of effectiveness of the company in generating profits and selling its products with the formula (Orniati, 2009):

## **Liquidity Ratio**

The liquidity ratio is the ability of an entity to pay off the company's current liabilities by utilizing its current assets, (Mouzas, 2006). To be able to maintain the company in a liquid condition, the company must have current funds that are greater than its current debt. When the company is in an unhealthy state, it can be interpreted that the company is in an illiquid position, (Otu et al., 2015). The liquidity ratio is calculated by the current ratio, which is a ratio that divides the amount of current assets from the company's current debt (current ratio = current assets / current debt).

## **Price Earning Ratio**

Price Earning Ratio shows between the share price per share (P) and earnings per share (EPS), (Purwaningrum, 2011). In growing companies, high P/E is due to high earnings growth estimates, (Fitzsimmons et al., 2011). The thing to consider is whether the estimate is "accurate" or will occur in the future. If that doesn't happen, then the PER will be high or the price will be expensive. Of course, this situation can be a consideration for investors.

## **Solvency Ratio**

According to (Dirman, 2020) The solvency ratio (leverage) is a ratio used to measure the extent to which a company's assets are financed with debt. Debt to Equity Ratio is a ratio used to assess debt with equity, (Husna & Satria, 2019). This ratio is found by comparing all debt, including current debt with all equity. The formula for finding the debt to equity ratio can be used to compare total debt with total equity as follows

## **Profit Growth**

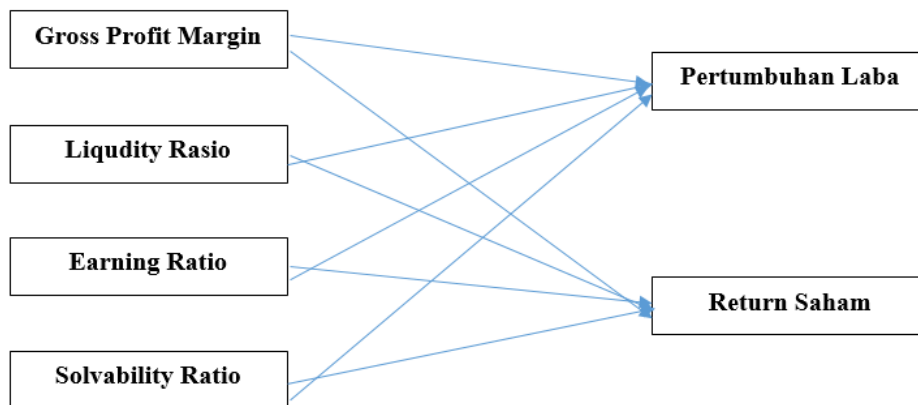
Profit growth is the difference between realized revenue arising from transactions during a period and the costs associated with that revenue, (Dechow & Dichev, 2002). Year-on-year profit growth is also used as a basis for measuring management efficiency and helps forecast the company's future direction or future dividend distribution. Formula for measuring Profit growth, (Kazemian et al., 2017)

## **Stock Return**

Return (return) is the level of profit enjoyed by investors on an investment made, (Purnamasari, 2015). (Anayochukwu, 2012) It also states that stock returns are the results obtained from an investment.

Expected returns are returns that have not occurred but that are expected in the future. As a rational individual, investors will consider the expected return and the amount of risk that must be borne as a logical consequence of the decisions that have been taken.

**Frame of Mind**



Sumber: diolah penulis 2021

- Hypothesis 1 = (*Gross profit margin* has a significant effect on profit growth)
- Hypothesis 2 = (*Liquidity ratio* has a significant effect on profit growth)
- Hypothesis 3 = (*Earning ratio* has a significant effect on profit growth)
- Hypothesis 4 = (*Solvability ratio* has a significant effect on profit growth)
- Hypothesis 5 = (*Gross profit margin* has a significant effect on stock returns)
- Hypothesis 6 = (*Liquidity ratio* has a significant effect on stock returns)
- Hypothesis 7 = (*Earnings ratio* has a significant effect on stock returns)
- Hypothesis 8 = (*Solvency ratio* has a significant effect on stock returns)

**RESEARCH METHODS**

**Data Types and Sources**

The nature in this study is quantitative, which in processing data uses statistical models. The data taken are financial statements for the period 2017 to 2019 on property and real estate sub-sector *companies listed on the Indonesia Stock Exchange and some literature related to the problem being studied.*

**Sample**

The sample selected in this study is property and real estate sub-sector *companies on the IDX with the following criteria:*

- a. Shares of active companies listed on the IDX during the period 2017-2019.
- b. Property and real estate sub-sector *companies* that present complete financial statements and ratios in accordance with the variables to be studied based on the sources used.
- c. The Company has published audited financial statements in the period 2017-2019.

**Data Analysis Techniques**

The analysis technique used is multiple linear regression consisting of two variables dependent (Y) and two independent variables (X1- X2).

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Information:

Y = Profit Growth and Stock Return = Constant, X1 = Liquidity Ratio

X2 = Gross Profit Margin, X3 = Earning Ratio, X4 = Solvability Ratio

**Research Overview**

This research analysis uses secondary data sourced from annual financial statements on *property and real estate sub-sector* service companies published and listed on the Indonesia Stock Exchange (IDX) with a period of 2017-2019.

**Descriptive Statistics**

Table 2 shows the descriptive statistics of each variable used in the study in the form of independent variables, namely *gross profit margin (GPM)*, *liquidity ratio (CR)*, *earning ratio (PER)* and solvency ratio (*DER*) as well as dependent variables of profit growth (GROWTH) and stock return (RS).

**Descriptive Statistics Table**

	GROWTH	RS	GPM	CR	PER	DER
Mean	67.85746	0.043313	0.604840	194.3800	15.22161	50.59881
Median	1.713245	-6.175439	0.599900	132.0000	10.75963	47.05500
Maximum	1521.163	86.16352	1.589900	1276.860	110.7843	142.0000
Minimum	-95.89020	-43.71585	0.347400	2.340000	4.503582	0.300000
Std. Dev.	259.6357	27.72755	0.186183	242.2085	17.18012	41.21485
Observations	42	42	42	42	42	42

Source : Data processed with eviews 10, 2021

**Common effect model**

The results of the estimation *of the common effect model* of equations 1 and 2 are presented in the following table:

**Common effect (Growth) Model Table**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-134.7171	184.8636	-0.728737	0.4707
GPM	216.0556	230.0332	0.939237	0.3537
CR	0.024498	0.167933	0.145878	0.8848
PER	-3.626205	2.313414	-1.567469	0.1255
DER	2.417648	1.020258	2.369644	0.0231

Source : Data processed with eviews 10, 2021

**Common effect (RS) Model Table**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-4.021131	20.61992	-0.195012	0.8465
GPM	22.15221	25.65819	0.863358	0.3935
CR	-0.012101	0.018732	-0.646041	0.5222
PER	-0.259187	0.258041	-1.004442	0.3217
DER	-0.060013	0.113801	-0.527355	0.6011

Source : Data processed with eviews 10, 2021

Based on the regression results above, model the equations for equations 1 and 2 using the method *Common Effect* can be formulated as follows:

$$\begin{aligned} \text{GROWTH} &= 134.72 + 216.06 \text{ GPM} + 0.02 \text{ CR} - 3.63 \text{ PER} + 2.42 \text{ DER} \\ \text{RS} &= -4.02 + 22.15 \text{ GPM} - 0.01 \text{ CR} - 0.26 \text{ PER} - 0.06 \text{ DER} \end{aligned}$$

**Fixed effect model**

The results of the fixed effect model estimation of equations 1 and 2 are presented in the following table:

**Fixed Effect (Growth) Model Table**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-564.8681	145.5239	-3.881619	0.0007
GPM	135.3927	176.1032	0.768826	0.4495
CR	0.096561	0.195807	0.493146	0.6264
PER	-8.636187	1.455887	-5.931909	0.0000
DER	13.11339	1.595625	8.218339	0.0000

Source : Data processed with eviews 10, 2021

**Fixed Effect (RS) Model Table**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-26.77296	25.21792	-1.061664	0.2990
GPM	27.59161	30.51703	0.904138	0.3749
CR	-0.084672	0.033931	-2.495378	0.0199
PER	-0.165402	0.252292	-0.655600	0.5183
DER	0.575190	0.276507	2.080202	0.0484

Source : Data processed with eviews 10, 2021

Based on the regression results above, model the equations for equations 1 and 2 using the method *Fixed Effect* can be formulated as follows:

$$\begin{aligned} \text{GROWTH} &= -564.87 + 135.39 \text{ GPM} + 0.09 \text{ CR} - 8.64 \text{ PER} + 13.11 \text{ DER} \\ \text{RS} &= -26.77 + 27.59 \text{ GPM} - 0.08 \text{ CR} - 0.17 \text{ PER} + 0.58 \text{ DER} \end{aligned}$$

**Random effect model**

The results of the random effect model estimation of equations 1 and 2 are presented in the following table:

**Random Effect (Growth) Model Table**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-203.4998	119.7048	-1.700013	0.0975
GPM	247.4914	145.8090	1.697366	0.0980
CR	0.046134	0.123146	0.374628	0.7101
PER	-6.515718	1.338854	-4.866640	0.0000
DER	4.187383	0.783972	5.341238	0.0000

Source : Data processed with eviews 10, 2021

**Random Effect (RS) Model Table**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6.506617	20.10559	-0.323622	0.7480
GPM	24.41695	24.61615	0.991908	0.3277
CR	-0.026445	0.020280	-1.304003	0.2003
PER	-0.241287	0.228886	-1.054181	0.2986
DER	0.011754	0.127767	0.091994	0.9272

Source : Data processed with eviews 10, 2021

Based on the regression results above, model the equations for equations 1 and 2 using the method *random effect* can be formulated as follows:

$$\begin{aligned} \text{GROWTH} &= -203.50 + 247.49 \text{ GPM} + 0.05 \text{ CR} - 6.52 \text{ PER} + 4.18 \text{ DER} \\ \text{RS} &= -6.51 + 24.42 \text{ GPM} - 0.03 \text{ CR} - 0.24 \text{ PER} + 0.01 \text{ DER} \end{aligned}$$

**Panel Data Regression Model Selection**

According to Widarjono (2013: 362), the selection of the best model can be determined by performing statistical test F or *Chow Test*, and *Hausman Test* and, *Lagrange Multiplier Test*.

**Chow Test on Fixed effect Model**

**Chow Test Results Table (GROWTH)**

Redundant Fixed Effects Tests			
Equation: Untitled			
Test cross-section fixed effects			
Effects Test	Statistics	d.f.	Prob.
Cross-section F	8.948029	(13,24)	0.0000
Cross-section Chi-square	74.167920	13	0.0000

Source : Data processed with eviews 10, 2021

**Chow Test Results Table (GROWTH)**

Redundant Fixed Effects Tests			
Equation: Untitled			
Test cross-section fixed effects			
Effects Test	Statistics	d.f.	Prob.
Cross-section F	2.625936	(13,24)	0.0196
Cross-section Chi-square	37.159554	13	0.0004

Source : Data processed with eviews 10, 2021

The results of the chow test test, show that the probability of *cross section chi square* equations 1 and 2 of 0.0000 and 0.0004 is smaller than alpha (0.05) so  $H_a$  is accepted. Then the appropriate method in research and the best technique for conducting regression tests is the *fixed effect model*.

**Hausman Test on Random Effect Model**

The results of testing the *random effect* model on equations 1 and 2 using the hausman test can be seen in the following table.

**Hausman Test Table (GROWTH)**

Correlated Random Effects - Hausman Test			
Equation: Untitled			
Test cross-section random effects			
Test Summary	Chi-sq. Statistics	Chi-sq. d.f.	Prob.
Cross-section random	59.289349	4	0.0000

Source : Data processed with eviews 10, 2021

**Hausman Test Table (RS)**

Correlated Random Effects - Hausman Test			
Equation: Untitled			
Test cross-section random effects			
Test Summary	Chi-sq. Statistics	Chi-sq. d.f.	Prob.
Cross-section random	10.643060	4	0.0309

Source : Data processed with eviews 10, 2021

The results of the Hausman test above show that the probability of *random cross section* in equations 1 and 2 of 0.0000 and 0.0309 respectively is smaller than alpha (0.05) so that H0 is accepted, so it means that the right model for panel data regression is a *fixed effect model*.

**Test the Lagrange Multiplier on the Common Effect Model**

Test *Lagrange Multiplier* (LM) is a test used to determine if an approach *random effect* better than approach *Common Effect* (Zulfikar, 2018).

**Classical Assumption Test**

The estimation technique used in the *common effect* model is the *Ordinary Least Square* (OLS) approach. In panel data regression, classical assumption tests used in the OLS approach include heteroscedasticity and multicollinearity.

**Heteroscedasticity Test**

**Table of Heteroscedasticity Test Results (GROWTH)**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	80.99173	58.92380	1.374516	0.1820
GPM	-8.895370	71.30561	-0.124750	0.9018
CR	-0.021458	0.079284	-0.270652	0.7890
PER	-1.046485	0.589500	-1.775206	0.0885
DER	0.223956	0.646081	0.346638	0.7319

Source : Data processed with eviews 10, 2021

**Table of Heteroscedasticity Test Results (GROWTH)**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	6.549942	10.08022	0.649782	0.5220
GPM	7.184748	12.19840	0.588991	0.5614
CR	-0.002208	0.013563	-0.162759	0.8721
PER	-0.125424	0.100847	-1.243704	0.2256
DER	0.081448	0.110527	0.736908	0.4683

Source : Data processed with eviews 10, 2021

The results of the tests conducted show that the probability value of the Glejser test in equations 1 and 2 on independent variables *gross profit margin* (GPM), *liquidity ratio* (CR), *Earning Ratio* (PER) and *solvency ratio* (DER) shows a value of > 0.05 (5%) so that it can be



concluded that the regression model in equations 1 and 2 does not experience heteroscedasticity problems.

**Multicollinearity Test**

**Multicollinearity Test Table**

	GPM	CR	PER	DER
GPM	1	0.224595992 8418564	0.166157833 9098467	0.313732733 5309388
CR	0.224595992 8418564	1	0.045016160 26013581	0.106344384 1117336
PER	0.166157833 9098467	0.045016160 26013581	1	0.165211653 9984407
DER	0.313732733 5309388	0.106344384 1117336	0.165211653 9984407	1

Source : Data processed with eviews 10, 2021

The results of the tests carried out show that the value of the correlation coefficient between independent variables *gross profit margin* (GPM), *liquidity ratio* (CR), *Earning Ratio* (PER) and *solvency ratio* (DER) has a value of < 0.80, so the regression model in equations 1 and 2 used does not occur multicollinearity problems.

**Multiple Regression Analysis Panel Data**

The relationship of the independent variables *gross profit margin* (GPM), *liquidity ratio* (CR), *earning ratio* (PER) and *solvency ratio* (DER) to the dependent variables of profit growth and stock return was analyzed using panel data regression analysis. The model used in the study is a *fixed effect model* with the following estimation results:

**Fixed effect Model Table (GROWTH)**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-564.8681	145.5239	-3.881619	0.0007
GPM	135.3927	176.1032	0.768826	0.4495
CR	0.096561	0.195807	0.493146	0.6264
PER	-8.636187	1.455887	-5.931909	0.0000
DER	13.11339	1.595625	8.218339	0.0000

Source : Data processed with eviews 10, 2021

Based on the regression results above, model the equation for equation 1 (GROWTH) using the method *Fixed Effect* can be formulated as follows:  
 GROWTH = -564.87 + 135.39 GPM + 0.09 CR - 8.64 PER + 13.11 DER

The results of the *fixed effect model* in equation 2 are presented in the following table:

**Fixed effect (RS) Model Table**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-26.77296	25.21792	-1.061664	0.2990
GPM	27.59161	30.51703	0.904138	0.3749
CR	-0.084672	0.033931	-2.495378	0.0199
PER	-0.165402	0.252292	-0.655600	0.5183
DER	0.575190	0.276507	2.080202	0.0484

Source : Data processed with eviews 10, 2021

Based on the results of the regression above, model the equation for equation 2 (RS) using the method *Fixed Effect* can be formulated as follows:

$$RS = -26.77 + 27.59 \text{ GPM} - 0.08 \text{ CR} - 0.17 \text{ PER} + 0.58 \text{ DER}$$

**Test the hypothesis**

In this study, hypothesis testing uses the t test to see the influence of the independent variable on the dependent variable partially and the F test to find out the estimated model is feasible to show the influence of the independent variable on the dependent variable and the coefficient of determination test to find out how much influence the independent variable has on the dependent variable.

**Statistical F Test**

According to (Zulfikar, 2018) The feasibility test of the model is used to test the accuracy of the sample regression function in estimating the actual value that can be measured through the value of the coefficient of determination, the statistical value of F, and the statistical value of t. The results of the t test in equations 1 and 2 can be seen in the following table:

**Statistical Test Results Table F**

R-squared	0.858053	Mean dependent var	67.85746
Adjusted R-squared	0.757507	S.D. dependent var	259.6357
S.E. of regression	127.8540	Akaike info criterion	12.83718
Sum squared resid	392319.5	Schwarz criterion	13.58190
Log likelihood	-251.5808	Hannan-Quinn criter.	13.11015
F-statistic	8.533929	Durbin-Watson stat	3.294973
Prob(F-statistic)	0.000002		

Source : Data processed with eviews 10, 2021

**Statistical Test Results Table F**

R-squared	0.626248	Mean dependent var	0.043313
Adjusted R-squared	0.361508	S.D. dependent var	27.72755
S.E. of regression	22.15590	Akaike info criterion	9.331612
Sum squared resid	11781.21	Schwarz criterion	10.07633
Log likelihood	-177.9638	Hannan-Quinn criter.	9.604579
F-statistic	2.365516	Durbin-Watson stat	2.501390
Prob(F-statistic)	0.026162		

Source : Data processed with eviews 10, 2021

Based on the table above, the probability value of f-statistic in equations 1 and 2 is smaller than alpha (0.05), which is 0.000 and 0.026 < 0.05 which means gross profit margin, liquidity ratio, earning *ratio and* solvability ratio *simultaneously have a significant effect on profit growth and stock return*. The conclusion in this study is to accept Ha.

**Partial Significance (t-test)**

The results of the t test on persaman 1 and 2 can be seen in the following table:

**Statistical Test Table t (GROWTH)**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-564.8681	145.5239	-3.881619	0.0007
GPM	135.3927	176.1032	0.768826	0.4495
CR	0.096561	0.195807	0.493146	0.6264
PER	-8.636187	1.455887	-5.931909	0.0000
DER	13.11339	1.595625	8.218339	0.0000

Source : Data processed with eviews 10, 2021

**Statistical Test Table t (RS)**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-26.77296	25.21792	-1.061664	0.2990
GPM	27.59161	30.51703	0.904138	0.3749
CR	-0.084672	0.033931	-2.495378	0.0199
PER	-0.165402	0.252292	-0.655600	0.5183
DER	0.575190	0.276507	2.080202	0.0484

Source : Data processed with eviews 10, 2021

Based on the table above, then:

- a. Hypothesis 1 = (*Gross profit margin* has a significant effect on profit growth)  
 Based on Table 20, the prob. value of the variable gross profit margin > *the value of critical probability* ( $\alpha = 5\%$ ) of  $0.4495 > 0.05$ , so that the variable gross profit margin does not have a significant effect on profit growth.
- b. Hypothesis 2 = (*Liquidity ratio* has a significant effect on profit growth)  
 The variable liquidity ratio prob. value > *critical probability value* ( $\alpha = 5\%$ ) of  $0.6264 > 0.05$ , so that the variable liquidity ratio *does not have a significant effect on profit growth*.
- c. Hypothesis 3 = (*Earning ratio* has a significant effect on profit growth)  
 The value of the prob. variable earning ratio < *the value of critical probability* ( $\alpha = 5\%$ ) of  $0.0000 < 0.05$ , so that the variable earning ratio *has a significant effect on profit growth*.
- d. Hypothesis 4 = (*Solvability ratio* has a significant effect on profit growth)  
 The prob. value of the solvability ratio variable < *the critical probability value* ( $\alpha = 5\%$ ) of  $0.0000 < 0.05$ , so that the solvability ratio variable has a significant effect on profit growth.
- e. Hypothesis 5 = (*Gross profit margin* has a significant effect on stock returns)  
 Based on Table 21, the prob. value of the variable gross profit margin > *the value of critical probability* ( $\alpha = 5\%$ ) of  $0.3749 > 0.05$ , so that the variable gross profit margin *does not have a significant effect on stock returns*.
- f. Hypothesis 6 = (*Liquidity ratio* has a significant effect on stock returns)  
 The variable liquidity ratio prob. value < *critical probability value* ( $\alpha = 5\%$ ) of  $0.0199 < 0.05$ , so that the variable liquidity ratio *has a significant effect on stock returns*.
- g. Hypothesis 7 = (*Earnings ratio* has a significant effect on stock returns)  
 The variable earning ratio > *critical probability value* ( $\alpha = 5\%$ ) of  $0.5183 > 0.05$ , so the variable earning ratio *does not have a significant effect on stock returns*.
- h. Hypothesis 8 = (*Solvency ratio* has a significant effect on stock returns)  
 The prob. value of the solvability ratio variable < *the critical probability value* ( $\alpha = 5\%$ ) of  $0.0484 < 0.05$ , so that the solvability ratio variable has a significant effect on stock returns.

**Coefficient of Determination ( R2 )**

The results of the coefficients of determination of equations 1 and 2 can be seen in the following table:

**Table of Coefficients of Determination (R2) (RS)**

R-squared	0.858053	Mean dependent var	67.85746
Adjusted R-squared	0.757507	S.D. dependent var	259.6357
S.E. of regression	127.8540	Akaike info criterion	12.83718
Sum squared resid	392319.5	Schwarz criterion	13.58190
Log likelihood	-251.5808	Hannan-Quinn criter.	13.11015
F-statistic	8.533929	Durbin-Watson stat	3.294973
Prob(F-statistic)	0.000002		

Source : Data processed with eviews 10, 2021

**Table of Coefficients of Determination (R2) (RS)**

R-squared	0.626248	Mean dependent var	0.043313
Adjusted R-squared	0.361508	S.D. dependent var	27.72755
S.E. of regression	22.15590	Akaike info criterion	9.331612
Sum squared resid	11781.21	Schwarz criterion	10.07633
Log likelihood	-177.9638	Hannan-Quinn criter.	9.604579
F-statistic	2.365516	Durbin-Watson stat	2.501390
Prob(F-statistic)	0.026162		

Source : Data processed with eviews 10, 2021

Based on the table, it is known that the adjusted r square value is 0.7575, this shows that the proportion of the influence of the independent variables *gross profit margin (GPM)*, *liquidity ratio (CR)*, *earning ratio (PER)* and *solvability ratio (DER)* on the dependent variable of *profit growth (GRPWTH)* 75.75% while the remaining 24.25 (100% - 75.75%) were influenced by other variables that were not in the regression model.

Based on the table, it is known that the adjusted r square value is 0.3615, this shows that the proportion of the influence of the free variables *gross profit margin (GPM)*, *liquidity ratio (CR)*, *earning ratio (PER)* and *solvency ratio (DER)* on the dependent variable *stock return (RS)* 36.15% while the remaining 63.85 (100% - 36.15%) were influenced by other variables that were not in the regression model.

**Conclusion**

In signal theory, this can be interpreted as an indication that a company is likely to signal to the market information that it considers positive or profitable. At the moment, the revenue ratio and solvency ratio are considered as factors that are considered to have a positive impact on profit growth, so companies choose to pass information on these factors to the market. Meanwhile, gross profit margin and liquidity ratio are considered not to have a significant impact on profit growth. Therefore, the results of this study provide specific insights into the company or market under study, but cannot be considered as generalizations that apply to all situations.

**Implication**

The implications of this paper are expected to be useful for investors, company management, and stakeholders to help companies increase profit growth and stock returns. Increasing transparency of information submitted by companies is key to building investor confidence. Accurate and relevant information is an important foundation in strengthening the company's image and reducing market area. Investors and financial analysts must have a good

understanding of the variables that affect a company's profit growth. In-depth analysis of factors such as income ratios and solvency ratios helps investors make smart and informed investment decisions. This advanced research will help companies develop more efficient financial strategies, adapt to market changes, and achieve sustainable profit growth.

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