



The Influence of Financial Performance and Macroeconomic Factors on Stock Returns in Pharmaceutical Companies Listed on Several ASEAN Exchanges (Singapore, Malaysia, Vietnam, Indonesia)

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Abstract: This research aims to determine the influence of Current Ratio, Cash Ratio, Debt To Equity Ratio, Time Interest Earned Ratio, Return On Equity, Net Profit Margin, Total Asset Turnover, Account Receivable Turnover, and Gross Domestic Product on stock return Pharmaceutical Companies Listed on Several ASEAN Stock Exchanges (Singapore, Malaysia, Vietnam, Indonesia) 2018-2021 period. This research uses a quantitative type of research. The sampling technique uses purposive sampling. The data analysis methods used in the research are Descriptive Analysis, Panel Data Regression Analysis, Classical Assumptions, and Hypothesis Testing using the STATA application version 17. The results of the study show that partially Current Ratio has a significant negative effect on stock returns, Debt To Equity Ratio and Time Interest Earned Ratio have a significant positive effect on stock returns. Whereas Cash Ratio, Return on Equity, Net Profit Margin, Total Asset Turnover, Account Receivable Turnover, and Gross Domestic Product has no effect on Return Share. Simultaneously (F Test) Current Ratio, Cash Ratio, Debt To Equity Ratio, Time Interest Earned Ratio, Return On Equity, Net Profit Margin, Total Asset Turnover, Account Receivable Turnover, and Gross Domestic Product have a positive and significant effect on the dependent variable (share returns).

Key words: Financial performance, Macroeconomic Factors, Stock returns.

INTRODUCTION

Background

In the era of industrial revolution 4.0, which is the era of digitalization, it has influenced growth and development in all aspects, including the world economy. In increasingly advanced and rapid economic activities, there is more and more competition which requires every company to be more innovative in carrying out the company's mission in order to achieve goals and fulfill stakeholder interests. Achieving targets and meeting company goals and needs, this condition spurs companies to look for sources of financing that can provide large amounts. Pharmaceutical companies in the ASEAN region are one of the companies that have a very important role in the medical world and are one of the main needs of society in maintaining and maintaining health levels. Pharmaceutical companies are one of the companies driving the economy both in Southeast Asia and internationally.

The company's financial performance is one of the factors related to the company's internal conditions to be able to see the level of health, good or bad, of a pharmaceutical company. The financial

performance of pharmaceutical companies can be seen and measured using the current year's or previous year's financial reports which are prepared as a guide for evaluating and improving competitiveness in the following year. Pharmaceutical companies are companies that are in great demand for doing business to make a profit, because they are one of the companies that can survive even in critical conditions.

ReturnShares are the results obtained from efforts carried out by supporters of financial activities and are one of the important factors in choosing share investments. Stock returns will be reflected in the share prices of pharmaceutical companies resulting from investment activities in the capital market. The higher the share purchase, the higher the share price, and this will also increase share returns. High stock returns indicate the prosperity of shareholders. Thus, effective financial performance management is very important for the company's continued growth and development.

Table 1. Average Financial Performance, GDP and Stock Returns in Pharmaceutical Companies Registered in Several ASEAN Countries 2018-2021

Variable	Singapore	Malaysia	Vietnamese	Indonesia
<i>Current Ratio</i>	2.95	2.02	2.16	3.85
<i>Cash Ratio</i>	1.97	0.82	0.59	1.44
<i>Debt to Equit Ratio</i>	0.44	1.03	0.75	0.56
<i>Time Interest Earned Ratio</i>	453.48	54.30	522.46	2970.20
<i>Return On Equity</i>	0.07	0.26	0.20	0.15
<i>Net Profit Margin</i>	0.20	1.02	0.10	0.12
<i>Total Asset Turnover</i>	0.66	3.05	1.22	0.94
<i>Account Receivable Turnover</i>	4.55	5.99	9.83	5.87
<i>Gross Domestic Product</i>	2.47	1.70	5.06	2.96
<i>ReturnShare</i>	0.05	0.35	0.27	0.14

Source: Data Processing, 2023

Based on this explanation, there are differences between the results obtained from previous research regarding Current Assets, Cash Ratio, Debt To Equity Ratio, Time Interest Earned Ratio, Return On Equity, Net Profit Margin, Total Asset Turnover Ratio, Receivable Turnover, and Gross Domestic Gross on Stock Returns, so the research title raised is: "The Influence of Financial Performance on Stock Returns in Pharmaceutical Companies Listed on Several ASEAN Exchanges (Singapore, Malaysia, Vietnam, Indonesia)"

Research purposes

1. To determine and analyze the influence of CR, QR, CAR, DER, DAR, TIER, ROE, ROA, NPM, ART, TATO, and FATO on stock returns in pharmaceutical companies listed on the ASEAN Exchange (SGX, KLSE, HOSE, IDX) for the period 2018-2021.
2. To find out and analyze the influence of the current ratio on stock returns in pharmaceutical companies listed on the ASEAN Exchange (SGX, KLSE, HOSE, IDX) for the 2018-2021 period
3. To find out and analyze the effect of the cash ratio on stock returns in pharmaceutical companies listed on the ASEAN Exchange (SGX, KLSE, HOSE, IDX) for the 2018-2021 period
4. To find out and analyze the effect of the debt to equity ratio on stock returns in pharmaceutical companies listed on the ASEAN Exchange (SGX, KLSE, HOSE, IDX) for the 2018-2021 period

5. To find out and analyze the influence of the Time Interest Earned Ratio on stock returns in pharmaceutical companies listed on the ASEAN Exchange (SGX, KLSE, HOSE, IDX) for the 2018-2021 period
6. To find out and analyze the effect of return on equity on stock returns in pharmaceutical companies listed on the ASEAN Exchange (SGX, KLSE, HOSE, IDX) for the 2018-2021 period
7. To find out and analyze the effect of net profit margin on stock returns in pharmaceutical companies listed on the ASEAN Exchange (SGX, KLSE, HOSE, IDX) for the 2018-2021 period
8. To find out and analyze the effect of total assets on stock returns in pharmaceutical companies listed on the ASEAN Exchange (SGX, KLSE, HOSE, IDX) for the 2018-2021 period
9. To find out and analyze the effect of receivable turnover on stock returns in pharmaceutical companies listed on the ASEAN Exchange (SGX, KLSE, HOSE, IDX) for the 2018-2021 period
10. To find out and analyze the influence of gross domestic product on stock returns in pharmaceutical companies listed on the ASEAN Exchange (SGX, KLSE, HOSE, IDX) for the 2018-2021 period

LITERATURE REVIEW

Efficiency Market Hypothesis

The Efficient Market Hypothesis theory was first introduced and popularized by Fama in 1970. It states that a market can be called efficient if the stock prices listed reflect information as it is by the company without any influence from other information and have been adjusted to the risks and strategies carried out by the company.

Signaling Theory

Signaling Theory proposed by Ross (1977), states that company executives who have better information about their company will be encouraged to convey this information to potential investors so that their company's share price increases.

ReturnShare

According to (Jogiyanto, 2017) stock returns are the profits obtained by investors from a stock investment made. There are two types of stock returns, namely realized returns that have occurred or expected returns that have not yet occurred but are expected to occur in the future. Stock returns can be calculated using the formula:

$$\text{Return Saham} = \frac{P_n - P_{n-1}}{P_{n-1}}$$

Financial performance

According to Fahmi (2018) financial performance is an analysis carried out to see the extent to which a company has implemented financial implementation rules properly and correctly.

Financial Ratios

Financial ratio analysis is an activity of comparing one number with another in a report (Kasmir, 2019).

Current Ratio

According to Kasmir (2018:134), the current ratio is a ratio to measure a company's ability to pay short-term obligations or debts that are immediately due when they are collected in full. Current Ratio (CR) can be calculated using the formula:

$$CR = \frac{\text{Aktiva Lancar}}{\text{Kewajiban Lancar}}$$

Cash Ratio

According to Kasmir (2018:138), the cash ratio is a tool used to measure how much cash is available to pay debts. Cash Ratio can be calculated using the formula:

$$CAR = \frac{Kas\ dan\ setara\ kas}{Kewajiban\ Lancar}$$

Debt to Equity Ratio

According to Kasmir (2018:157), Debt to Equity Ratio is a ratio used to assess debt versus equity. This ratio is found by comparing all debt, including current debt, with all equity. Debt to Equity Ratio (DER) can be calculated using the formula:

$$DER = \frac{Total\ Liabilitas}{Total\ Equity}$$

Times Interest Earned Ratio

According to Kasmir (2019:162), Times Interest Earned is a ratio to measure the extent to which income can decrease without making the company feel embarrassed because it is unable to pay its annual interest costs. Times Interest Earned (TIER) can be calculated using the formula:

$$TIER = \frac{Laba\ sebelum\ bunga\ dan\ pajak}{Beban\ bunga}$$

Return On Equity

According to Kasmir (2018:204), Return On Equity or profitability of own capital is a ratio to measure net profit after tax with own capital. This ratio shows the efficiency of own capital. Return On Equity (ROE) can be calculated using the formula:

$$ROE = \frac{Laba\ setelah\ pajak}{Modal\ Sendiri} \times 100\%$$

Net Profit Margin(NPM)

According to Kasmir, (2018:200), Net Profit Margin is a measure of profit by comparing profit after interest and tax compared to sales and this ratio shows the company's net income from sales. Net Profit Margin (NPM) can be calculated using the formula:

$$NPM = \frac{Laba\ Bersih}{Penjualan}$$

Accounts Receivable Turn Over

According to Kasmir (2019:178) Receivables turnover is a ratio used to measure how long it takes to collect receivables during one period or how many times the funds invested in these receivables rotate in one period. Accounts Receivable Turn Over (ART) can be calculated using the formula:

$$ART = \frac{Penjualan}{Accounts\ Receivable}$$

Total Assets Turnover

According to Kasmir (2019:187), Total Assets Turnover is a ratio used to measure the effectiveness of the total assets owned by a company in generating sales or in other words to measure how many sales will be generated from each rupiah of funds embedded in total assets. Total Assets Turnover (TATO) can be calculated using the formula:

$$TATO = \frac{Penjualan}{Total\ Asset}$$

Gross Domestic Product

The Bureau of Economic Analysis (BEA, 2018) defines Gross Domestic Product (GDP) as the value of goods and services produced by a country's economy minus the value of goods and services used in production. Gross Domestic Product (GDP) can be calculated using the formula:

$$PDB = \frac{PDBt - PDBt-1}{PDBt-1} \times 100\%$$

Previous research

Ismarinanda and Bawono (2022) in research entitled The Effect of Return on Assets (ROA), Return on Equity (ROE), Net Profit Margin (NPM), and Earnings per Share (EPS) on Stock Returns in Consumer Good Companies Listed on the IDX Period 2016-2019. The research results show that ROA has a negative and significant effect on stock returns, ROE has a negative and insignificant effect on stock returns, NPM has a positive and insignificant effect on stock returns, EPS has a positive and insignificant effect on stock returns.

Riyanti (2018) in research entitled The Effect of Inflation, Gross Domestic Product (GDP), Return on Assets (ROA), Debt to Equity Ratio (DER), and Current Assets (CR) on Sharia Stock Returns (Study of Indofood Sukses Makmur, Tbk Year 2015-2017). The research results show that inflation has a negative and significant effect on sharia stock returns, GDP has no significant effect on stock returns, ROA has no significant effect on stock returns, DER has no significant effect on stock returns, CR has no significant effect on stock returns.

Kurniawan (2017) in research entitled The Effect of Financial Performance on Stock Returns by Making Dividend Policy a Moderate Variable in Companies Listed on the Jakarta Islamic Index (JII 2007-2011). The results of the research show that the Current Ratio has a positive and not significant effect on stock returns, Return on Assets has a negative and not significant effect on stock returns, Return on Equity has a positive and not significant effect on stock returns, Debt to Equity Ratio has a negative and not significant effect on returns. shares, while Total Asset Turnover has a negative and significant effect on stock returns.

Research Model

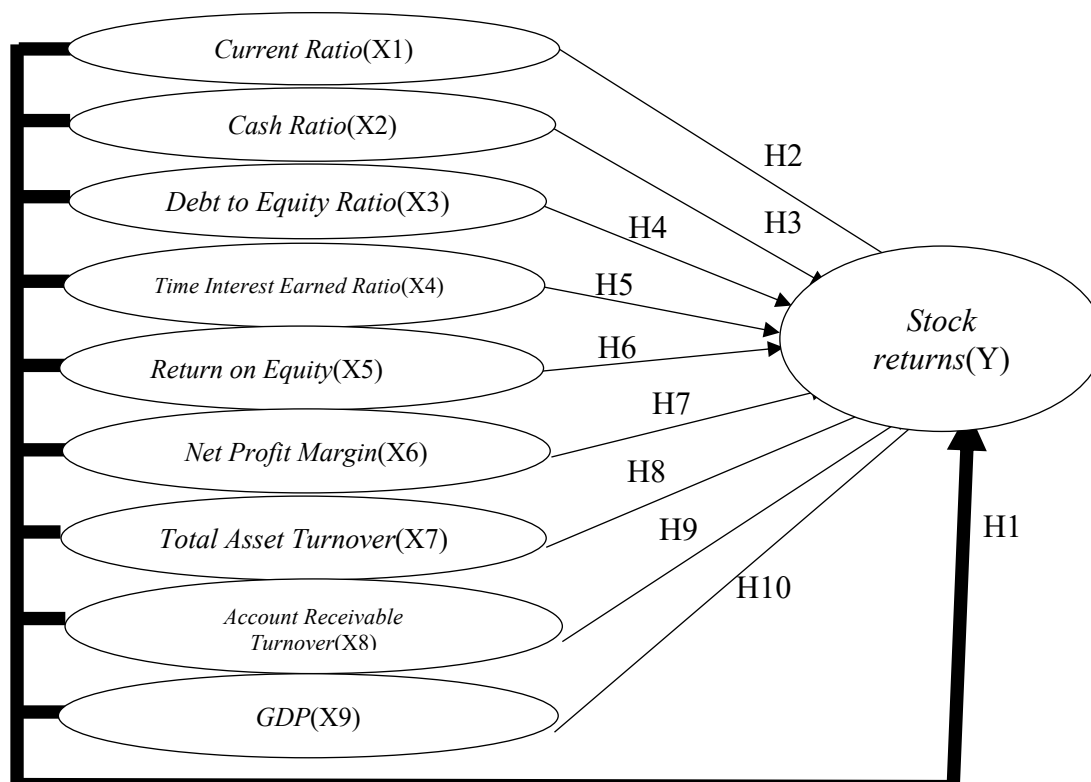


Figure 1. Research Model

Source: Theoretical Studies and Empirical Studies, 2023

Hypothesis

H1: It is suspected that there is an influence of company financial performance on stock returns in pharmaceutical companies listed on several ASEAN stock exchanges as measured by CR, CAR, DER, TIER, ROE, NPM, ART, TATO, and GDP.

H2: It is suspected that there is an influence of company financial performance on stock returns in pharmaceutical companies listed on several ASEAN stock exchanges as measured by the current ratio

H3: It is suspected that there is an influence of company financial performance on stock returns in pharmaceutical companies

which are listed on several ASEAN exchanges as measured by the cash ratio

H4: It is suspected that there is an influence of the company's financial performance on stock returns in pharmaceutical companies listed on several ASEAN stock exchanges as measured by the debt to equity ratio

H5: It is suspected that there is an influence of the company's financial performance on stock returns in pharmaceutical companies listed on several ASEAN stock exchanges as measured by the Time Interest Earned Ratio

H6: It is suspected that there is an influence of company financial performance on stock returns in pharmaceutical companies listed on several ASEAN stock exchanges as measured by return on equity

H7: It is suspected that there is an influence of company financial performance on stock returns in pharmaceutical companies listed on several ASEAN stock exchanges as measured by net profit margin

H8: It is suspected that there is an influence of the company's financial performance on stock returns in pharmaceutical companies listed on several ASEAN stock exchanges as measured by Total Asset Turnover

H9: It is suspected that there is an influence of the company's financial performance on stock returns in pharmaceutical companies listed on several ASEAN stock exchanges as measured by Account Receivable Turnover

H10: It is suspected that there is an influence of company financial performance on stock returns in pharmaceutical companies listed on several ASEAN stock exchanges as measured by Gross Domestic Product

Research methods

According to Sugiyono (2018; 13) quantitative data is a research method based on positivistic (concrete data), research data in the form of numbers that will be measured using statistics as a calculation test tool, related to the problem being studied to produce a conclusion.

Location and Research Objects

According to Sugiyono (2018) a research object is an attribute or trait or value of a person, object or activity that has certain variations determined by the researcher to be studied and then conclusions drawn. This research was conducted on pharmaceutical companies registered on the ASEAN Exchange by collecting the necessary data via the website www.sgx.com, www.klci.com, www.bloomberg.com, www.idx.co.id, investing.com, simplywall.st, worldbank.org and finance.yahoo.com.

Method of collecting data

The data collection technique in this research was used by means of a documentation study, namely by analyzing secondary data related to the research carried out. Documentation studies were

carried out on published and audited financial report data listed on the ASEAN Exchanges including the Singapore Exchange, Bursa Malaysia, Hochi Minh Stock Exchange, and the Indonesian Stock Exchange via the website www.sgx.com, www.klci.com, www.bloomberg.com, www.idx.co.id. Gross Domestic Product data was obtained from worldbank.org. Stock return data was obtained from investing.com and finance.yahoo.com.

Population and Sample

Population is a generalized area consisting of objects or subjects that have certain qualities and characteristics determined by researchers to study and then draw conclusions, Sugiyono (2018). The population in this research is 42 pharmaceutical companies listed on the ASEAN Exchange 2018-2021. The sample in this research was 20 companies, selected through a sample collection technique using purposive sampling.

Data analysis method

According to Sugiyono (2019:482) data analysis is the process of systematically searching and compiling data obtained from interviews, field notes and documentation, by organizing data into categories, describing it into units, synthesizing it, arranging it into patterns, choose what is important and what will be studied, and make conclusions so that they are easily understood by yourself and others. The data analysis method used in this research is panel data regression analysis, namely a combination of time series and cross section data. By using panel data, the number of samples in the analysis will increase so that the information provided is much more complete. Panel Data Regression was processed using the STATA version 17 application.

Classic assumption test

According to Ghazali (2018) the classical assumption test is The initial stage is used before further analysis of the data collected. In this research, the classical assumption test is in the form of a normality test which tests whether in the regression model there are confounding or residual variables that have a normal or abnormal distribution and the multicollinearity test is used to determine whether there is a correlation between the independent variables.

Hypothesis testing

In this research there are three stages, namely the partial test (t test) to find out how the independent variables partially influence the dependent variable, the simultaneous test (F test) to find out whether the independent variables jointly influence the dependent variable, the coefficient of determination (R²) to measure how far the model's ability to explain variations in the dependent variable..., Ghazali (2018)

Operational Definition of Variables

Table 2. Operational Definition of Variables

No	Variable	Formula	Definition
1	Stock returns (Y)	$\frac{P_n - P_{n-1}}{P_{n-1}}$	The profits obtained by investors from a stock investment made. (Jogiyanto, 2017)
2	Current Ratio (X1)	$\frac{\text{Aktiva Lancar}}{\text{Kewajiban Lancar}} \times 100$	Measuring the company's ability to pay short-term obligations. (Kasmir, 2018).
3	Cash Ratio (X2)	$\frac{\text{Kas dan setara kas}}{\text{Kewajiban Lancar}} \times 100\%$	Measures how much cash is available to pay debts. (Kashmere, 2018)
4	Debt to Equity Ratio (X3)	$\frac{\text{Total Liabilitas}}{\text{Total Ekuitas}} \times 100\%$	The ratio used to assess debt with equity. (Kashmere, 2018)
5	Times Interest Earned (X4)	$\frac{\text{Laba sebelum bunga dan pajak}}{\text{Beban bunga}}$	Measures the extent to which earnings can decline without the company feeling embarrassed by being unable to pay its annual interest costs (Kasmir 2019)
6	Return on Equity (X5)	$\frac{\text{Laba setelah pajak}}{\text{Modal Sendiri}} \times 100\%$	Ratio to measure net profit after tax with own capital (Kasmir, 2018)

7	Net Profit Margin (X6)	$\frac{\text{Laba Bersih}}{\text{Penjualan}} \times 100\%$	To measure profits by comparing profits after interest and taxes compared to sales and this ratio shows the company's net income from sales (Kasmir, 2018)
8	Total Assets Turnover (X7)	$\frac{\text{Penjualan}}{\text{Total Asset}} \times 100\%$	Rasio which is used to measure the effectiveness of the total assets owned by the company in generating sales or in other words to measure how many sales will be generated from each rupiah of funds embedded in total assets (Kasmir, 2019)
9	Account Receivable Turnover (X8)	$\frac{\text{Penjualan}}{\text{Accounts Receivable}} \times 100\%$	Ran ratio used to measure how long it takes to collect receivables during one period or how many times the funds invested in these receivables are turned over in one period.
10	Gross Domestic Product (X9)	$\frac{\text{PDB} - \text{PDB}_{t-1}}{\text{PDB}_{t-1}} \times 100\%$	Defined as the total income received by all people, including citizens and foreigners, from all goods and services in a country (Hasyim, 2016)

Source: Theoretical Studies and Empirical Studies, 2023

Research result

Descriptive Analysis Results

Descriptive analysis is used to provide an overview of the data studied. The descriptive statistical analysis in question is presented in the following table:

Table 3. Descriptive Analysis Results

Variables	Obs	Mean	Std Dev	Min	Max
RS	80	0.205370	0.8302417	-0.8502676	4.659408
CR	80	2.505716	1.450775	0.1120545	6.313464
CAR	80	1.14135	1.475059	0.0171748	6.444715
DER	80	0.6081183	0.4795449	0.0221831	1.799461
TIER	80	113.4349	199.2216	-45.93195	825.2318
ROE	80	0.1371178	0.1669618	-0.4187058	0.9431737
NPM	80	0.1092348	1.023212	-6.856381	4.021194
ART	80	6.215446	3.613473	0.451166	18.51356
TATTOO	80	1.472354	2.786161	0.0275454	19.06612
GDP	80	2.471999	4.617723	-3.90105	8.882354

Source: Stata 17 output (processed data, 2023)

Based on the results of these descriptive statistics, it can be explained that the dependent variable (Y), namely Stock Return, has a maximum value of 4.65, a minimum value of -0.85, an average of 0.20, and a standard deviation of 0.83. The Current Ratio has a maximum value of 6.31, a minimum value of 0.11, an average of 2.5, and a standard deviation of 1.45. Cash Ratio has a maximum value of 6.44, a minimum value of 0.01, an average of 1.14, and a standard deviation of 1.47. Debt to Equity Ratio has a maximum value of 1.79, a minimum value of 0.02, an average of 0.6, and a standard deviation of 0.47. The Time Interest Earned Ratio has a maximum value of 825.23, a minimum value of -45.93, an average of 113.43, and a standard deviation of 199.22. Return on Equity has a maximum value of 0.94, a minimum value of -0.41, an average of 0.13, and a standard deviation of 0.16. Net Profit Margin has a maximum value of 4.02, a minimum value of -6.85, an average of 0.19, and a standard deviation of 1.02. Account Receivable Turnover has a maximum value of 18.51, a minimum value of 0.45, an average of 6.21, and a standard deviation of 3.61. Total Asset Turnover has a maximum value of 19.06, a minimum value of 0.02, an average of 1.47, and a standard deviation of 2.78. Gross Domestic Product has a maximum value of 8.88, a minimum value of -390, an average of 2.47, and a standard deviation of 4.61.

Selection of Panel Data Regression Model Estimates

Test Chow

Ghozali (2018) Chow Test is an examination to determine and test to compare the most appropriate panel data model regression (Common effect or Fixed effect) to estimate panel data, H_0 : Common Effect Model; H_1 : Fixed Effect Model

Table 4. Chow Test Results

F test that all $u_i = 0$:
F(19, 51) = 2.87
Prob > F = 0.0014

(Source: Stata 17 output, processed data, 2023)

In the test results table above, it is known that the probability value obtained is 0.0014, which means the probability is < 0.05 , so the best model decision to use is the Fixed Effect Model. (FEM).

Hausman test

Ghozali (2018) uses the Hausman test to choose which model approach is appropriate to the actual data, which form of approach will be compared in This test is between fixed effects and random effects.

H_0 : Random Effect Model;

H_1 : Fixed Effect Model.

Table 5. Hausman Test Results

Tests:	Ho:	<i>difference in coefficients not systematic</i>
	Chi2 (7)	7.85
	Prob>chi2	0.5493

Source: Stata 17 output (processed data, 2023)

The table above shows the results of the Hausman test which shows that the probability value is equal to $0.5493 > \text{significance } 0.05$, then the conclusion is that the best model that is more appropriate to use is the Random Effect Model (REM).

Langrange Multiplier Test

Ghozali (2018) The Lagrange Multiplier test is a test used to select the best approach among the approach models Common Effect Model (CEM) and Random Effect Model (REM) in estimating panel data.

H_0 : Common Effect Model (CEM); H_a : Random Effect Model (REM)

Table 6. Lagrange Multiplier Test Results

Estimated results:	Var	sd=sqrt (Var)
Y	0, 4438523	0.666224
E	0.2372937	0.487128
U	0.1544772	0.3930358
Test		
chibar2(01)	7.30	
Prob > chibar2	0.0034	

Source: Stata 17 output (processed data, 2023)

The results of the Lagrange Multiplier test in the analysis above show a probability value of 0.0034 which means it is smaller than the significance level of 0.05 . So it can be concluded that the best model that is more appropriate to use is Random Effect Model (BRAKE).

Based on the results Selection of the Best Panel Regression Model for Transformed Data, the selected model used in this research is the Random Effect Model (REM) because it was selected in two model selection tests.

Classic assumption test

Normality test

Data normality assumption test analysis was carried out to determine whether the data was normally distributed or not. The significance level is above 0.05, then the data is normally distributed, whereas if the significance level is below 0.05 then the data is not normally distributed (Ghozali, 2018)

Table 7. Results Normality Test (Data Before Transformation)

Skewness/Kurtosis tests for Normality				
obs	Pr (Skewness)	Pr (Kurtosis)	adj chi2(2)	Prob > chi2
80	0,000	0,000	64	0,000

Source: Stata 17 output (processed data, 2023)

The results of the analysis of the table above show that the probability value of skewness and kurtosis is 0.000, which means it is smaller than 0.05, so it can be concluded that the data is not normally distributed. So it is necessary to transform the data using log10 to deal with abnormal data.

Table 8. Results Normality Test (Data After Transformation)

Skewness/Kurtosis tests for Normality				
Obs	Pr (Skewness)	Pr (Kurtosis)	adj chi2(2)	Prob > chi2
80	0.2383	0.1497	3.59	0.1660

(Source: Stata 17 output, processed data 2023)

The results of the analysis of the table above show that the probability values for skewness and kurtosis are equal to 0.1660, where the value is greater than the significance level of 0.05 so it can be concluded that H_0 is accepted where the data is normally distributed.

Multicollinearity Test

The multicollinearity test was carried out to find out whether there was a correlation between the independent variables (Ghozali, 2018).

Table 9. Results Multicollinearity Test

Variables	VIF	1/VIF
ART	5.56	0.179708
CR	4.67	0.214256
ROE	3.27	0.305598
DER	2.88	0.347546
CAR	2.37	0.421951
TIER	1.92	0.521781
TATTOO	1.82	0.549237
NPM	1.74	0.573330
GDP	1.30	0.771213
Mean VIF	2.84	

(Source: Stata 17 output, processed data 2023)

Table 8 shows that there are no symptoms of multicollinearity if the VIF value is <10 . Because the VIF value for 9 independent variables is less than 10, it is concluded that there are no symptoms of multicollinearity in the selected REM model.

Panel Data Regression Equation Test

Table 10. Panel Data Regression Test Results

RS	Coef.	Std. Errr.	Z	P< z	[95% Conf.	Intervals
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CR	-0.1522121	0.0689642	-2.21	0.027	-0.2873793	-0.0170448
CAR	0.0807138	0.0685187	1.18	0.239	-0.0535804	0.2150081
DER	0.6090139	0.2555877	2.38	0.017	0.1080713	1.109957
TIER	0.0010482	0.0004041	2.59	0.009	0.0002561	0.0018402
ROE	0.6940993	0.5861054	1.18	0.236	-0.4546462	1.842845
NPM	-0.01155	0.0833209	-0.14	0.890	-0.1748559	0.1517559
ART	-0.0243822	0.0267112	-0.91	0.361	-0.0767351	0.0279707
TATTOO	0.01941	0.0373748	0.52	0.604	-0.0538433	0.0926633
GDP	0.0009667	0.0122222	0.08	0.937	-0.0229883	0.0249217
cons	-0.9292381	0.3226887	-2.88	0.004	-1.561696	-0.2967799

(Source: Stata 17 output, processed data 2023)

The panel data linear regression equation in this research based on the table above can be described as follows:

$$\text{Stock Return} = -0.9292 - 1.522\text{CR} + 0.0807 \text{ CAR} + 0.6090 \text{ DER} + 0.0010 \text{ TIER} + 0.6941 \text{ ROE} - 0.0115 \text{ NPM} - 0.0243 \text{ ART} + 0.0194 \text{ TATO} + 0.0009 \text{ GDP}$$

1. The constant α of -0.92923 states that if variable X has a value of zero (0), then *returnsstock* is -0.92923.
2. The Current Ratio regression coefficient of -1.5221 has a negative sign, indicating that every 1% increase in the CR value will reduce the stock return value by 1.5221.
3. The Cash Ratio regression coefficient is 0.0807 and has a positive sign, indicating that every 1% increase in the CAR value will increase stock returns by 0.7981.
4. The Debt to Equity Ratio regression coefficient is 0.6090 and has a positive sign, indicating that every 1% increase in the DER value will increase stock returns (RS) by 0.6090.
5. The Time Interest Earner regression coefficient is 0.0010 and has a positive sign, indicating that every 1% increase in TIER will increase stock returns by 0.2476.
6. The Return on Equity regression coefficient is 0.6941 and has a positive sign, indicating that every 1% increase in ROE will increase the stock return value by 0.6941.
7. The Net Profit Margin regression coefficient is -0.0115 and has a negative sign, indicating that every 1% increase in NPM will reduce stock returns by 0.0115.
8. *Account Receivable Turnover* is -0.0243 and has a negative sign indicating that every 1% increase in the ART value will reduce stock returns by 0.0243.
9. The Total Asset Turnover regression coefficient is 0.0194 and has a positive sign, indicating that every 1% increase in TATO will increase stock returns by 0.0194.
10. The Gross Domestic Product regression coefficient is 0.00096 and has a positive sign, indicating that every 1% increase in GDP value will increase stock returns by 0.00096.

Hypothesis testing

Parsian Test (t Test)

The partial T test was carried out to determine the effect of each independent variable on *returnsshares* (RS). If the probability value is <0.05 then the decision H_0 is rejected and H_1 is accepted. The results of the partial test research can be seen as follows

Table 11. Partial Test Results (t Test)

RS	Z	P< z
CR	-2.21	0.027
CAR	1.18	0.239
DER	2.38	0.017
TIER	2.59	0.009
ROE	1.18	0.236
NPM	-0.14	0.890

ART	-0.91	0.361
TATTOO	0.52	0.604
GDP	0.08	0.937
cons	-2.88	0.004

(Source: Stata 17 output, processed data 2023)

1. The first hypothesis (H1) states that the current ratio variable has a probability value of 0.027 < 0.05. So that the decision H0 is rejected and the conclusion is that the current ratio has a negative and significant effect on *returnsshare* (RS).
2. The second hypothesis (H2) states that the variable *cash ratio* has a probability value of 0.239 > 0.05. So it was found that the H0 decision was accepted and the conclusion that CAR had no significant effect on *returnsshare* (RS).
3. The third hypothesis (H3) states that the variable The debt to equity ratio has a probability value of 0.017 < 0.05. So that the decision H0 is rejected and the conclusion is that DER has a significant effect on stock returns (RS).
4. The fourth hypothesis (H4) states that the variable Time Interest Earned Ratio has a probability value of 0.009 < 0.05. So that the decision H0 is rejected and the conclusion is that TIER has a significant effect on stock returns (RS).
5. The fifth hypothesis (H5) states that the variable return on equity has a probability value of 0.236 > 0.05. So that the decision H0 is accepted and the conclusion is that ROE has no significant effect on stock returns.
6. The sixth hypothesis (H6) states that the variable *net profit margin* has a probability value of 0.890 > 0.05. So that the decision H0 is accepted and the conclusion is that NPM has no significant effect on stock returns (RS).
7. The seventh hypothesis (H7) states that the variable the occurrence of total asset turnover has a probability value of 0.604 > 0.05. So that the decision H0 is accepted and the conclusion is that TATO has no significant effect on stock returns (RS).
8. The eighth hypothesis (H8) states that the variable The occurrence of account receivable turnover has a probability value of 0.361 > 0.05. So that the decision H0 is accepted and the conclusion is that ART has no significant effect on stock returns (RS).
9. The ninth hypothesis (H9) states that the variable *gross domestic product* has a probability value of 0.937 > 0.05. So that the decision H0 is accepted and the conclusion is that GDP has no significant effect on stock returns (RS).

Simultaneous Test (F Test)

Table 12. Simultaneous Test Results (F Test)

F(12, 48)	27.84
Prob > chi2	0.0010

(Source: Stata 17 output, processed data 2023)

The probability value is 0.0010 < 0.05 so that the decision H0 is rejected and H1 is accepted, then the conclusion is CR, CAR, DER, TIER, ROE, ROA, NPM, ART, TATO, and GDP together have a significant effect on Stock Returns (RS).

Determination Coefficient Test (R2 Test)

Table 13. Coefficient of Determination Test Results (R2 Test)

Rsq	
Within	0.3129

(Source: Stata 17 output, processed data 2023)

The R square value obtained is 0.4513, indicating that the variables CR, CAR, DER, TIER, ROE, NPM, ART, TATO, and GDP have an influence of 31.29% on stock returns (RS) and the remainder is 68.71 % influenced by other variables outside the research.

Discussion

The Effect of Current Ratio (CR) on Stock Returns

Based on the results of hypothesis testing that has been carried out, it shows that the variable *current ratio* (CR) has a negative and insignificant effect on stock returns. This means that high current assets may not necessarily produce high returns on stock returns, because of the stock amount high demand compared to estimated future sales, thus indicating excess inventory and showing that the company has not maximized existing inventory. The results of this study are consistent with the results of research conducted by Choirudin (2018) states that the Current Ratio has a significant negative effect on stock returns. However, this is not in line with research by Widiana and Rahmawati (2020) state that there is a positive and significant influence of the current ratio on stock returns.

Effect of Cash Ratio (CAR) on Stock Returns

Based on the results of hypothesis testing that has been carried out, it shows that the variable *cash ratio* positive and insignificant effect on stock returns. This means that the company has more cash to anticipate short-term debt and can increase production so that cash turnover can increase company profits. The results of this research are consistent with the results of research conducted by Feti Andriani (2020), that the cash ratio has an insignificant effect on stock returns. However, this is not in line with research conducted by Widiana and Rahmawati (2020) which states that there is a positive and significant influence of cash ratio on stock returns.

The Effect of Debt To Equity (DER) on Stock Returns

Based on the results of hypothesis testing that has been carried out, it shows that the variable *debt to equity* positive and significant effect on stock returns. This means that some investors have the courage to take risks and will tend to invest in shares that have a high DER, in accordance with stock theory which states that high risk-high return where the risk of a company is characterized by the DER that the company has.

The results of this research are consistent with the results of research conducted by Athidira and Yustina (2017) that DER has a positive and significant influence on stock returns. However, this is not in line with research conducted by Angga Kurniawan (2017) stated that DER does not significant effect on stock returns.

The Effect of Time Interest Earned Ratio (TIER) on Stock Returns

Based on the results of hypothesis testing that has been carried out, it shows that the variable *debt to equity* positive and significant effect on stock returns. This means that a high TIER indicates that the company is increasingly able to pay its company's interest expenses. This company's ability makes the company increasingly avoid the risk of default which could cause bankruptcy for the company. The results of this study are consistent with the results of research conducted by Husna (2016) states that there is a positive and significant influence of TIER on stock returns. However, this is not in line with research conducted by Indra Setiyawan (2014) which states that the Time Interest Earned Ratio has no significant effect on stock returns.

The Influence of Return On Equity (ROE) on Stock Returns

Based on the results of hypothesis testing that has been carried out, it shows that the variable *return on equity* positive and insignificant effect on stock returns. This means that ROE indicates that the company is able to maximize its equity effectively and efficiently to generate profits. The results of this research are consistent with the results of research conducted by Angga Kurniawan

(2017) that there is no influence of ROE on stock returns. However, it is not in line with research conducted by Öztürk and Karabulut (2018) that there is an influence of Return On Equity (ROE) on stock returns.

The Effect of Net Profit Margin (NPM) on Stock Returns

Based on the results of hypothesis testing that has been carried out, it shows that the variable *return on equity* negative and insignificant effect on stock returns. This means that the information provided by the company in obtaining profits from each sale does not attract investors to be able to make considerations in making decisions to invest. The results of this study are consistent with the results of research conducted by Ismarinanda and Bawono (2022) that there is no influence of Net Profit Margin and stock returns. However, this is not in line with research conducted by Putra and Kindangen (2016) that Net Profit Margin (NPM) has a significant influence on stock returns.

The Effect of Account Receivable Turnover (ART) on Stock Returns

Based on the results of hypothesis testing that has been carried out, it shows that the variable *return on equity* negative and insignificant effect on stock returns. This means that there are obligations that must be collected by the company, but the receivables collection system is weakening so that the amount of receivables is getting bigger and the asset flow is decreasing, so that it is unable to meet the company's needs from the assets it owns. The results of this research are consistent with the results of research conducted by Deviyanti and Safitri (2021) that Account Receivable Turn Over (ART) does not have a significant effect on stock returns. However, this is not in line with research conducted by Angga Kurniawa (2022) that Account Receivable Turnover has a significant effect on share prices of wholesale sub-sector companies (durable and non-durable goods).

The Effect of Total Asset Turnover (TATO) on Stock Returns

Based on the results of hypothesis testing that has been carried out, it shows that the variable *return on equity* positive and insignificant effect on stock returns. This means that high asset turnover indicates that the company uses too few assets or the assets used are obsolete, high TATO is not accompanied by greater net profits, so it cannot attract investors to invest. The results of this research are consistent with the results of research conducted by Deviyanti and Safitri (2021) that Total Asset Turnover (TATO) does not have a significant effect on stock returns. However, it is not in line with research conducted by Angga Kurniawan (2017) that there is a significant influence of Total Asset Turnover (TATO) on stock returns.

The Influence of Gross Domestic Product (GDP) on Stock Returns

Based on the results of hypothesis testing that has been carried out, it shows that the variable *return on equity* positive and insignificant effect on stock returns. This means that GDP does not directly affect stock returns because high GDP does not necessarily increase per capita income. This is because when people's living standards increase, people will tend to spend their funds on consumer products, which will help spur real economic growth, and developments in real investment are not followed by developments in investment in the capital market. The results of this research are consistent with the results of research conducted by Nuryati (2018) that GDP does not have a significant effect on stock returns. However, this is not in line with research conducted by Putra, Farma, Azis (2022) that GDP has a positive and significant effect on stock returns.

The influence of CR, CAR, DER, TIER, ROE, NPM, TATO, ART and GDP on stock returns

Based on the results of hypothesis testing that has been carried out, it shows that the variable CR, CAR, DER, TIER, ROE, NPM, ART, TATO, and GDP together have a significant effect on Stock Returns (RS). This means that these variables show that the company is able to overcome all obligations and operational costs so that it can gain profits through the assets, capital and production results owned by the company. The results of this research are consistent with the results of research

conducted by Nuryati (2018) who examined the Analysis of the Effect of Inflation, Gross Domestic Product (GDP), Return on Assets (ROA), Debt to Equity Ratio (DER), and Current Ratio (CR) on Returns Sharia Stocks, the research results conclude that GDP and Financial Ratios simultaneously have an influence on the dependent variable.

Conclusion

1. *Current Ratio* has a negative and significant effect on stock returns (RS) in Pharmaceutical Companies Listed on Several ASEAN Exchanges (SGX, KLSE, HOSE, IDX).
2. *Cash Ratio* has a positive and insignificant effect on stock returns (RS) in pharmaceutical companies listed on several ASEAN exchanges (SGX, KLSE, HOSE, IDX).
3. *Debt to Equity Ratio* has a positive and significant effect on stock returns (RS) in Pharmaceutical Companies Listed on Several ASEAN Exchanges (SGX, KLSE, HOSE, IDX).
4. *Time Interest Earned Ratio* has a positive and significant effect on stock returns (RS) in Pharmaceutical Companies Listed on Several ASEAN Exchanges (SGX, KLSE, HOSE, IDX).
5. *Return On Equity* positive and insignificant effect on stock returns (RS) in Pharmaceutical Companies Listed on Several ASEAN Exchanges (SGX, KLSE, HOSE, IDX).
6. *Net Profit Margin* has a negative and insignificant effect on stock returns (RS) in Pharmaceutical Companies Listed on Several ASEAN Exchanges (SGX, KLSE, HOSE, IDX).
7. *Total Asset Turnover* positive and insignificant effect on *returnsshares* (RS) in Pharmaceutical Companies Listed on Several ASEAN Exchanges (SGX, KLSE, HOSE, IDX).
8. *Account Receivable Turnover* negative and insignificant effect on *returnsshares* (RS) in Pharmaceutical Companies Listed on Several ASEAN Exchanges (SGX, KLSE, HOSE, IDX).
9. *Gross Domestic Product* positive and insignificant effect on *returnsshares* (RS) in Pharmaceutical Companies Listed on Several ASEAN Exchanges (SGX, KLSE, HOSE, IDX).
10. *Current Ratio, Cash Ratio, Debt To Equity, Time Interest Earned Ratio, Return On Equity, Net Profit Margin, Total Asset Turnover, Account Receivable Turnover, and Gross Domestic Product* have a significant effect on stock returns (RS) in Pharmaceutical Companies Listed on Several ASEAN Exchanges (SGX, KLSE, HOSE, IDX).

Suggestion

1. The suggestion from this research is that it is hoped that future researchers can increase the number of samples and research period and add variables to be studied if they want to get maximum and accurate results.
2. The advice for investors that can be taken from this research is to give more consideration to the decision to invest in pharmaceutical sector companies because this sector is a sector that is able to survive the monetary or economic crisis compared to other sectors.
3. Suggestions for improving financial performance by releasing more products according to the conditions and needs of the community so that profits can increase. The profits generated are expected to be a source of working capital, business expansion and debt payments, so that it can be mutually beneficial for shareholders and investors.

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