



# THE EFFECT OF FUNDAMENTAL FACTORS, EARNING PER SHARE AND EXCHANGE RATE ON STOCK RETURNS WITH DIVIDEND POLICY AS INTERVENING VARIABELS

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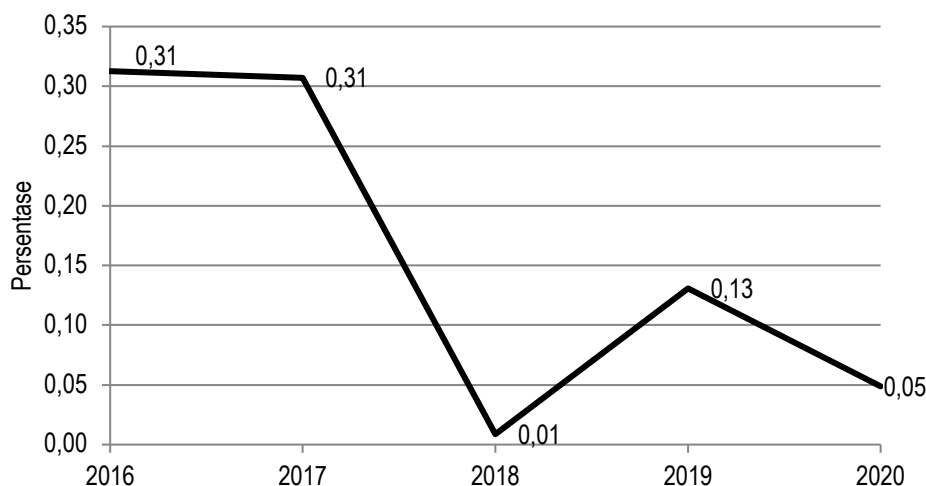
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**Abstract.** *The purpose of this study was to determine the effect of fundamental factors on earnings per share, exchange rate and dividend policy as intervening variables on stock returns. In this study, fundamental factors are measured using financial ratio. The higher the stock return, the higher the welfare of the shareholders. Increased stock returns will affect potential investors to invest in the company. This study uses a sample of banking companies indexed by infobank15 which are listed on the Indonesia Stock Exchange during the 2016-2020 period. The sampling technique used in this research is the purposive side method, the sample obtained is 9 banking companies indexed by infobank15, using the Eviews.12 analysis method. Based on the results of the study, it shows that the fundamental factors which are proxied by the debt to equity ratio (DER), the exchange rate have an effect on stock returns. While the fundamental factors that are proxied by return on assets, earnings per share and dividend policy have no effect on stock returns. The dividend policy variable is able to mediate the relationship between the fundamental factor variables which are proxied by return on assets and the exchange rate to stock returns. Meanwhile, the dividend policy variable is not able to mediate the relationship between the fundamental factor variables which are proxied by the DER and earnings per share to stock returns.*

**Keywords :** return on assets, debt to equity ratio, exchange rate, dividend policy, stock returns

## INTRODUCTION

In the Indonesian capital market, one of the financial instruments traded is stocks because stocks are a product that is quite attractive of the higher rate of return Pandaya et,al (2020). The phenomenon that happen, at this time investors will be more careful for the investing. In connection with the possible risks take by investors, the need for complete information regarding stock exchange activities is also increase the following development of stock exchange. One of the information needed is the index as a reflection of a stock will continue to increase. One of the stock indexes most favored by investors is the Infobank15 index consisting of 15 banking stock that have good fundamentals and high trading liquidity. So that it is considered capable of generating the returns expected by investors. But, the Infobank15 Index also does not guarantee for the investors can get increase the return. As illustrated in the graph of the average return on banking companies indexed by Infobank15:



Source: (Data processing, 2022)

Figure 1. Graph of average stock return of banking companies in the Infobank15 in 2016-2020

In Figure 1 it can be seen that the average stock return from 2016-2020, this study took a sample for 5 years to analyze whether there were fluctuations in stock returns in banking companies indexed by Infobank15. After the data is processed and analyzed, it is known that the decline in stock prices occurred from 2017 to 2018. One of the banking companies indexed by infobank15, namely bank BTN stated "Throughout 2018, the performance of the domestic capital market faced various things. the world economy slowed to 3.6% (yoy). This weakening was mainly due to slowing economic growth in the United States (US), Europe and China, several of these events contributed to market sentiment that affected the performance of stock indexes in several countries during 2018". So that several banking companies from the 15 banking stocks in 2017 to 2018 experienced a decline in stock prices. The comparison of share price declines can be seen in the following table:

Table 1. Share price drop comparison

Name of Bank	Current year stock price		Stock price last years	
	2018		2017	
BBNI	Rp	8.800	Rp	9.900
BBTN	Rp	2.540	Rp	3.570
BJBR	Rp	2.050	Rp	2.400
BJTM	Rp	690	Rp	710
BMRI	Rp	7.375	Rp	8.000
BNGA	Rp	915	Rp	1.350
BNLI	Rp	620	Rp	625
SDRA	Rp	860	Rp	890

Source: (Data processing, 2022)

Table 1 shows that banking companies experienced a decline in stock prices from 2017 to 2018, so this affects the average stock return in 2018 which has decreased. This is in accordance with a question from Bank BTN which informed that in 2018 world economic growth slowed down in various countries in the United States (US), Europe and China, these events contributed to the emergence of market sentiment which affected the performance of stock indexes in several countries during 2018 ([www.idx.co.id](http://www.idx.co.id)).

The difference between this study and previous studies, Almira and Wiagustini (2020) state that return on assets has a positive and significant effect on stock returns, Anismawati (2019) states that dividend policy has a positive and significant effect on stock return, and Anismawati (2019) states that dividend policy is an intervening variable between DER and stock returns. While, Worotikan et.al (2021) showed that the current DER, return on assets did not affect partially or simultaneously. Pujawati et.al (2015) states that the exchange rate has a negative and significant effect on stock returns, but not with Damaris. M and Poerwati (2022) as they say exchange rate does not affect the return of stocks. In this study use of fundamental factors proxied by return on assets and DER, as well as earnings per share and exchange rate as independent variables, then adding an intervening variable in the form of dividend policy, as well as the object and period used, namely banking companies that are included in the Infobank15 index for 2016-2020. Research on the factors that influence stock returns in banking companies included in the Infobank Index15 is still relevant to be carried out, so that banking

companies can review the company's financial performance, so as to be able to produce the returns expected by investors. Based on this background, the researcher is interested in conducting a study entitled "The Effect of Fundamental Factors, Earning Per Share (EPS) and Exchange Rate on Stock Returns with Dividend Policy as Intervening Variables".

Based on the description above, the research problems are formulated, namely:

1. Does the fundamental factors proxied by return on assets affect stock returns?
2. Does the fundamental factors proxied by the DER affect stock returns?
3. Does earnings per share affect stock returns?
4. Does the exchange rate affect stock returns?
5. Does dividend policy affect stock returns?
6. Does dividend policy mediate the fundamental factors proxied by return on assets to stock returns?
7. Does dividend policy mediate the fundamental factors proxied by the DER to stock returns?
8. Does dividend policy mediate earnings per share on stock returns?
9. Does dividend policy mediate the exchange rate on stock returns?

## **THEORETICAL FRAMEWORK AND HYPOTHESES**

For literature pertaining to this study, the authors use as the signaling theory of the literature as a basis for understanding the use of modeling in research methods that will be in use. One of them performed by Ayem and Astuti (2019) for investors to develop their stocks, signaling theory is very useful to provide convenience for investors needed by company management in determining the direction or prospects of the company going forward. The positive thing in signal theory is that a company can distinguish good information from not having good news from a company that provides that information, by informing the market about their condition, a signal about good future performance given by companies whose past financial performance is not good will not be trusted by the market. Information published as an announcement will provide a signal for investors in making investment decisions.

### **Stock Return (Variable Y)**

Research conducted by Almira and Wiagustini (2020), said that stock returns are the second level of buying and selling stocks, stock returns are the results obtained from investments. Returns obtained from the difference between the capital gain or the difference in the capital loss which is the difference between the current investment price and the investment price in the previous period. According to Yusma and Holawati (2019) return is the result obtained from the investment. By knowing the return of a company, the return can be one of the factors seen by investors in making investment decisions.

### **Fundamental Factors (Variabel Independen)**

According to Pati and Astika (2016), fundamental factors are factors that come from within the company that issue stocks by looking at the condition and value of a company based on the company's performance and projections. Fundamental analysis is an analysis that practices stock prices in the future by estimating the value of fundamental factors that affect stock prices in the future and applying these variables. In this study, these fundamental factors can be measured through financial ratios, namely: Return on Assets and DER. According to Pamungkas and Haryanto (2016:2) say that "Return on Assets is one of the profitability ratios that describes the company's financial performance in generating net income from assets used for company operations". According to Kasmir (2019), DER is the ratio used to assess debt to equity. This ratio is sought by comparing all debt, including current debt with all equity. This ratio is useful for knowing the amount of funds provided by the borrower (creditor) with the owner of the company.

### **Earning Per Share (EPS)**

According to Asrini (2020), A company shows earnings per share information seen from the size of the company's net profit which is ready to be distributed to all company shareholders, but not all companies include the amount of earnings per share of the company concerned in their financial statements. According to Kasmir (2019), Earnings per share ratio or also called book value is a ratio to measure the success of management in achieving profits for shareholders. The benefits available to ordinary shareholders are the amount of profits minus taxes, dividends and minus other rights for priority shareholders.

### **Exchange Rate**

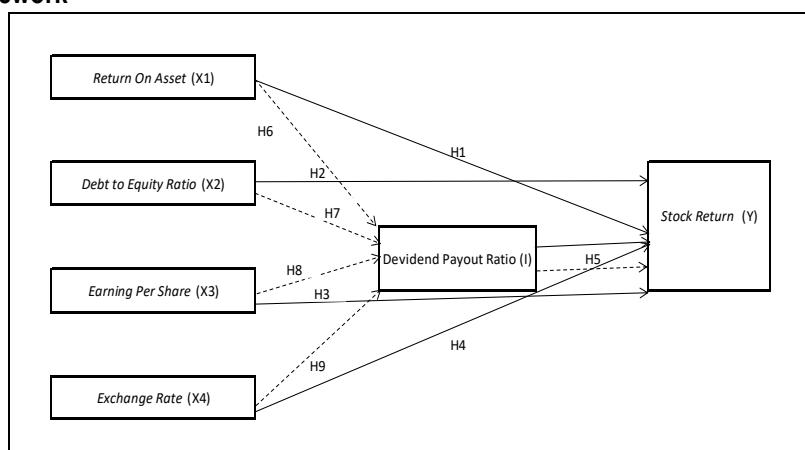
Abdallah's research (2018) states that exposure to exchange rate fluctuations will have a major impact on firm value. In this study, we want to see how changes in stock returns will occur if the Rupiah is seen as weak by the dollar or if the Rupiah is seen as strong by the dollar. The decline in the Rupiah exchange rate against

foreign currencies, especially the US Dollar, has a negative impact on the economy and capital market. The exchange rate is one of the indicators that affect activity in the stock market and money market because investors tend to be careful when making investments.

### Dividend Policy (Variable Intervening)

In this study, dividend policy becomes a mediating variable, if the profit generated increases it will affect the dividends received by shareholders, it can increase the value of stock returns. According to Syahputra (2016), the distribution of dividends is the profit distributed by the company to shareholders. The amount of dividends received by shareholders depends on the number of stocks owned. The indicator used to calculate this dividend policy is the dividend payout ratio. Dividend policy is a decision to divide the profits earned by the company to shareholders as dividends or to hold them in the form of retained earnings to be used as investment financing in the future.

### Conceptual framework



Source: Author (2022)

Figure 2 Theoretical framework

In this study can be summarized in the hypothesis:

- H1 : It is suspected that the fundamental factor proxied by return on assets has an effect on stock returns.
- H2 : It is suspected that the fundamental factor proxied by debt to equity has an effect on stock returns.
- H3 : It is suspected that the earning per share has an effect on stock return.
- H4 : It is suspected that the exchange rate has an effect on stock return.
- H5 : It is suspected that the dividend policy has an effect on stock return.
- H6 : It is suspected that the dividend policy mediates the fundamental factors that are proxied by the return on assets of the stock return.
- H7 : It is suspected that the dividend policy mediates the fundamental factors that are proxied by the debt-to-equity ratio of the stock return.
- H8 : It is suspected that the dividend policy mediates the proxied by the earning per share of the stock return.
- H9 : It is suspected that the dividend policy mediates the proxied by the exchange rate of the stock return.

### RESEARCH METHODS

Author uses the secondary data, the data is processed in the quantitative data or data from annual reports and financial reports, then processed and analyzed statistically. The object in this study is a banking company with a population of banking companies indexed by Infobank15 listed on the IDX, consisting of 15 banking companies for the 2016–2020 period. The sample technique used in this study is purposive sampling, the sampling criteria consist of:

1. Banking companies listed on the Infobank15 index that publish annual financial report data for the 2016-2020 research year.
2. Banking companies listed on the Infobank15 index that have stock price information in a row during the 2016-2020 period.
3. Banking companies listed on the Infobank15 index which distribute dividends consecutively during the 2016-2020 period.

The data used is data secondary with quantitative methods. The research data was obtained from the link: [www.idx.co.id](http://www.idx.co.id) and the official website of the company concerned.

Table 2. Variables and Measurements

Number	Name of Variable	Measurement/Formula/Indicator	Scale
1	<i>Stock Return</i> (Novitasari,2017:41)	$Ret_{i,t} = \frac{P_{i,t} - P_{i,t-1}}{P_{i,t-1}}$	Ratio
2	<i>Return On Asset</i> (Handayani and Harris,2019:265)	$Return\ On\ asset = \frac{Net\ profit\ after\ tax}{Total\ assets} \times 100\%$	Ratio
3	<i>Debt to Equity Ratio</i> (Pandaya e.t.c 2020:236)	$Debt\ to\ Equity\ Ratio = \frac{Debt}{Equity}$	Ratio
4	<i>Earning Per Share</i> (Dr.Kasmir,2019:209)	$Earning\ per\ Share = \frac{Common\ stock\ earnings}{common\ stock}$	Ratio
5	<i>Exchange Rate</i> (Chandra e.t.c,2020:18)	(Rupiah to Dollar Rate)	Rupiah
6	Dividend Policy (Asrini,2020:60)	$DPR = \frac{Dividend\ Per\ Share}{Earning\ Per\ Share} \times 100\%$	Ratio

Source: (Data processing)

The data analysis technique in this research is using panel data regression analysis, classical assumption test, hypothesis testing and path analysis.

### Panel Data Regression Model Test

To determine the most appropriate panel data in analyzing data, there are several tests that can be carried out, namely:

#### 1. Test Chow

The Chow test is to determine the most appropriate common effect model (CEM) or fixed effect model (FEM) in estimating panel data (Basuki and Prawoto, 2017).

#### 2. Test Hausman

The Hausman test is a test to select the most appropriate fixed effect model or random effect model to use Basuki and Prawoto (2017).

#### 3. Test Lagrange Multiplier

Research conducted by Dewi and Yudowati (2020) stated that the Lagrange multiplier test was carried out to determine the best model to use, namely the random effect model or the common effect model.

### Assumption Classics

This classical assumption test consists of normality test, multicollinearity test, autocorrelation test and heteroscedasticity test. The following is an explanation of each test in the classical assumption test:

#### 1. Normality Test

Winarno's (2017:5.40) say the normality test aims to determine whether in the regression model, the confounding or residual variables have a normal distribution. There are two ways in which the normality test can be used, namely: histograms and jarque-bera test. In this study, the normality test uses a histogram with the following conditions:

- If the value of J-B is not significant (less than 2), then the data is normally distributed.
- If the probability is greater than 5%, then the data is normally distributed

#### 2. Multicollinearity Test

According to research conducted by Dewi and Yudowati (2020), The multicollinearity test was carried out with the intention of knowing whether there was a correlation between the independent variables used. if

the correlation value between independent variables < 0.9 means that there is no multicollinearity between independent variables.

### 3. Autocorrelation Test

According to Winarno (2017:5.29) the autocorrelation test aims to test whether a linear regression model has a correlation between the confounding error (residual) in period t and the error period t-1 (previous). If there is a correlation, it is called an autocorrelation problem. In this study, the autocorrelation test was carried out using the Breusch-Godfrey test. Decision making if the Obs\*R-square value and probability value is greater than 5% or 0.05, then the data is said to have no autocorrelation.

### 4. Heteroscedasticity Test

"Heteroscedasticity is a regression problem in which the disturbance factor does not have the same variance or the variance is not constant". In this study, the heteroscedasticity test used the glejser test. The basis for decision making is if the value of Obs\* R-square is greater than 5%, it can be concluded that there is no heteroscedasticity (Ghozali and Ratmoko, 2017: 90).

### Hypothesis testing

Basuki and Praworo (2017), said the F test (together test) was to determine the effect of the independent variables simultaneously. The T statistical test basically shows how far the influence of one explanatory/ independent variable individually in explaining the dependent variable.

#### Path Analysis

Sujarweni (2016), said that path analysis shows that independent variables can have a direct effect on the dependent variable and can also have an indirect effect on the dependent variable through intervening variables.

#### Sobel Test

Sujarweni (2016), said that to determine the relationship of the strength of the indirect influence X to Y through I. The indirect effect of X to Y through I is calculated by multiplying the path X to Y (a) by path I to Y (b) or ab. So,  $ab=(c-c')$ , where c is the effect of X on Y without controlling for I while c' is the coefficient of a and b written with sa and sb and the standard error of the indirect effect is sab which is calculated by the formula below:

$$Sab = \sqrt{b^2 Sa^2 + a^2 Sb^2 + Sa^2 Sb^2}$$

$$t = \frac{ab}{sab}$$

Where:

- a : The regression coefficient of the independent variable on the mediating variable
- b : Regression coefficient of the mediating variable on the independent variable
- Sa2 : Standard error of estimation of the influence of the independent variable on the mediating variable
- Sb2 : Standard error of estimation of the effect of the mediating variable on the independent variable

## RESULT AND DISCUSSION

Based on the criteria that have been determined using the purposive sampling method, based on the criteria that have been determined, there are 9 banking companies that are used as samples with a total number of samples during the study period is 45 samples in the annual financial report (annual report). Researchers selected the population to obtain target selection according to predetermined criteria so that researchers obtained population data as follows:

Table 3. Target population selection criteria

Criteria	Total
Number of research samples	15
Period of research	5
Total research sample	75
Incomplete data	30
Total sample	45

Source: (Data processing)

**Descriptive statistics**

**Table 4. Descriptive statistics**

Date: 01/11/22 Time: 22:13 Sample: 2016 2020						
	RS	ROA	DER	EPS	ER	KD
Mean	0.110000	1.846889	5.835333	387.0780	13870.50	36.41889
Median	0.050000	1.890000	5.380000	278.5200	13882.50	35.00000
Maximum	1.050000	3.130000	16.08000	1159.000	14380.00	72.52000
Minimum	-0.480000	0.070000	3.260000	20.00000	13472.50	9.970000
Std. Dev.	0.307564	0.722498	2.462671	327.5289	333.0134	14.92262
Skewness	0.989093	-0.344301	2.225469	0.972662	0.264287	0.291862
Kurtosis	4.315398	2.972326	8.649576	2.787316	1.734096	2.238075
Jarque-Bera	10.58155	0.890511	96.99102	7.180352	3.528568	1.727368
Probability	0.005038	0.640661	0.000000	0.027593	0.171309	0.421606
Sum	4.950000	83.11000	262.5900	17418.51	624172.5	1638.850
Sum Sq. Dev.	4.162200	22.96816	266.8489	4720108.	4879508.	9798.125
Observations	45	45	45	45	45	45

Source: (Output Processing Eviews.12, 2022)

**Test Chow**

**Table 5. Chow Test Result**

Redundant Fixed Effects Tests Equation: Untitled Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	0.480595	(8,31)	0.8604
Cross-section Chi-square	5.261205	8	0.7293

Source: (Output Processing Eviews.12, 2022)

In the Chow test, the basic decision-making test is if the cross-section chi-square value is  $< 0.05$ , then the Chow test will choose the fixed effect model and vice versa if the probability value is  $> 0.05$ , the common effect model will be chosen. Based on the results of statistical testing, the probability value is  $0.8604 > 0.05$ , so the common effect model is the best model than the fixed effect model.

**Test Lagrange Multiplier**

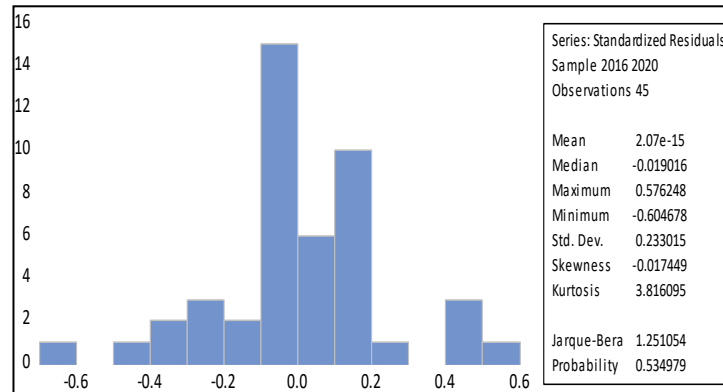
**Table 6. Lagrange Multiplier Result**

Lagrange Multiplier Tests for Random Effects Null hypotheses: No effects Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided (all others) alternatives			
	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	2.198885 (0.1381)	0.443383 (0.5055)	2.642267 (0.1041)
Honda	-1.482864 (0.9309)	0.665870 (0.2527)	-0.577702 (0.7183)
King-Wu	-1.482864 (0.9309)	0.665870 (0.2527)	-0.312451 (0.6227)
Standardized Honda	-0.817277 (0.7931)	1.522314 (0.0640)	-3.102065 (0.9990)
Standardized King-Wu	-0.817277 (0.7931)	1.522314 (0.0640)	-2.646432 (0.9959)
Gourieroux, et al.	--	--	0.443383 (0.4530)

Source: (Output Processing Eviews.12, 2022)

In the basic lagrange multiplier test for decision making is if the probability value (breusch-pagan cross-section)  $> 0.05$  then  $H_0$  is accepted so that the best model used is the common effect model. Based on the results of statistical testing of the Lagrange multiplier test, the prob. Breush-Pagan cross-section value was  $0.1041 > 0.05$ , so the best estimation method was the command effect model.

**Classic assumption  
Normality test**



Source: Output Processing Eviews.12, 2022

Figure 4. Normality test result

Based on the data processing using the statistical tool Eviews.12, as shown in Figure 4.2 the results of the J-B value of 1.251 > 0.05 and the Prob value of 0.534 > 0.05, the residual data is normally distributed.

**Multicollinearity Test**

Table 7. Multicollinearity Test Result

Source: (Output Processing Eviews.12, 2022)

	ROA	DER	EPS	ER	KD
ROA	1.000000	-0.520785	0.610000	-0.052780	0.300437
DER	-0.520785	1.000000	-0.205883	0.075685	-0.250974
EPS	0.610000	-0.205883	1.000000	-0.033518	-0.147184
ER	-0.052780	0.075685	-0.033518	1.000000	0.098367
KD	0.300437	-0.250974	-0.147184	0.098367	1.000000

The basis for making the decision is if the correlation value between the independent variables is < 0.9, it means that there is no multicollinearity between the independent variables. Based on the results of statistical testing in table 7, the correlation value between independent variables is less than 0.9, which means that there is no multicollinearity.

**Autocorrelation test**

Table 8. Autocorrelation Test Result

Breusch-Godfrey Serial Correlation LM Test:				
Null hypothesis: No serial correlation at up to 2 lags				
F-statistic	1.126909	Prob. F(2,37)	0.3349	
Obs*R-squared	2.583745	Prob. Chi-Square(2)	0.2748	
Test Equation:				
Dependent Variable: RESID				
Method: Least Squares				
Date: 01/11/22 Time: 22:36				
Sample: 1 45				
Included observations: 45				
Presample missing value lagged residuals set to zero.				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.473664	1.905932	-0.248521	0.8051
ROA	-0.005962	0.097810	-0.060955	0.9517
DER	-0.000723	0.020982	-0.034446	0.9727
EPS	2.81E-05	0.000184	0.152238	0.8798
ER	3.56E-05	0.000136	0.260909	0.7956
KD	-0.000413	0.003362	-0.122876	0.9029
RESID(-1)	-0.124104	0.175280	-0.708034	0.4834
RESID(-2)	-0.224521	0.163342	-1.374546	0.1775
R-squared	0.057417	Mean dependent var	-8.65E-16	
Adjusted R-squared	-0.120910	S.D. dependent var	0.265835	
S.E. of regression	0.281448	Akaike info criterion	0.462070	
Sum squared resid	2.930872	Schwarz criterion	0.783255	
Log likelihood	-2.396579	Hannan-Quinn criter.	0.581805	
F-statistic	0.321974	Durbin-Watson stat	2.009744	
Prob(F-statistic)	0.939199			



Source: (Output Processing Eviews.12, 2022)

Based on the results of statistical testing in table 8 in the autocorrelation test, the probability value is 0.27 > 0.05, which means that there is no autocorrelation.

**Heteroscedasticity test**

Table 9. Heteroscedasticity Test Result

Dependent Variable: RESABS				
Method: Panel Least Squares				
Date: 01/15/22 Time: 20:08				
Sample: 2016 2020				
Periods included: 5				
Cross-sections included: 9				
Total panel (balanced) observations: 45				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.842428	1.271968	1.448486	0.1555
ROA	0.000672	0.067805	0.009911	0.9921
DER	0.001137	0.014601	0.077869	0.9383
EPS	1.89E-05	0.000131	0.144659	0.8857
ER	-0.000119	9.17E-05	-1.292532	0.2038
KD	-0.000898	0.002382	-0.376835	0.7083
R-squared	0.051425	Mean dependent var	0.180267	
Adjusted R-squared	-0.070187	S.D. dependent var	0.193478	
S.E. of regression	0.200152	Akaike info criterion	-0.255912	
Sum squared resid	1.562375	Schwarz criterion	-0.015024	
Log likelihood	11.75802	Hannan-Quinn criter.	-0.166111	
F-statistic	0.422864	Durbin-Watson stat	2.413338	
Prob(F-statistic)	0.829925			

Source: (Output Processing Eviews.12, 2022)

Based on table 9 the results of the Glejser test test obtained the value of Prob = (0.155) (0.992) (0.938) (0.885) (0.203) (0.708) because the coefficient of the independent variable is significant, which is more than 5% or 0.05, it can be concluded not there is heteroscedasticity.

**Hypothesis testing**

Table 10. T- test Result

Dependent Variable: RS				
Method: Panel Least Squares				
Date: 01/11/22 Time: 22:17				
Sample: 2016 2020				
Periods included: 5				
Cross-sections included: 9				
Total panel (balanced) observations: 45				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.111265	1.794412	2.291149	0.0274
ROA	0.180632	0.095655	1.888360	0.0664
DER	0.047567	0.020598	2.309279	0.0263
EPS	-8.29E-05	0.000184	-0.450118	0.6551
ER	-0.000328	0.000129	-2.538283	0.0152
KD	-0.000659	0.003361	-0.196097	0.8456

Source: (Output Processing Eviews.12, 2022)

Based on Table 10, equation I is obtained as follows.

$$Y = 4.1112 + 0.1806X_1 + 0.0475X_2 - 8.2900X_3 - 0.0003X_4 - 0.0007I$$

Based on Table 4.14, it is known that.

1. The t-count value of the fundamental factor variable proxied by return on assets is 1.888 while the t-table is 1.680 (1.888 > 1.680) with a significance value of 0.066 > 0.05. So it can be concluded that the fundamental factor variable proxied by return on assets has no effect on stock returns and is not significant.
2. The t-count value of the fundamental factor variable proxied by the DER is 2.309, while the t-table is 1.680 (2.309 > 1.680) with a significance value of 0.026 < 0.05. So it can be concluded that the fundamental factor variable proxied by the DER has an effect on stock returns and is significant.
3. The t-count value of the EPS variable is -0.450 while the t-table is 1.680 (-0.450 < 1.680) with a significance value of 0.655 > 0.05. So it can be concluded that the EPS variable has no effect on stock returns and is not significant.
4. The t-count value of the exchange rate variable is -2.538 while the t-table is 1.680 (-2.538 > 1.680) with a significance value of 0.015 < 0.05. So it can be concluded that the exchange rate variable has an effect on stock returns and is significant.

5. The t-count value of the dividend policy variable is -0.196 while the t-table is 1.680 (-0.196 < 1.680) with a significance value of 0.845 > 0.05. So it can be concluded that the dividend policy variable has no effect on stock returns and is not significant.

**Path Analysis**

The magnitude of the influence can be arranged in table 11 as follows:

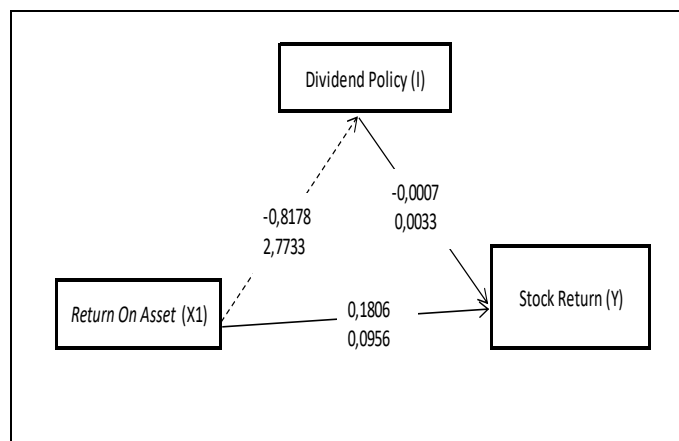
Table 11. Direct and Indirect Influence

Effect	Direct	Indirect From Dividend Policy
Fundamental factors that are proxied by ROA on stock returns	0,1806	-0,8178
Fundamental factors proxied by DER to stock returns	0,0475	-2,8548
EPS on stock returns	-8,2900	-0,0086
Exchange rate on stock returns	-0,0003	0,0056

Source: (Self Proceed, 2022)

- The direct and indirect effect of the Fundamental Factors Proxied by ROA on Stock Return  
Direct path = ROA – Stock Return (big effect is 0.1806)  
Indirect path = ROA – Dividend Policy – Stock Return (big effect is (-0.8178) (0.0007) = 5.7246
- The direct and indirect effect of the Fundamental Factors Proxied by DER on Stock Return  
Direct path = DER – Stock Return (big effect is 0.0475)  
Indirect path = DER – Dividend Policy – Stock Return (big effect is (-2.8548) (-0.0007) = 1.9983
- The direct and indirect effect of EPS on Stock Return  
Direct path = EPS – Stock Return (big effect is -8,2900)  
Indirect path = EPS – Dividend Policy – Stock Return (big effect is (-0.0086) (-0.0007) = 6.02
- The direct and indirect effect of the Exchange Rate on Stock Return  
Direct path = Exchange Rate – Stock Return (the influence is -0.0003)  
Indirect path = Exchange Rate - Dividend Policy - Stock Return (big effect is (0.0056) (-0.0007) = -3.92

**Sobel Test**

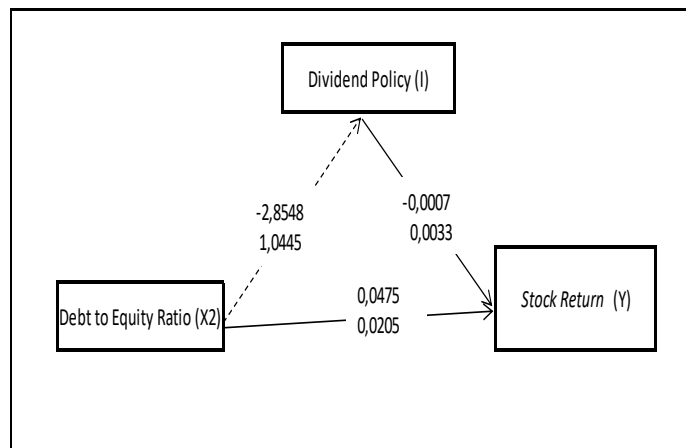


Source: (Author, 2022)

Figure 4 Indirect Effect of X1 through I to Y

$$\begin{aligned}
 Sab &= \sqrt{((-0,0007)^2(2,7733)^2 + ((-0,8178)^2 (0,0033)^2 + ((2,7733)^2 (0,0033)^2)} \\
 &= 9,736 \\
 t &= \frac{(-0,8178)(-0,0007)}{9,736} = 5,879
 \end{aligned}$$

Based on the calculation of the Sobel test above, the t-count value is 5.879 > t table (1.680) so H0 is rejected, meaning that there is an indirect effect between ROA on stock returns through dividend policy, a positive effect of 5.7246, it can be concluded that Dividend Policy is able to mediate the relationship between factors Fundamentals which are proxied by ROA on stock returns.

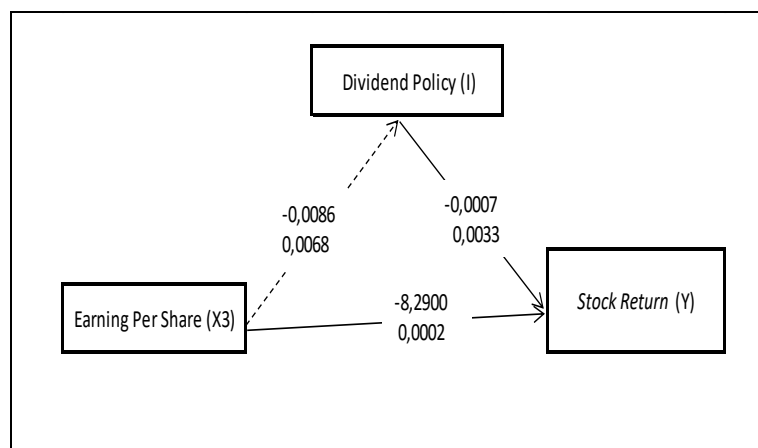


Source: (Author, 2022)

Figure 5 Indirect Effect of X2 through I to Y

$$\begin{aligned}
 Sab &= \sqrt{((-0,0007)^2(1,0445)^2 + ((-2,8548)^2 (0,0033)^2 + ((1,0445)^2 (0,0033)^2)} \\
 &= 0,010 \\
 t &= \frac{(-2,8548)(-0,0007)}{0,010} = 0,199
 \end{aligned}$$

Based on the calculation of the Sobel test above, it is obtained that t count is 0.199 < t table (1.680), so H0 is accepted, meaning that there is no indirect effect between DER on stock returns through dividend policy, a positive effect of 1.9983, then this means that dividend policy is not able to mediate DER relationship to stock returns.

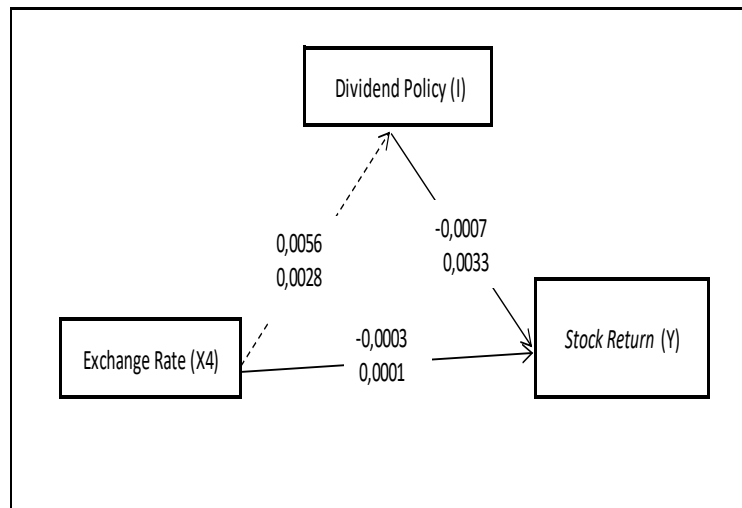


Source: (Author, 2022)

Figure 6 Indirect Effect of X3 through I to Y

$$\begin{aligned}
 Sab &= \sqrt{((-0,0007)^2(0,0068)^2 + ((-0,0086)^2 (0,0033)^2 + ((0,0068)^2 (0,0033)^2)} \\
 &= 3,649 \\
 t &= \frac{(-0,0086)(-0,0007)}{3,649} = 1,649
 \end{aligned}$$

Based on the calculation of the Sobel test above, it is obtained that t count is 1.649 < t table (1.680) so H0 is accepted, meaning that there is no indirect effect between earnings per share on stock returns through dividend policy, a positive effect of 6.02, then this means that dividend policy is not able to mediate the relationship between EPS and stock returns.



Source: (Author, 2022)

Figure 7 Indirect Effect of X4 through I to Y

$$Sab = \sqrt{((-0,0007)^2(0,0028)^2 + ((0,0056)^2(0,0033)^2 + ((0,0028)^2(0,0033)^2)}$$

$$= 2,075$$

$$t = \frac{(0,0056)(-0,0007)}{2,075} = -1,889$$

Based on the Sobel test calculation above, it is obtained that t count is -1.889 > t table (1.680) so H0 is rejected, meaning that there is an indirect effect between the exchange rate on stock returns through dividend policy, a negative effect of -3.92, it can be concluded that dividend policy is able to mediate the relationship between the exchange rate and stock returns.

#### The effect of fundamental factors proxied by return on assets on stock returns.

Based on the test results on the fundamental factors which are proxied by return on assets that affect stock returns, it has a coefficient value of 0.180 with a significant level of 0.066 > 0.05. From these results it can be concluded that the fundamental factor variable proxied by return on assets has no effect on stock returns. The results of this study are inconsistent with the results of research conducted by Almira and Wiagustini (2020) which states that return on assets has a positive and significant effect on stock returns. The ROA value will be smaller so that it cannot attract investors and the stock price will decrease. The amount of assets owned by the company must be in line with the net income obtained by the company. However, it is different when the assets are large and the company cannot earn greater income. This research is supported by the results of research conducted by Pamungkas and Hariyanto (2016) which states that ROA has no effect on stock returns.

#### The effect of fundamental factors proxied by the DER on stock returns.

Based on the test results in the t table, it shows that the fundamental factor variable proxied by the DER has an effect on stock returns having a coefficient value of 0.047 with a significant level of 0.026 < 0.05. From these results, it can be concluded that the fundamental factor variable proxied by the DER has a positive and significant effect on stock returns. The results of this study are consistent with the results of research conducted by Amri and Ramdani (2020) which states that the DER has a positive and significant effect on stock returns. High debt does not necessarily describe the company in an unfavorable condition, DER does not have a significant effect due to the comparison of own capital and debt-financed capital not only the effect of management performance, but other factors such as profitability ratios, investors are more likely to see profitability ratios that measure the level of profit earned. companies in the banking sector, DER is not a reference for investors in investing.

#### Effect of earnings per share on stock returns.

Based on the results of the t-table test for the variable earnings per share that has an effect on stock returns, it has a coefficient value of -8.29 with a significant level of 0.655 > 0.05. From these results it can be concluded that the EPS variable has no and no significant effect on stock returns. The results of this study are not in line with the results of research conducted by Almira and Wiagustini (2020) which states that earnings per share have a positive and significant effect on stock returns. EPS will depend on the number of stocks

outstanding. The reason investors are less interested in EPS also means a picture of the competition that occurs in infobank indexed banking companies<sup>15</sup>. If the company has a higher profit than similar companies, it indicates a strong company position in the eyes of investors. This will cause investors to be disinterested in seeing EPS in investing. This research is supported by research conducted by Novitasari (2017) which states that EPS has no effect.

#### **Effect of exchange rate on stock returns.**

Based on the results of the t-table test for the exchange rate variable that has an effect on stock returns, it has a coefficient value of -0.000 with a significant level of  $0.015 < 0.05$ . From these results it can be concluded that the exchange rate variable has a negative and significant effect on stock returns. The results of this study are consistent with the results of research conducted by Pujawati et al (2015) which states that the exchange rate has a negative and significant effect on stock returns. Research conducted by Supriantikasari and Utami (2019) which states that the exchange rate affects stock returns. This research is also reinforced by signaling theory which provides information signals in determining investment decisions with the weakening of the Rupiah against the dollar will reduce stock returns in banking companies indexed by infobank<sup>15</sup>. In the current situation, despite the weakening exchange rate, investors are still interested in investing their stocks in banking companies indexed by infobank<sup>15</sup>.

#### **The effect of dividend policy on stock returns.**

Based on the test results in the t table for the dividend policy variable that has an effect on stock returns, it has a coefficient value of -0.0007 with a significant level of  $0.845 > 0.05$ . From these results it can be concluded that the dividend policy variable has no effect on stock returns. The results of this study are not in line with the results of research conducted by Anismawati (2019) which states that dividend policy has a positive and significant effect on stock returns. Banking companies have high or low dividend policies providing stock returns below the average, meaning that high or low dividend payout ratios do not affect the amount of stock returns given to shareholders. From the data obtained from the BPD Jawa Timur Tbk company, the DPR value is 72.52% but get a low stock return that is 0.31 (31%). This research is supported by research conducted by Dewi and Yudowati (2020) [16] which states that dividend policy has no effect on stock returns.

#### **Dividend Policy Mediates Fundamental Factors Proxied by ROA on Stock Return.**

Based on the results of calculations using the Sobel test, the value of t count is  $5.879 > t$  table (1.680), it can be concluded that dividend policy is able to mediate the relationship of fundamental factor variables proxied by ROA to stock returns.

#### **Dividend Policy Mediates Fundamental Factors Proxied by DER to Stock Return.**

Based on the results of calculations using the Sobel test, the value of t arithmetic is  $0.199 < t$  table (1.680) then this means that dividend policy is not able to mediate the relationship of fundamental factor variables proxied by DER to stock returns. Companies need funds for company development, these funds can be obtained from debt or profit utilization. If it is from debt, the DER will increase so that the profits earned are distributed as dividends. Or vice versa if DER goes down DPR will also go down. The results of this study are not in line with research conducted by Anismawati (2019) which states that DPR is the intervening variable between DER and Stock Return.

#### **Dividend Policy Mediates EPS on Stock Return.**

Based on the results of calculations using the Sobel test, the t-count value is  $t\text{-count } 1.649 < t\text{-table } (1.680)$ , then this means that dividend policy is not able to mediate the relationship between EPS and stock returns. The direct effect of EPS on stock returns has no effect, after going through the mediation route there is still no relationship between EPS and stock returns. The results of this study are supported by research conducted by Anismawati (2019) which states that DPR is not an intervening variable.

#### **Dividend Policy Mediates exchange rate on Stock Return.**

Based on the results of calculations using the Sobel test, the value of t count is  $-1.88 > t$  table (1.680), it can be concluded that dividend policy is able to mediate the relationship between the exchange rate and stock returns. The direct effect of the exchange rate on stock returns has an effect, after going through the mediation channel there is a relationship between the exchange rate and stock returns. The Rupiah exchange rate against foreign currencies is very influential on the company's operations The strengthening of the Rupiah value shows that the company does not have to provide large enough funds to finance the company's operations, thereby

increasing company profits. The strengthening of the value of the Rupiah shows that the company can increase profits, so that the share of profits that can be distributed to large shareholders.

### **CONCLUSION**

This purpose of study for the test effect of fundamental factors, earnings per share, exchange rate and dividend policy as intervening variables on stock returns. The sample used in this study amounted to 9 banking companies indexed by infobank15 during 2016-2020. The results show that together the independent variables consisting of fundamental factors proxied by return on assets, fundamental factors proxied by debt to equity ratio, earnings per share, exchange rate and dividend policy affect stock returns. While partially the fundamental factor variable which is proxied by the debt to equity ratio, the exchange rate has an effect on stock returns. Fundamental factor variables that are proxied by return on assets, earnings per share and dividend policy have no effect on stock returns. The dividend policy variable is able to mediate the relationship between the fundamental factor variables which are proxied by return on assets and the exchange rate to stock returns. Meanwhile, the dividend policy variable is not able to mediate the relationship between the fundamental factor variables which are proxied by the debt-to-equity ratio and earnings per share to stock returns.

### **Implication**

Based on the results of the study, several things can be described for consideration for related parties, namely:

#### 1. For Investors

This research can provide or add information to potential investors for investment. It is hoped that with this research, investors and potential investors can make the right decisions in determining investment decisions that can optimize the expected returns and can minimize those faced by the company, shareholders and investors.

#### 2. For Companies

This research can be used as input or consideration in determining investment decisions so that the company obtains stock returns as expected with a minimal level of risk.

#### 3. For the Government

This research is expected to provide input for the government in making decisions regarding financial performance and exchange rate intervention, as well as capital market managers to act actively to overcome a stock game in the capital market.

#### 4. Share other research

This research is expected to add information and be useful as reference material for further research, especially regarding matters related to fundamental factor analysis and stock returns.

### **Research Limitations**

In conducting this research, the author has limitations which are expected to be corrected in future research. The limitations that exist in this study are as follows:

1. Companies that are sampled in this study are only banking companies indexed by Infobank15.

2. The coefficient of determination is still relatively small, which means that there are many other factors that can affect stock returns.

### **Suggestion**

Further researchers are advised to conduct research with the research population not only banking companies indexed by infobank15 but extending to other sectors such as the financial sector but still companies listed on the Indonesia Stock Exchange (IDX). Further research is better to replace the dividend policy intervening variable with other variables. Investors by reading this research can provide input for decision makers in investing their stocks in infobank15 indexed. From the results, suggestions for banks, especially management prepare to fundamental factors such as return on assets, earnings per share of the company so that investors are interested in investing their stocks in banking companies indexed by Infobank15.

### **REFERENCES**

- Abdallah, Z. (2018). Pengaruh Nilai Tukar Rupiah Terhadap Return Saham Dengan Return On Asset Sebagai Variabel Intervening Pada Perusahaan Rokok . Jurnal Akuntansi Volume 14 Number 1 Online Issn : 2477-2984 – Print Issn : 1978-6581, 1-10.
- Almira, N. A., & Wiagustini, N. P. (2020). Return On Asset, Return On Equity, Dan Earning Per Share Berpengaruh Terhadap Return Saham. E-Jurnal Manajemen, Vol. 9, No. 3 Issn : 2302-8912, 1069-1088.
-

- Amri, A., & Ramdani, Z. (2020). Pengaruh Nilai Tukar, Kebijakan Dividen Dan Struktur Modal Terhadap Return Saham Pada Perusahaan Yang Terdaftar Di Jakarta Islamic Index. *Jurnal Ilmu Keuangan Dan Perbankan (Jika)* Volume 10 No. 1 E-Issn: 2655-9234 , 18-36.
- Anismawati, N. (2019). Pengaruh Debt To Equity Ratio Dan Earning Per Share Terhadap Return Saham Dengan Kebijakan Dividen Sebagai Intervening. *Jurnal Akuntansi Bisnis Dan Ekonomi* Vol.5 No.1 Issn 2460-030x, 1263-1272.
- Asrini, E. D. (2020). Pengaruh Earning Per Share Dan Price Earning Ratio Terhadap Return Saham Dengan Kebijakan Dividen Sebagai Variabel Intervening. *E-Bisma*, Vol.1 No.2, Issn 2774-8790 (Print) Dan Issn 2774-8804 (Online), 58-69.
- Ayem, S., & Astuti, B. (2019). Pengaruh Earning Per Shares (Eps), Leverage, Ukuran Perusahaan Dan Tax Planning Terhadap Return Saham Perusahaan. *Akuntansi Dewantara* Vol. 3 No. 2 P-Issn: 2550-0376 , E-Issn: 2549-9637, 89-105.
- Basuki, A. T., & Prawoto, N. (2017). Analisis Regresi Dalam Penelitian Ekonomi & Bisnis (Dilengkapi Aplikasi Spss & Eviews). Jakarta: Rajawali Pers.
- Chandra, A., Efni, Y., & Emrinaldi. (2018). Analisis Pengaruh Fundamental Dan Makro Ekonomiterhadap Kebijakan Dividen Dengan Return On Assetsebagai Variabel Intervening Pada Perusahaanmanufaktur Yang Terdaftar Di Bursa EfekIndonesia Tahun 2012-2015. *Jurnal Tepak Manajemen Bisnis* Vol. X. No. 2., 188-209.
- Damaris.M, B. B., & Poerwati, R. T. (2022). Pengaruh Volume Perdagangan, Kurs Dan Risiko Pasar Terhadap Return Saham Pada Perusahaan Lq-45 Di Bursa Efek Indonesia Tahun 2018-2020. *Jurnal Ilmiah Mahasiswa Akuntansi Vol : 13 No : 01 E- Issn: 2614 – 1930* , 190-199.
- Dewi, I. K., & Yudowati, S. P. (2020). Analisis Komponen Arus Kas, Manajemen Modal Kerja Dan Kebijakan Dividen Terhadap Return Saham. *Jmm Online* Vol. 4 No. 4, Issn 2614-0365, 566-580.
- Ghozali , I., & Ratmono, D. (2017). Analisis Multivariat Dan Ekonometrika Teori,Konsep,Dan Aplikasi Dengan Eviews 10. Semarang: Badan Penerbit Undip.
- Handayani, M., & Harris, I. (2019). Analysis Of Effect Of Debt To Equity Ratio (Der), Return On Asset (Roa), Return On Equity (Roe), And Net Profit Margin (Npm) On Stock Return (Case Study On Consumer Goods Companies In Indonesia Stock Exchange). *Jurnal Ilmiah Manajemen* Vo.7 No.3 E-Issn 2580-3743, 263-275.
- Kasmir, D. (2019). Analisis Laporan Keuangan. Depok: Rajawali Pers.
- Novitasari, N. L. (2017). Pengaruh Corporate Governance Dan Faktor Fundamental Terhadap Return Saham Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia. *Jurnal Krisna: Kumpulan Riset Akuntansi*; Vol. 9, 36-49.
- Pamungkas, Y. A., & Haryanto, A. M. (2016). Analisis Pengaruh Current Ratio (Cr), Debt To Equity Ratio (Der), Net Profit Margin (Npm), Return On Asset (Roa) Dan Total Asset Turnover (Tato) Terhadap Return Saham (Studi Kasus Pada Perusahaan Pertambangan Periode 2012-2014). *Diponegoro Journal Ofmanagement* Volume 5, Nomor 4 Issn (Online): 2337-3792, 1-12.
- Pandaya, Julianti, P. D., & Suprpta, I. (2020). Pengaruh Faktor Fundamental Terhadap Return Saham. *Jurnal Akuntansi*, Vol. 9 No. 2, 233-243.
- Pati, I. A., & Astika, I. P. (2016). Variabel-Variabel Fundamental Yang Berpengaruh Pada Kebijakan Dividen. *E-Jurnal Akuntansi Universitas Udayana* Vol.16.3, 1938-1964.
- Pujawati, P. E., Wiksuana, I. B., & Artini, L. S. (2015). Pengaruh Nilai Tukar Rupiah Terhadap Return Saham Dengan Profitabilitas Sebagai Variabel Intervening. *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana* Vol.4 No.04 Issn : 2337-3067, 220-242.
- Sujarweni, V. (2016). Kupas Tuntas Penelitian Akuntansi Dengan Spss. Yogyakarta: Pustaka Baru Press Yogyakarta.
- Supriantikasari, N., & Utami, S. E. (2019). Pengaruh Return On Assets, Debt To Equity Ratio, Current Ratio, Earning Per Share Dan Nilai Tukar Terhadap Return Saham(Studi Kasus Pada Perusahaan Go Public Sektor Barang Konsumsi Yang Listing Di Bursa Efek Indonesia Periode 2015-2017). *Jramb* Volume 5 No. 1. Issn : 2460-123, 49-66.

Syahputra, F. A. (2016). Pengaruh Profitabilitas, Kebijakan Dividen, Dan Solvabilitas Terhadap Return Saham Pada Perusahaan Yang Terdaftar Dalam Indeks Lq45 Tahun 2011-2015. E-Proceeding Of Management: Vol.3, No.3, Issn : 2355-9357, 3153-3158.

Winarno, W. W. (2017). Analisis Ekonometrika Dan Statistika Dengan Eviews . Yogyakarta: Upp Stim Ykpn. [www.idx.co.id](http://www.idx.co.id) (diakses 27 November 2021).