The Effect Of Macroeconomic Factor On Stock Return Of Pt Unilever Indonesia Tbk

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Abstract

The indicators of the successful economy is macroeconomic performance. This macroeconomic factors can affect activities of industry, company and the capital market as well. In 2016-2021, economic growth of all over the world has a severe decline, especially in 2019 due to the emergence of the Covid 19 pandemic, one of the sectors that has experienced fluctuations is the consumer goods sector, PT Unilever Indonesia is one of the consumer goods sector company that experienced the unusual fluctuate of their company stocks price.This research aims to analyze the impact of macroeconomic variable such as inflation, interest rates and exchange rates toward the return of a company's stock. The sample used in this study are data from PT Unilever Indonesia Tbk since periods 2016-2021. The method analysis is the quantitative method by using descriptive and the multiple linear regression analysis.The results show that simultaneously the variables inflation, interest rates and exchange rates have an effect on PT Unilever Indonesia Tbk return, partially inflation have an effect on stock returns, while interest rates and exchange rates have no significant effect on stock returns partially, Implication of these findings, investors can utilize this research as a reference for further research using other variables that can influence the return of a company's shares and also use different objects.

Keywords-Macroeconomic Indicators, Stocks Return, Inflation, Interest Rates, Exchange Rates.

Abstrak

Indikator keberhasilan ekonomi adalah kinerja ekonomi makro. Faktor ekonomi makro ini dapat mempengaruhi kegiatan industri, perusahaan dan juga pasar modal. Pada tahun 2016-2021 pertumbuhan ekonomi seluruh dunia mengalami penurunan yang cukup parah, khususnya pada tahun 2019 akibat munculnya pandemi Covid 19, salah satu sektor yang mengalami fluktuasi adalah sektor barang konsumsi, harga saham perusahaan juga mengalami fluktuasi. menganalisis pengaruh variabel ekonomi makro seperti inflasi, suku bunga dan nilai tukar terhadap return saham suatu perusahaan. Sampel yang digunakan dalam penelitian ini adalah data dari PT Unilever Indonesia Tbk periode 2016-2021. Metode analisis yang digunakan adalah metode kuantitatif dengan menggunakan analisis deskriptif dan analisis regresi linier berganda.

Hasil penelitian menunjukkan bahwa secara simultan variabel inflasi, suku bunga dan nilai tukar berpengaruh terhadap return PT Unilever Indonesia Tbk, secara parsial inflasi dan nilai tukar juga berpengaruh terhadap return saham, sedangkan suku bunga tidak berpengaruh signifikan terhadap return saham secara parsial, Implikasi Dari temuan tersebut, investor dapat memanfaatkan penelitian ini sebagai referensi untuk penelitian selanjutnya dengan menggunakan variabel lain yang dapat mempengaruhi return saham suatu perusahaan dan juga menggunakan objek yang berbeda.

kata kunci-indikator makroekonomi, return saham, inflasi, suku bunga, nilai tukar.

I. INTRODUCTION

Unilever Indonesia is one of the most liquid company in Indonesian stocks exchange, based on the phenomena that occur on 2016-2021 period, The stocks price returns of PT Unilever Tbk had a high unusual fluctuation that caused an unnormal action on market, December 5, 1933 was the date the company was founded, PT Unilever Indonesia Tbk. has developed as a leading company that produces Home and Personal Care and Foods & Ice Cream in Indonesia. Some of the products from Unilever Indonesia include several well-known brands worldwide, such as Pepsodent, Lux, Lifebuoy, Dove, Sunsilk, Clear, Rexona, Vaseline, Rinso, Molto, Sunlight, Walls, Blue Band, Royco, Bango, and others

The capital market in Indonesia is currently experiencing rapid growth and attracting investors to invest their capital, with the hope of getting large profits in the future. The measurement tools of economic growth can be measured using Gross Domestic Product (GDP). In the last six periods 2016-2021, GDP in Indonesia fluctuated. However, in 2020, the entire world economy is experiencing a downturn due to the COVID-19 pandemic. This COVID-19 affects almost all sectors of life, such as the industrial sector, services to education. One of the consumer goods sector stock prices that experienced high and not normal fluctuations of returns in the midst of this pandemic was PT. Unilever Indonesia Tbk. According to Utama and Puryandani (2020), macroeconomic developments in Indonesia are influenced by several factors, including interest rates, inflation and exchange rates. The changing macroeconomy can also affect stock prices, which can also indirectly affect the return of a stock."

The variables used in this study are inflation, interest rates and exchange rates because according to Afiyati & Topowijono (2018) these variables are considered to have the most influence on economic conditions and stock returns investment. Investment according to Halim (2005:4) is in fact the placement of a number of funds in the present with the desire to make a profit in the future. An investor needs to be very selective in determining which company to invest in by analyzing the company's internal and external threats that cannot be predicted and controlled by the company. used as a leading indicator of a country's economy. However, Unilever Indonesia's stock price return may fluctuate as it is influenced by global macroeconomic conditions, Based on the problem statements, the research will be carried out entitled "The Effect of Macoeconomic Factor on Stock Return of PT Unilever Indonesia Tbk''.

II. LITERATURE REVIEW

A. Investment

According to Big Indonesian Dictionary (KBBI) the definition of investment is the investing of money or capital in some company or project for the purpose of gaining profit Lubis (2016) states that investment is spending financial resources or other resources to own an asset in the present with the aim of gaining future profits. According to Wardiyah (2017), a person has a specific purpose in investing, to get a profit for the investor. Another reason someone makes an investment is the declining productivity of someone who invests continuously, the changing economic environment so that there is a possibility that the income he gets will be far below his expenses, and the increasing need for these investors.

B. Stock Return

Anyana (2020:32) argues that shares are a proof of ownership of a company. Those who vote for proof of ownership are known as shareholders. Shares are only in the form of a piece of paper in which it is explained that those who have the paper are the owners of the company that issued the shares, According to Jogiyanto (2010: 263), stock return is the result obtained from stock investment. Stock returns are in the form of realized returns that have occurred or expected returns that have not yet occurred but which are expected to occur in the future According to Nurhakim et al. (2016), the return of a stock is the rate of return expected by investors on the investment they make.

C. Capital Market

The capital market can also be expressed as a market that trades securities which generally have a maturity of more than 1 year, such as stocks, bonds and mutual funds. According to Tandelilin (2017:25), the definition of the capital market is a meeting between various parties who have excess funds and those who need funds by trading securities.

D. Stock Price Index

The index has a function, namely being an indicator of market trends, this means that the mobility of the index provides an overview of the state of the market at a time, whether the market is active or in a sluggish state. Changes in stock prices on an exchange will be reflected in the movement of the value of its stock index shares, whether the market is in active state or in a sluggish state. By using the index, you can see the trend of the current stock price mobility, whether it is rising, constant, or falling. Based on Tandelilin (2010:86), states that "The stock index is a parameter that reflects the performance of stocks in the capital market". Based on the above understanding, the stock index is the price of a share expressed in an index. to see the movement of shares on the stock exchange.

E. Macroeconomic Variable

According to Putong (2013) Macroeconomics is a component of economics that specializes in understanding the overall workings of the economy, which has the aim of understanding various economic events and changing economic regulations to be better. Based on the above researchers, macroeconomics can be defined as the study of economic behavior and performance on a large scale. Macroeconomics analyzed various factors that determine the state of national products.

1. Inflation

Inflation based on Tandelilin (2010), is a "tendency" to increase product prices that occur as a whole. Inflation can arise if the value of money stored in circulation is greater than the number of goods or services offered. According to Fahmi (2015:67), inflation is an event that describes a situation or situation where the price of goods increases and the value of the currency weakens. Inflation rates that are too high are often associated with an economy that is currently hot. This means that the state of the economy occurs when demand for products exceeds the size or parameters of the product supply, resulting in an increase in prices, The amount of inflation also causes a decrease in the purchasing power of money.

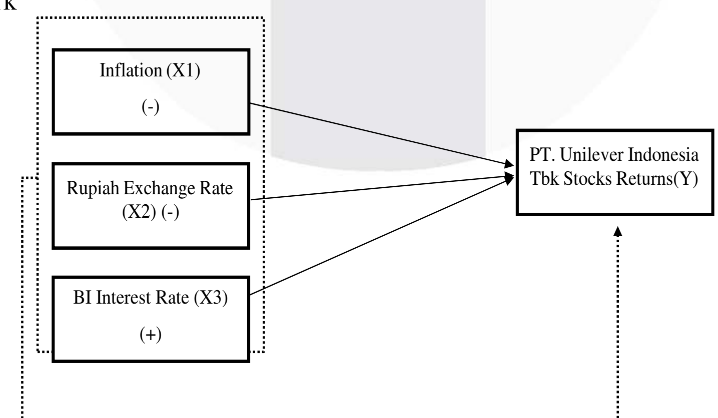
2. Interest Rate

The exchange rate shows the number of units of currency that can be purchased or exchanged for one other currency or the price of a currency expressed in another currency Martono (2002). Thus, it can be concluded that the value of one rupiah currency is translated into a foreign currency, Therefore this exchange rate is determined by a level, namely supply and demand in the foreign exchange market. Sukirno (2010), gives an opinion if the price of a foreign currency or the price of foreign currency to domestic money is called the exchange rate or exchange rate. Based on the researchers above, the rupiah exchange rate is the ratio between the value of a country's currency against other countries. Exchange rates provide a reflection of the alignment of supply and demand for local currency and foreign currency.

3. Exchange Rate

According to Boediono (2014: 76) interest rate is one of the parameters in determining whether someone will invest or save. Meanwhile, based on Sunariyah (2011:20), the interest rate is the price of the loan. Based on the researchers above, the interest rate is said to be a percentage of the principal in each unit of time. The type of interest rate used in this research is the BI rate. The BI rate is the policy interest rate that reflects the behavior of monetary policy determined by BI and then notified to the public.

F. Research Framework



Picture 1. Research Framework (Source: Data is Processed by The Author)

From the research question, empirical studies and conceptual framework that have been carried out, the hypotheses in this research are:

H1 : Inflation, Interest Rates and Exchange Rates simultaneously have a significant effect to the Stock Return of PT. Unilever Indonesia Tbk.

H2 : Inflation has a significant effect on stock returns of PT. Unilever Indonesia Tbk.

H3 : The exchange rate has a significant effect on the stock return of PT. Unilever Indonesia Tbk.

H4 : Interest rates have a significant effect on PT. Unilever Indonesia Tbk

III. RESEARCH METHOD

A. Research Characteristics

Table 1. Research Characteristics

No.	Research Characteristics	Type
1.	By Method	Quantitative
2.	By Purpose	Descriptive
3.	By Type of Research	Association
4.	Based on Research engagement	Minimal
5.	Based on Unit of Analysis	Organization
6.	By Execution Time	Time Series

Source: Data is Processed by The Author

This study uses quantitative methods with the aim of the research are to examines the causal relationship between the independent variables and the dependent variable. The independent variables used in this study are inflation, interest rates and exchange rates while the dependent variable used is stock returns. Data on these variables comes from the official websites www.bi.go.id, www.bps.go.id, www.investing.com and www.finance.yahoo.com. The sample used in this study is PT Unilever Indonesia Tbk stock price data for six years, from 2016 to 2021. To test this sample, the research uses descriptive analysis techniques, multiple linear regression analysis, classical assumption tests and hypothesis testing.

IV. RESEARCH RESULT AND DISCUSSION

A. Descriptive Statistical Analysis

Table 2. Descriptive Statistical Analysis

	Descriptive Statistic				
	N	Minimum	Maximum	Mean	Std Deviation
Stocks Returns	72	-0.1538	0.2132	-0.00581	0.0656
Inflation Rate	72	1.32	4.45	2.86	0.89602
Interest Rate	72	3.50	7.25	4.78	0.93885
Exchange Rate	72	12,998	16,413	14,035	692,415

Based on the Table 2. above, the descriptive analysis results of the stocks return with the minimum is -0.1538 and the maximum is 0.2132, on the other side, the average of the stock return per month is -0.00581 and the standard deviation is 0.0656, The descriptive analysis results of the inflation with the minimum is 1.32 and the maximum is 4.45, on the other side, the average of the stock return per month is 2.86 and the standard deviation is 0.89602

The descriptive analysis results of the interest rate with the minimum is 3.50 and the maximum is 7.25, on the other side, the average of the stock return per month is 4.78 and the standard deviation is 0.93885, The descriptive analysis results of the exchange rate with the minimum is 12,998 and the maximum is 16,413, on the other side, the average of the stock return per month is 14,035 and the standard deviation is 692,415

B. Multiple Linear Regression Test

Table 3. Multiple Linear Regression Test

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.150	.296		-.506	.615
	Inflation Rate	-3.689	1.466	-.363	-2.517	.014
	Interest Rate	-.158	1.373	-.016	-.115	.909
	Exchange Rate	3.260E-5	.000	.192	1.676	.098

Based on the table above, the following equation is:

$$Y = - 150 - 3.689 \text{ Inflation} - 158 \text{ Interest rate} + 3.260 \text{ Exchange Rate} + 0{,}296$$

From the regression equation above, it can be concluded that the regression coefficient of inflation is -3.689. this shows that if the inflation variable has increased, the stock return are decreased by -3,689, the regression coefficient of the interest rate variable is -158 which means that if the interest rate variable has increased, the stock return are decreased by -158, the regression coefficient of the exchange rate variable which is equal to 3,260 can be interpreted if the exchange rate variable has increased, the stock return are increased by 3,260.:

C. Classic Assumption Test

1. Normality Test

According to (Gozali, 2018, p. 161) the normality test is a test that aims to find out whether the independent or dependent variables have a normal distribution or not, normality test is analyzing the Kolmogorov Smirnov test value, the basis for making a decision is if the significance value is > 0.05, then the residual from the regression results meets the assumption of normality test.

Table 4. One-Sample Kolmogorov-Smirnov Test

N		**Unstandardized Residual**
		72
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	.08001557
Most Extreme Differences	Absolute	.071
	Positive	.059
	Negative	-.071
Test Statistic		.071
Asymp. Sig. (2-tailed)		.200[c,d]

Source: Data is processed by the author

Based on the results of the normality test with the Kolmogorov Smirnov test above, it can be seen that the significance value = 0.200 > 0.05, then the regression model meets the normality assumption and the data is called normal, meaning that it has a data distribution that represents the population

2. Multicollinearity Test

The multicollinearity test was carried out to find out whether the independent variables were multicollinear or not and whether the regression found a high or perfect correlation between the independent variables (Gozali, 2018, p. 107).

Table 5. Multicollinearity Test

Model	Collinearity Statistics	
	Tolerance	VIF

Inflation Rate	.546	1.832
Interest Rate	.567	1.765
Exchange Rate	.860	1.163

Source: Data is processed by the author

Based on the data above, the VIF value of inflation is 1.832, the VIF value of interest rate is 1.765, the VIF value of exchange rate is 1.163, meaning that if the VIF value is less than 10.00, then there is no multicollinearity in the regression model, while the tolerance value of inflation is equal to 0.546, the tolerance value of interest rate is equal to 0.567, the tolerance value of the exchange rate is equal to 0.860, then there is no multicollinearity in the regression model.

3. Autocorrelation Test

Autocorrelation test aims to find out whether there is a regression model regression between confounding errors in period (t) and period t-1 (previously). If there is a correlation, then there is a correlation problem. This problem arises because the residual (confounding error) is not independent of one observation to other observations. A good regression model is one that is free from autocorrelation.

Table 6. Autocorrelation Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.478[a]	.229	.195	.0817616	2.051

Source: Data is processed by the author

From the Summary table model, it can be seen that Durbin Watson's value is 2.051 the value is between 1.5 to 2.5. Then it can be stated that there is no correlation

4. Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residual one observation to another observation, it is called homoscedasticity and if it is different it is called heteroscedasticity (Gozali, 2018, p. 137). Whether or not heteroscedasticity exists can be seen from the probability of significance, if the significance value is above the 5% confidence level, it can be concluded that it does not contain heteroscedasticity (Gozali, 2018, p. 142).

Table 1. Heteroscedasticity Test

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.176	.159		-.452	.270
	InflationRate	-.483	.786	-.100	.195	.541
	Interest Rate	-.147	.737	-.032	-.130	.843
	Exchange Rate	-6.280E-6	.000	-.078	.642	.549

Source: Data is processed by the author

Based on the results above of the heteroscedasticity test using Glesjer, it can be seen that the significance value of inflation is equal to 0.541, the significant value of the interest rate is equal to 0.843, the significance value of exchange rates is equal to 0.549, it can be concluded that there is no heteroscedasticity.

D. Hypothesis Test

1. Simultaneous Significance Test (F Test)

Table 8. Simultaneous Significance Test (F Test)

Model		Sum of Squares	Df	Mean Square	F	Sig.	R	R Square
1	Regression	.135	3	.045	6.727	.000[b]	.478	.229
	Residual	.455	68	.007				
	Total	.589	71					

Source: Data is processed by the author

Based on the results of the analysis in the table above, it can be concluded that the F_{count} value is 6,727 and a significance value is 0. the significance value is 0 <0.05. then it can be concluded that H_0 is accepted or in other words the variables of inflation, interest rates and exchange rates simultaneously have a significant effect on stock returns.

2. Partial Test (T Test)

Table 9. Partial Test (T Test)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.150	.296		-.506	.615
	Inflation Rate	-3.689	1.466	-.363	-2.517	.014
	Interest Rate	-.158	1.373	-.016	-.115	.909
	Exchange Rate	3.260E-5	.000	.192	1.676	.098

Source: Data is processed by the author

Based on the table above:

The Effect of Inflation on Stock Return, the significance value of the inflation variable is 0.014 < 0.050, which means that the inflation variable has a significant effect on stock returns, The Effect of Interest Rate on Stock Return, The significance value of the interest rate variable is 0.909 > 0.050, which means that the interest rate variable has no significant effect on stock returns, The Effect of Exchange Rate on Stock Return, The significance value of the exchange rate variable is 0.098 > 0.050, which means that the exchange rate variable has no significant effect on stock returns.

3. Coefficient of Determination

Table10. Coefficient of Determination

Model	R	R Square	AdjustedR Square	Std. Error of the Estimate	Durbin-Watson
1	.478[a]	.229	.195	.0817616	2.051

Source: Data is processed by the author

Based on the table above, the value of R Square (R2) is 0.229, it can be concluded that the independent variables (inflation, interest rates and exchange rates) have an influence on the dependent variable (stock return) with 22.9% of 100% and the rest are influenced by other independent variables outside of this research.

E. Research Discussion

1. The Effect of Inflation on Stock Return

Based on the results of the t test that has been done, it is concluded that the inflation variable has a significance value of 0.14 and a calculated t value of -2.517. The significance value of the inflation variable is <0.05, which means that Ho is accepted or in other meanings inflation has a significant negative effect on PT Unilever Indonesia Tbk stock returns in 2016-2021. Inflation cause the value of the currency decreased that causes the public interest in saving and investing in stocks market also decreasing.

2. The Effect of Interest Rate on Stock Return

Based on the results of the t test that has been done, it is concluded that the interest rate variable has a significance value of 0.909 and a calculated t value of -115. The significance value of the interest rate variable is > 0.05, which means that Ho is rejected or in other words, interest rates do not have a significant effect on PT Unilever Indonesia Tbk stock returns in 2016-2021. interest rates in 2016-2021 have fluctuated with a tendency to increase, with rising interest rates, the company's expenses will increase, especially companies that are in debt, the increase in interest rates will not have a direct impact or have less influence on the high and low interest of investors to invest in company shares.

3. The Effect of Exchange Rate on Stock Return

Based on the results of the t test that has been done, it is concluded that the exchange rate variable has a significance value of 0.098 and a calculated t value of 1.676. The significance value of the interest rate variable is > 0.05, which means that Ho is rejected or in other words, exchange rates do not have a significant effect on PT Unilever Indonesia Tbk stock returns in 2016-2021. the exchange rate of the rupiah against the US dollar during the 2016-2021 period experienced a weakening, some investors such as foreign investors considered that a decrease in the value of the rupiah would cause the value of shares to be purchased in the currency exchange rate in their home country to also decrease, but with a weakening of the currency exchange rate it would not make company stock returns in the consumer goods sector are vulnerable to this.

V. CONCLUSION

Based on the results of the research that has been done, the conclusions that can be drawn are:

A. Inflation, interest rates and exchange rates have a significant effect on PT Unilever Indonesia Tbk 2016-2021 simultaneously.

B. Inflation has a significant effect on PT Unilever Indonesia Tbk's stock returns in 2016-2021 partially.

C. Interest rates has no significant effect on PT Unilever Indonesia Tbk stock returns in 2016-2021 partially.

D. Exchange rate has no significant effect on PT Unilever Indonesia Tbk's stock returns in 2016-2021 partially.

REFERENCE

Abdul Halim. (2005). *"Investment Analysis"*. PT Salemba Emban Patria. Jakarta.

Arifin, B. a. & Didik J. Rachbini (2001). *"Political Economies and Public Policy"*. Jakarta: PT. Grasindo.

Adyanata Lubis. (2016) *"Basic General Data"*. Deep Publisher .Yogyakarta

Afiyati, H.T. and Topowijono. (2018). *"The Effect of Inflation, BI Rate and Exchange Rate on Stock Return of Food and Beverage Sector Company"*. Brawijaya University Journal. Malang

Asfia Murni. (2013) "*Macroeconomics*". PT Refika Aditama. Bandung

Basuki, Agus Tri. 2016. *"Regression Analysis in Economics Research*". Jakarta

Boediono. (2014). "*Synopsis Series about Delivers Economics Knowledge*". Yogyakarta

Case, K. E. (2009). *Principles of Macroeconomics, Fifth Edition,* . Jakarta, : PT Index.

Cooper & Schindler. (2014). "*Business Research Method. Mcgraw Hill*". New York.

Fahmi, I. (2014). *Financial Performance Analysis.* Bandung: Alphabeta.

Fahmi, I (2015). *Financial Mnagment Theories*. Bandung. Alphabeta.

Febrina, N, S., & Rakim,A,A (2020). *The Effect of Inflation, BI Rate and Exchange Rate on Stocks Return of IHSG.* Jakarta

Gerald Jensen & Charles Jensen. "*Investment Analysis and Management*". 2020

Gozali, I. (2018). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 25. Edisi 9.* Semarang: Undip.

Gruber, M. J. (2003). "*Modern Portfolio Theory and Investment*". United States, John Wiley & Sons, Inc.

Halim Abdul. (2014). *Investment Analysis,* . Edition 2, Salemba four, Jakarta.

Heryanto Wingnyowinarto.(2019) "*The Decreased of Rupiah*". Cakrawala Media Pressindo. Yogyakarta

Indah Puspa Dewi (2020) "*The Effect on Inflation, Kurs, and gold price on IHSG*", Yogyakarta University Journal

Indrawati. (2015) *"Management and Business Convergence Technology and Communication Technology"*. Aditama. Bandung.

Indriantoro, Nur Supomo, Bambang. (2018) *"Research Methodology"*.

Jogiyanto H.M (2010) "Investment Analysis and Portfolio Theories 7th Edition" BPFE, Yogyakarta

Karl E Case, Ray C Fair, Sharon M Oster. (2012) *"Principles of Economics 10th Edition"*
Martono. (2002) "*Banks and Other Financial Institutions 1st*". ECONICA
Mansyur, M. (2009). "The Influence of the SBI Interest Rate on the US Dollar Exchange Against the Jakarta Stock Exchange Composite Stock Price Index". *Journal of Padjadjaran University.*
Martalena, &. M. (2012). *Introduction to Capital Markets, First Edition,.* Yogyakarta.
Martalena, a. M. (2011). *Introduction to Capital Markets, First Edition, .* Yogyakarta: Andi.
Neuman W.(2014) "*Social Research Method: Qualitative and Quantitative Approaches 7th Edition*". Pearson Education Limited
Nurhakim, Anistia, Irni Yunita, Aldila Iradianty (2016) "*The Effect of Probability and Inflation on Stock Return on Pharmacies Sector In IHSG*" Asia Pacific Institute
Nora Amelda Rizal, Prileka Penta Putri. (2018) The Effect of Infkation, Intrest Rate,Gold Price and Oil Price on Jakarta Islamic Index
Oktavian Yodha Utama, Siti Puryandani, (2020). *The Effect of BI Rate , Exchange Rate and Gold Price on Stock Return in Sri Kehati Index*". Journal dinamika Management
Putong, I. (2013). *Economics, Introduction to Micro and Macro, Fifth Edition.* Jakarta: Mitra Wacana Media.
Sjahral, Dermawan. (2014) Financial Management Extended Revision Edition. Mitra Wacana Media. Jakarta
Soeparmono. (2018) "Macroeconomic Delivers" YKPN. Yogyakarta
Sujarweni, V. Wiratna (2015) "Research Methhod In Economics Business" Pustaka Baru Press. Yogyakarta
Sunariyah. (2011) "*Stock Exchange 4th edition"* YPKM Yogyakarta
Sunardi, N & Ula L.N.R. (2017) "The Effect Of BI Rate, Inflation and Kurs on IHSG".
Sugiyono (2017) "*Mixed Method Combinttion*" CV Alfabeta Bandung
Sugiyono (2018) "*Mixed Method Combination*" CV Alfabeta Bandung
Suci, K. S. (2012). "*The Effect of Inflation, Interest Rates, Exchange Rates, and GDP Syarofi (2014) "Analysis of Intrest Rate, Exchange Rate, Gold Price, DJIA, Nikkei, Hangseng on IHSG Return on GARCH M Methdod*"
Growth on the Composite Stock Price Index". *Journal of Economics. Volume 8*, No.1.
Sukirno, S. (2010). *Macroeconomics, Introductory Theory, Third Edition, .* Jakarta, : Rajawali Pers.
Tandelilin, E. (2001). *Investment Analysis and Portfolio Management, .* Yogyakarta, : BPFE.
Tandelilin, E. (2010). *"Portofolio dan Investasi Teori dan Aplikasi".* Edisi Pertama, Kanisius.
Tandelilin, E. (2010). *Portfolio and Investment Theory and Applications. First edition.* Yogyakarta: PT Kanisius.
Tandelilin, E. (2017). *Capital Markets Portfolio & Investment Management,.* Yogyakarta: Kanisius.
Wardiyah, Mia Lasmi, *Financial Report Analysis*. Pustaka Setia Bandung