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MACROECONOMIC ANALYSIS OF STOCK RETURNS

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Abstrak

This study was done to investigate how the macroeconomic environment affects stock returns. Whereas sampling is based on the research criteria, the population of the study consists of financial organizations registered in LQ45. A number of analyses, including descriptive analysis, traditional presumptions, and hypothesis testing (t test, f test, and r square test), are used in the data processing approach. According to the analysis test, while inflation and interest rates have an impact on stock returns, it is not statistically significant. In contrast, the stock return has a considerable impact on the currency rate. The three independent variables have a considerable impact on stock returns when tested together.
***Keywords**: Exchange rates, interest rates, stock returns, and inflation*

INTRODUCTION

One of the factors that potential investors take into account when deciding whether or not to invest in stocks is the stock market's volatility because it affects returns, which are an investor's primary concern. There are things to think about, like macroeconomics. In cases where volatile macroeconomic factors can result in returns, the stock payment is similarly volatile. These macroeconomics are external economic forces, such as investors purchasing stock in the company, that might have an impact on the company's finance operations (Sunayah & Ibrahim, 2016). As is now the case, numerous companies' stock values on the Indonesia Stock Exchange have fluctuated as a result of outside factors like the Covid-19 epidemic, especially in the banking sector, making stock returns to investors unpredictable. For fear of not being able to pay under the current circumstances, many people are unable to save money or borrow money from the bank.

As a result, banking firm activities are less steady, and corporate stock returns are unstable. Due to the unpredictable stock prices of banking businesses, the rate of return on shares received will change. because the size of the stock return received depends on the price of the stock sold in the simulated market. The table below allows us to properly examine this fluctuation issue:

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Table 1. Share Prices

No.	Emitment Code	2017	2018	2019	2020
1.	BBTN	1,259	1,740	3,570	2,540
2.	DEVELOP	214	189	995	670
3.	NISP	638	1035	938	855
4.	BBKP	700	640	590	272

According to the aforementioned data, it is clear that the stock prices of a number of banking businesses have been volatile, and some banks have even seen their stock prices decrease steadily over the past four years. Because the described share price variations also have an unpredictable effect on investors, they are relevant for study when determining how much to pay for banking firm stocks on the capital market. Macroeconomic study of businesses, such as the exchange rate versus the dollar, is one of the analyses that might have an impact on the acquisition of shares in order to acquire the anticipated stock return. The Indonesian government's inflation rate as well as the interest rate on Bank Indonesia Certificates, or SBI, were both high. People still struggle to buy shares with limited cash due to the current inflation, which has a significant impact on the pricing of products and services (A & Sudjarni, 2016). Additionally, investors become less interested in expanding the amount of money they have invested in the company due to inflation because they believe the return on their money is not going to be particularly promising.

Along with rising inflation, the capital market's stock prices are unsteady due to the variation in the exchange rate of the rupiah for foreign currencies, or what we often refer to as currency exchange, particularly the dollar. If the value of the rupiah declines, it may also result in a drop in the stock price of financial institutions listed on the Indonesian stock exchange (Suriyani & Sudiartha, 2018).

SBI, which is also one of the factors determining a banking activity because interest rates are one of the attractions for banking customers, is a factor that affects stock prices that is equally essential. When the SBI provided by the government is high, more people will invest in banks and fewer people will borrow money. As a result, there will be less money stashed away in banks and less money earned from interest on loans (Wardani & Andarini, 2016). And on the other hand, if the SBI established by the government is low, it will force people to borrow money from banks in order to make purchases or investments and will induce a decline in interest in saving due to the low interest rates offered. Because there is little interest in saving among the general population, banks find it challenging to supply capital for public loans. The macroeconomic instability makes it challenging for banks to adapt to the environment; if banking operations are subpar, the company will also be unable to generate stock returns for all investors in accordance with investors' wishes.

The direction of my study goal, which is to examine the Macroeconomic Analysis of Stock Returns, can be understood in light of the issues raised above. Whereas with these goals, this research can help investors pay more attention to external issues and not just the internal factors of the organization. According to this study, external factors also

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affect whether a company's stock price increases or decreases, which affects stock returns for investors.

Literature Review

Stock Returns

Of course, investors that are prepared to spend their earnings on new investments anticipate a return on their capital (Yulianto & Widyasasi, 2020). What we typically refer to as stock returns is this. Since a return will always be an investor's main objective in the capital market, the term "return on the capital market" is nothing new to investors (Purba, 2019). Investors can still make money even though purchasing and selling shares does not always result in a positive rate of return by receiving dividends, bonuses for invested shares, and capital gains. There are two common sorts of returns: current income and the difference between the profit from the sale of shares that we make (capital gain) (Asmirantho et al., 2016) .

Inflation

A nation's economy will undoubtedly be impacted by what is known as inflation, which can be defined as a constant drop in the purchasing power of money and an increase in the overall cost of commodities (Hidayat et al., 2018). Inflation affects stock prices on the capital market as well as rising market prices for goods, therefore a spike in stock prices might result in irregular stock returns for investors. Investors in stocks who are aware of the considerable risk associated with investing in stocks may benefit or suffer from the difficulties of predicting future inflation. This can be a gleam of hope for investors who are willing to assume all the risks when purchasing equities, especially long-term stocks (Mankiw & Gregory, 2014). Contrary to investors who are still on the fence about investing in stocks, the possibility of unpredictable inflation will make them even more wary of doing so given the dangers involved (Julia & Diyani, 2015).

Interest rate

The national interest rate reference is determined by Bank Indonesia, which also serves as the parent institution for all banks and sets interest rates (Suriyani & Sudiartha, 2018). Every month, this will be done following the Board of Governors of Bank Indonesia meeting to ensure that the policies put into place would be advantageous to many parties. This interest rate is also one of the monetary strategies the government uses to manage interest rates in the community and prevent them from rising too high. The major goal of setting interest rates is to regulate the growth of money market interest rates among all banks, including those that practice sharia banking and conventional banking (Julia & Diyani, 2015).

Ex**change rate**

The term "exchange rate" typically refers to the cost of converting one currency to another. Because various currencies have different nominal values, the outcome of this exchange will affect the nominal amount of money. The exchange rate is another name for it (Suriyani & Sudiartha, 2018). The rate at which currencies are exchanged for US dollars is the one that is most frequently computed globally. Exchange rates can occasionally be used in balance of payments transactions as well. International trade will ease payments for all nations thanks to the exchange rate. Additionally, this will affect the cost of traded shares on a national and worldwide level (Sutriani, 2014).

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Conceptual Framework for the Study

Figure 1 below explains the conceptual framework that served as a fundamental guide for developing a framework for variables in this study:

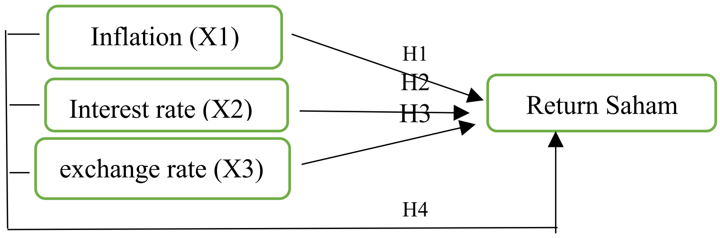

Figure 1. Conceptual Framework

Study Hypothesis

The provisional conclusions that may be derived from this research with regard to the conceptual framework are:

H1: Inflation has a major impact on stock returns.

H2: Stock returns are impacted by BI interest rates.

H3: The exchange rate has a significant impact on stock returns.

H4: These three factors simultaneously affect stock returns and are important.

METHODS

The research method adopted is quantitative. Secondary data is used, such as data collecting from publicly available financial reports with banks listed on the Indonesia Stock Exchange (IDX), and can be obtained for free straight from the site's main page by clicking the link at www.idx.co.id. Table 2 below provides detailed explanations for each of the dependent and independent variables used to produce this study.

Table 2. Explanation of Variables

No	Variable	Understanding	Scale	Measurement
1.	Stock *Returns*	The return on investment received by investors as the result they receive for investing their funds in a company.	Ratio	*Return* = $\frac{P_t - P_{t-1}}{P_{t-1}}$
2.	Inflation	Rising prices of goods and decreasing value of money that occurs in the long term (continuously).	Ratio	Changes in the rate of inflation
3.	Interest rate	Determination of interest rates from Bank Indonesia which is announced and applied to the public.	Ratio	The average interest rate in 1 year.

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4.	Exchange rate	Rupiah currency exchange for foreign currencies	Nominal	IDR exchange rate against US$

In addition to variables, the research also creates a population of all banking companies in LQ45 that meet specific criteria. This is accomplished by choosing samples that represent the existing population and meet the necessary research criteria. A total of 5 bank companies had their data collected over the last 5 years, from 2017 to 2021, and 25 data were processed as a result. Following the collection of the data, a method for data analysis was used, beginning with a descriptive analysis and moving on to tests for the traditional assumptions of normality, heteroscedasticity, multicollinearity, and autocorrelation before testing the hypothesis using partial tests, simultaneous tests, and the coefficient of determination (Ghozali, 2013). The SPSS application was used to perform all data analysis.

RESULTS AND DISCUSSION

We can obtain a summary of the study data we use thanks to this analysis. According to Table 3, the lowest stock return data had a negative value of -12.97, while the greatest value was 34.36, with an average of 3.1948. The inflation statistics that followed had a mean of 3.988 and ranged from a least value of 3.03 to a highest value of 5.38. Meanwhile, the average interest rate is 5.51, with the lowest interest rate being 4.56 and the highest being 6.25. Finally, the information on the dollar to rupiah exchange rate shows a minimum of 13436 and a maximum of 14542 with an average of 13883.

Table 3. Descriptive analysis

Descriptive Statistics

	N	Minimum	Maximum	Means	std. Deviation
Stock returns	25	-12.97	34.36	3.1948	9.96021
Inflation	25	3.03	6.38	3.9880	1.25147
Interest rate	25	4.56	6.25	5.5100	.62156
Exchang e rate	25	13436	14542	13883.20	416,042
Valid N (listwise)	25				

SPSS processing result source

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The normality test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residuals
N		25
Normal Parameters[a,b]	Means	0E-7
	std. Deviation	8.41764558
Most Extreme Differences	absolute	.207
	Positive	.207
	Negative	-.141
Kolmogorov-Smirnov Z		1035
asymp. Sig. (2-tailed)		.234

a. Test distribution is Normal.
b. Calculated from data.

SPSS processing result source

Table 4 of the SPSS results displays the asymp.The study's data are all based on normal data because the study's sig number is 0.234 and the value is > 0.05

The Heteroscedasticity Test

Park glejser test , in table 5 it can be seen where all sig values > 0.05 it is concluded that heteroscedasticity between variables does not apply.

Table 5. Heteroscedasticity Test

Model		t	Sig.
1	(Constant)	-.222	.826
	Inflation	-.404	.690
	Interest rate	1,185	.249
	Exchange rate	.073	.942

SPSS processing result source

The Multicollinearity Test

Table 6 shows that the numbers given on the Tolerance > 0.10 and the VIF value are both less than 10, indicating that no multicollinearity is found in any of the independent variables.

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Coefficients [a]

Model		Collinearity Statistics	
		tolerance	VIF
1	Inflation	.677	1,477
	Interest rate	.735	1,360
	Exchange rate	.890	1,124

a. Dependent Variable: Return_Saham
SPSS processing result source

The Autocorrelation Test
Knowing that the DW value is 2.358 from table 7 and that the DU value is 1.6540 from the DW statistics table satisfies the criteria that DU<DW<4-DU, 1.65402.346 2.358 results demonstrate that there is no autocorrelation in the study

Table 7 Autocorrelation Test
Summary Model [b]

Model	R	R Square	Adjusted R Square	std. Error of the Estimate	Durbin-Watson
1	.535 [a]	.286	.184	8.99884	2,358

a. Predictors: (Constant), Exchange_Value, Interest_Rate, Inflation

b. Dependent Variable: Return_Saham

The Partial Test
The sig inflation value in Table 8 is 0.091 > 0.05, indicating that the inflation variable does not significantly affect stock returns. Interest rates, whose significance value is 0.684 > 0.05, have no discernible impact on stock returns. Furthermore, given that the exchange rate variable has a value of 0.025–0.05, it may be inferred that the exchange rate has a sizable impact on stock returns.

Table 8. Partial Test
Coefficients [a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	std. Error	Betas		
1	(Constant)	180,905	69,331		2,609	.016
	Inflation	-3,163	1,784	-.397	-1,774	091
	Interest rate	-1,423	3,447	-.089	-.413	.684
	Exchange rate	-.011	005	-.473	-2,420	.025

a. Dependent Variable: Return_Saham

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The Simultaneous Test

returns are simultaneously influenced by all the variables given in this study.

Table 9. Simultaneous test

ANOVA [a]

Model		Sum of Squares	df	MeanSquare	F	Sig.
1	Regression	87348834	3	29116.278	4,797	.011 [b]
	residual	127468.967	21	6069951		
	Total	214817.801	24			

a. Dependent Variable: Return_Saham

b. Predictors: (Constant), Exchange_Value, Interest_Rate, Inflation

SPSS processing result source

Test for Determination Coefficient

The results of the Adjusted R Square with the value of 0.322 are shown in Table 10, and when expressed as a percentage, it yields 32.2%. This indicates that the percentage of stock returns that are influenced by the independent variable is 32.2%, while the remaining percentage is still influenced by many other factors that were not examined in this study.

Table 10. Test the coefficient of determination

Summary Model [b]

Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.638 [a]	.407	.322	77.90989

a. Predictors: (Constant), Exchange_Value, Interest_Rate, Inflation

b. Dependent Variable: Return_Saham

H1: Independent stock returns are significantly impacted by inflation to a lesser extent.

The findings of this study demonstrate that inflation does not have a significant impact, despite the fact that investors are ready for the risk of uncertainty around inflation. This means that when inflation changes, the business must adjust its operations more in order to generate profits. As a result, the time that results is not optimal, and consequently, the returns that are given to investors are also not optimal or insignificant compared to the value of the funds they have invested. When inflation is high, the value of money will decline, and people will withdraw their money from the bank because they don't trust the bank to increase it. As a result, banks will likely face financial difficulties and may even need to use reserve funds to keep their businesses operating, which will have a negative impact on their longevity as well as

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on the amount of profit investors will make from their investments. This study is consistent with that of Andes et al. (2017).

H2: Stock returns are significantly impacted by interest rates in part.

Interest rates have a negligible impact on stock returns, according to the research findings section. This shows that when interest rates are low, people are less likely to save money or make investments because the interest they will get is likewise lower. In fact, because of the low interest rates, consumers frequently approach banks to borrow money. Due to the low level of public savings and increasing borrowing, there will be less money available for business operations. As a result, businesses must increase their profit margins while reducing the amount of money they pay to investors in order for them to continue operating effectively. The findings of (Frima & Surya, 2018) research, which claimed that interest rates have a detrimental impact on stock returns, are at odds with those of this study.

H3**: The stock returns are significantly impacted by the exchange rate in part.**

The third theory, according to which the exchange rate significantly affects stock returns, is acknowledged. This considerable impact is caused by the dollar's continuing appreciation relative to the rupiah, which maximizes both domestic and global trade, particularly for import and export within the nation. When it comes to helping businesses with buying and selling activities, banking plays a role. With more and more clients and transactions for these customers producing maximum profits, the more purchases and sales are made on a national and international scale, the more sustainable a bank will become. By default, the banks will also offer all investors who have put money into the business a respectable stock return. According to research findings (Asmirantho et al., 2016), the exchange rate significantly influences stock returns.

H4: Stock returns are significantly impacted simultaneously by currency rates, interest rates, and inflation.

The evaluation of the f test findings reveals that the independent factors employed significantly affect stock returns. Accordingly, if inflation, interest rates, and exchange rates all rise at the same time, the stock prices of banking companies will likewise rise on the capital market, which will improve investors' rates of return. According to studies (Andes et al., 2017), currency rates, interest rates, and total inflation have a considerable impact on stock returns. These findings are in line with that research

Conclusion

After carrying out all the tests in this research, it can be concluded from the results obtained are:

1. Inflation does not have a significant effect on the return received by investors.
2. Likewise with interest rates, the influence exerted is not significant on stock returns .
3. Value turns out to have a significant effect on stock returns .
4. Meanwhile, the three variables simultaneously influence and are significant to the dependent variable.
   and performance.

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REFERENCES

A, made S. W., & Sudjarni, L. K. (2016). Pengaruh Tingkat Suku Bunga, Tingkat Inflasi, Nilai Kurs Rupiah Dan Produk Domestik Bruto Terhadap Return Saham. E-Jurnal Manajemen Universitas Udayana, 5(6), 254288.

Andes, S. L., Puspitaningtyas, Z., & Prakoso, D. A. (2017). Pengaruh Inflasi, Kurs Rupiah dan Suku Bunga terhadap Return Saham Perusahaan Manufaktur. Jurnal Akuntansi Keuangan Dan Bisnis, 10(2), 8–16. http://jurnal.pcr.ac.id

Asmirantho, E., Mulya, Y., & Firmansyah, D. A. (2016). Pengaruh Kinerja Keuangan Dan Makroekonomi Terhadap Return Saham Pada Subsektor Makanan Dan Minuman Periode 2011-2015. JIMFE (Jurnal Ilmiah Manajemen Fakultas Ekonomi), 2(2), 17–25. https://doi.org/10.34203/jimfe.v2i2.445

Frima, R., & Surya, F. (2018). Pengaruh Tingkat Pendidikan dan Penggunaan Informasi Akuntansi Manajemen Terhadap Kinerja UMKM di Kota Padang. Jurnal Akuntansi & Manajemen, 13(1), 93–111.

Ghozali, I. (2013). Aplikasi Analisis Multivariate Dengan Program IBM SPSS 21. Badan Penerbit Universitas Ponogoro.

Hidayat, L. R., Setyadi, D., & Azis, M. (2018). Pengaruh Inflasi dan Suku Bunga dan Nilai Tukar Rupiah serta Jumlah Uang Beredar terhadap Return Saham. Forum Ekonomi, 19(2), 148. https://doi.org/10.29264/jfor.v19i2.2121

Julia, T. T., & Diyani, L. A. (2015). Pengaruh Faktor Fundamental Keuangan dan Makroekonomi terhadap Harga Saham. Jurnal Bisnis Dan Komunikasi, 2(2), 109–119, ISSN 2356-4385.

Mankiw, & Gregory, N. (2014). Pengantar Ekonomi Makro Edisi Asia. Salemba Empat.

Purba, N. M. B. (2019). Pengaruh Profitabilitas, Likuiditas, Dan Leverage Terhadap Return Saham Perusahaan Manufaktur Di BEI. Jurnal Akuntansi Keuangan Dan Bisnis, 12 No. 2(2), 67–76.

Sunayah, S., & Ibrahim, Z. (2016). Analisis Pengaruh Perubahan Variabel Makroekonomi Terhadap Return Saham Syariah Pt. Telekomunikasi Indonesia, Tbk. Periode 2011-2013. ISLAMICONOMIC: Jurnal Ekonomi Islam, 7(1), 113–139. https://doi.org/10.32678/ijei.v7i1.37

Suriyani, N. K., & Sudiartha, G. M. (2018). Pengaruh Tingkat Suku Bunga, Inflasi Dan Nilai Tukar Terhadap Return Saham Di Bursa Efek Indonesia. E-Jurnal Manajemen Universitas Udayana, 7(6), 255328. https://doi.org/10.24843/EJMUNUD.2018.v07.i06.p12

Sutriani, A. (2014). Pengaruh Profitabilitas, Leverage, Dan Likuiditas Terhadap Return Saham Dengan Nilai Tukar Sebagai Variabel Moderasi Pada Saham LQ-45. Journal of Business and Banking, 4(1), 67–80. https://doi.org/10.14414/jbb.v4i1.294

JIMUPB Jurnal Ilmiah Manajemen
E-issn:2549-9491 P-issn:2337-3350

Wardani, D. K., & Andarini, D. F. T. (2016). Pengaruh Kondisi Fndamental, Inflasi, dan Suku Bunga Sertifikat Bank Indonesia terhadap Harga Saham (Study Kasus pada Perusahaan Real Estate dan Property yang terdaftar di Bursa Efek Indonesia tahun 2010-2013). Jurnal Akuntansi, 4(2), 77–90. https://doi.org/10.24964/ja.v4i2.233

Yulianto, & Widyasasi. (2020). Analisis Faktor-Faktor Yang Mempengaruhi Nilai Perusahaan. Jurnal Akuntansi, 9(2), 218–232. https://doi.org/10.37932/ja.v9i2.154