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THE EFFECT OF INTEREST RATES AND INFLATION RATES ON THE RETURN OF BANKING SECTOR STOCKS ON THE INDONESIA STOCK EXCHANGE FOR THE 2016-2020 PERIOD

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ABSTRACT

The purpose of this study was to analyze the effect of interest rates and inflation rates on stock returns in banking companies listed on the Indonesia Stock Exchange for the 2016-2020 period. The object of this research is 30 banking companies listed on the Indonesia Stock Exchange. Data collection is obtained directly from companies listed on www.idx.co.id, and analyzed quantitatively. Data analysis to see the effect of the dependent variable with the independent variable using multiple linear regression equation analysis. The results of hypothesis testing show that interest rates and inflation rates together have an effect on stock returns in the banking sector listed on the Indonesia Stock Exchange for the 2016-2020 period. The interest rate has an effect on stock returns of 0.750. The inflation rate has an effect on stock returns of 0.437. The degree of relationship (R) is 0.706. The magnitude of the influence of interest rates and inflation rates (R²) is 0.499. This means that interest rates and inflation rates affect stock returns by 49.90%.

KEYWORDS: interest rate, inflation rate, stock return.

1. INTRODUCTION

Investors' interest in investing in shares is influenced by the quality of the share value itself in the capital market. The ups and downs and highs and lows of share values will be reflected in the company's performance which is manifested in the financial performance of a company. As a tool for obtaining information and as a consideration, investors need data to make investment decisions, one of which is using company financial report data. Apart from that, valid information about the company's financial performance and management and other relevant information can be used to assess shares accurately (Djazuli, 2016:51)

Every investor expects "stock returns from funds invested through stocks, where the results are in the form of yield and capital gains (losses)". Return is "the level of profit enjoyed by investors on their investment". Capital gain is calculated the difference in the current investment price higher than the previous period, if on the contrary there is a capital loss.

The growth of investment in a country will be affected by the economic growth of that country. The better the level of a country's economy, the better the level of prosperity of its population. This higher level of prosperity is generally characterized by an increase in people's income levels. As income increases, the more people have excess funds, the excess funds can be used to be stored in the form of savings or invested in securities traded in the capital market.

The phenomenon that occurs today in the Indonesian banking industry in recent years is often incompatible with expectations with what has been achieved, in this case when the company's net profit increases, the share price falls, and vice versa, when profits fall the share price rises. This is as shown in Table 1.

Table 1. Share Price and Stock Return

No	Code	Year	Net Profit	Share Price	Return (%)
1.	AGRO	2016	841,290,753,000	370	5,96
		2017	930,240,497,000	215	-41,89
		2018	983,875,368,000	335	55,67
		2019	1,118,073,171,000	334	0,30
2.	BABP	2016	69,675,152,324	143	-39,26
		2017	48,711,921,383	470	229,01
		2018	165,397,041,451	625	33,22
		2019	(174,809,293,323)	600	-4,46
3.	BACA	2016	319,151,767,553	600	22,12
		2017	442,124,140,880	620	3,12
		2018	398,603,030,590	845	36,06
		2019	364,491,172,242	410	-51,35
4.	BBCA	2016	273,913,555,964	2250	159,05
		2017	412,809,066,465	1310	-41,77
		2018	583,796,318,489	2960	126,44
		2019	659,488,778,509	2240	-24,23

Table 1 shows some stock prices that experienced a decline when net income actually increased. For example, we can see at Bank BRI Agroniaga (AGRO), the bank recorded an increase in the

company's net profit in 2016. In 2015 AGRO's net profit was recorded at Rp.841,290,753,000 and increased in 2016 to Rp.930,240,497,000. But on the other hand, in 2016 the company's stock return decreased dramatically by 41.89%. The same thing happened again in 2018, AGRO's net profit increased from 2017 of Rp.983,875,368,000 to Rp.1,118,073,171,000. But on the other hand, in 2018, the company's stock return dropped dramatically to reach 0.

In addition, we can also see inconsistent stock prices in the data in Table 1.1, sometimes down, sometimes up, sometimes even very drastic. In addition, a phenomenon related to investment in the banking sector is that stocks in this sector still provide profits for day trading. However, that does not mean the stock can provide benefits if invested for the medium or long term.

Stock price can be interpreted as a unit of value on the books of a financial instrument that refers to the ownership of a company. The shares are bought or owned by the investor community who are categorized as investors and speculators. While stock return can be interpreted as the level of profit obtained by investors or investors on the investment made. Return can be in the form of realized returns that have occurred or expected returns that have not occurred.

In general, stock returns themselves are often influenced by interest rates and inflation rates. The rate is the amount of interest paid per unit of time referred to as a percentage of the amount lent. While the interest rate is the price that must be paid to obtain the capital. As for companies or individuals who invest funds (investors) the interest rate is compensation for the capital invested (Kasmir, 2015: 56). While the inflation rate is defined as a process of increasing prices that prevail in an economy. The inflation rate differs from one period to another and differs from one country to another (Sukirno, 2016: 14). Sometimes the inflation rate is low, reaching two or three percent. The moderate inflation rate reached between four and ten percent. Very serious inflation can reach a level of several tens of percent in a year. In general, stock returns themselves are often influenced by interest rates and inflation rates. The rate is the amount of interest paid per unit of time referred to as a percentage of the amount lent. While the interest rate is the price that must be paid to obtain the capital. As for companies or individuals who invest funds (investors) the interest rate is compensation for the capital invested (Kasmir, 2015: 56). While the inflation rate is defined as a process of increasing prices that prevail in an economy. The inflation rate differs from one period to another and differs from one country to another (Sukirno, 2016: 14). Sometimes the inflation rate is low, reaching two or three percent. The moderate inflation rate reached between four and ten percent. Very serious inflation can reach a level of several tens of percent in a year.

Furthermore, Halim (2013: 22) suggests that the general purpose of all investments in various fields and types of companies, especially in banking companies, is basically to conduct stock price analysis to choose stocks that can produce the best return with the smallest risk for the investment they have made. Some of the risks that investors may face are the possibility of errors in selecting shares, interpreting the condition of issuers, capital market crisis conditions and so on.

According to Triandaru (2012: 77), the development of internal and external factors causes banking conditions in Indonesia to be grouped into 4 periods, first.

banking conditions in Indonesia before a series of deregulation packages in the real and monetary sectors that began in the 1980s. Then the second is the condition of banking in Indonesia after the emergence of deregulation until the period before the economic crisis in the late 1990s. Furthermore, the third is the condition of banking in Indonesia during the economic crisis since the late 1990s. While the last is the condition of banking in Indonesia at this time.

Investments made by investors in the banking sector at banks listed on the IDX, not only by paying attention to the capital structure but also paying attention to factors from outside the company in their investment activities. Factors from outside the company itself include inflation rates, and interest rates. Investment activities can also be reviewed from factors that exist within the company, which can be viewed from the state of the company's own capital structure, where the source of a company's capital can come from its own funds and funds from outside the company. Funds from outside the company can take the form of loans, to see.

One example of the influence of interest rates and inflation rates on stock returns at banks listed on the IDX is Bank Mandiri. Bank Mandiri (Persero) Tbk (BMRI) is one of the banks listed on the Indonesia Stock Exchange until now. In accordance with the data in the published financial statements, this Bank is one of the banks that has the largest assets among all other banks listed on the Indonesia Stock Exchange to date.

Furthermore, the ratio of inflation rate and interest rate at Bank Mandiri (Persero) Tbk, can be seen in the following table.

Table 2 Interest Rate for the period 2016-2020

Indicator	Year				
	2016	2017	2018	2019	2020
Interest Rate	6,500	6,583	5,771	6,481	7,358
Inflation Rate	5,13	5,38	4,28	6,97	6,42

Source: www.bi.go.id

Table 2 shows that external factors such as interest rates and inflation rates fluctuate from year to year, where interest rates are in accordance with the BI rate and inflation rates are determined according to the Consumer Price Index (CPI). Interest rates and inflation rates apply equally to all banks listed on the Indonesia Stock Exchange.

Thus, Bank Mandiri as a bank that has the largest assets in Indonesia fluctuates from year to year, interest rates and inflation rates affect stock returns, what about other banks listed on the Indonesia Stock Exchange. Of course, other banks smaller than Bank Mandiri also experience fluctuations from year to year. This is interesting to study further, so researchers are interested in conducting research on the effect of inflation rates and interest rates.

In addition, this interest is also based on data from Bank Indonesia, where since 2016 the inflation rate in Indonesia has fallen from around 4% in 2016, continuing to decline to reach 1% in 2019. Likewise, the interest rate is seen in 2016 the interest rate grew by around 4% then rose to 7% in early 2018, then fell again to reach 3% in 2020. So, the tram inflation rate and interest rates continue to decline, whether it has a direct influence on stock returns, considering that stock returns are profits obtained by investors from the investments they invest in a company, especially in this case banking companies.

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Thus, based on some of the above phenomena, researchers are interested in conducting a study entitled "The Effect of Interest Rates and Inflation Rates on Banking Sector Stock Returns on the Indonesia Stock Exchange for the 2016-2020 Period".

2. RESEARCH METHODS

This research is library research, which uses secondary data sourced from the official website of the Indonesia Stock Exchange (IDX) or commonly referred to as the Indonesia Stock Exchange, with the official website address <http://www.idx.co.id/>. While the object in this study is the annual financial statements for the period 2016-2020 in the form of stock price data, stock returns, interest rates, and inflation rates of the companies sampled in this study.

The population in this study is all banking companies listed on the Indonesia Stock Exchange. The sample was obtained from companies that met the criteria totaling 30 banking companies listed on the Indonesia Stock Exchange.

This research data is pooled data that is quantitative. The type of data used in writing this thesis is secondary data. Research data is obtained from the publication of financial statements of banking companies on the IDX. The data was collected in time series during the period 2016-2020, so that the number of observation subjects was 150 observations, which were directly obtained from the official website of the Indonesia Stock Exchange www.idx.co.id.

To determine the extent of the influence of interest rates and inflation rates on stock returns of banking sector companies listed on the Indonesia Stock Exchange, quantitative analysis is analyzed using multiple regression equation analysis based on Sugiyono's opinion (2012: 192) with the following formula:

$$Y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \varepsilon$$

- Y = Stock returns
- α = Constant
- x_1 = Variable interest rate
- x_2 = Variable inflation rate
- $\beta_1 \beta_2$ = Coefficient of independent variables
- ε = Epsilon

3. RESEARCH RESULTS AND DISCUSSION

The description of research variables can be seen in Table 3 below.

Table 3 Description of Research Variables Ratio of Sample Companies

No	Variable	N	Minimum	Maximum	Mean	Std. Deviation
1.	Interest Rate (X1)	150	5,00	7,75	6,7500	1,07597
2.	Inflation Rate (X2)	150	2,72	8,38	5,1880	2,61469
3.	Stock Return (Y)	150	-18,75	44,00	,9927	7,47494

Source: Data processed, 2022

Based on the table above, it can be seen the lowest, highest, average, and standard deviation values of the variables studied with the target population number of 30, and research observations of 150 observations. In the independent variable interest rate (X1), it can be seen that the lowest value of the variable interest rate is 5.00% which occurred at the close of 2020. In the next independent variable, namely the inflation rate variable (X2), it can be seen that the lowest value of the inflation rate variable was 2.72% which occurred at the close of the end of 2020, while the highest inflation rate was 8.38% at the end of 2016.

That is the result obtained from investment by calculating the difference in stock prices for the closing period of the current year with the closing period of the previous year. The lowest share return was -18.75 owned by Bank Danamon Indonesia Tbk (BDMN) in 2016. While the highest is 44.00 owned by Bank Rakyat Indonesia Tbk (BBRI) in 2017

4. Linear Regression Results

The results of linear regression of the influence of the independent variable on the dependent variable can be seen in the following table.

Table 4 Regression Results of the Influence of the Independent Variable on the Dependent Variable Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1. (Constant)	3,792	1,488		2,548	0,004
Interest Rate	0,750	0,082	0,108	9,146	0,000
Inflation Rate	0,437	0,137	0,153	3,190	0,000

a. Dependent Variable: Stock Return

Based on the results of computer output through the SPSS program, the multiple regression equation is obtained as follows:

$$Y = 3,792 + 0,750 X1 + 0,437 X2$$

From the equation above, the results of the study can be explained as follows:

- The coefficient of constant or constant obtained from the independent variable and the dependent variable is 3.792. This means that if the interest rate and inflation rate are considered constant, then the stock return is 3,792 or 379.2%.
- The coefficient of constant or constant obtained from the independent variable and the dependent variable is 3.792. This means that if the interest rate and inflation rate are considered constant, then the stock return is 3,792 or 379.2%.
- The magnitude of the variable coefficient of inflation rate of 0.437 means that every 1% increase in changes in variable stock returns will be relatively affected by an inflation rate of 43.7%.

Table 5 Regression results the simultaneous influence of the independent variable on the dependent variable

Model	Sum of Squares	df	Mean Squares	Fhitung	Ftabel	Sig
Regression	93,786	2	46,893	8,391	3,060	,000 ^b
Residuals	821,544	147	5,589			
Total	915,33	149				

Source: Data processed, 2022

The test was conducted with Anova comparing the value of Fcalculate with Ftable Table 5 showing Fcalculate of 8.391 while Ftable at the significance level of $\alpha = 5\%$ was 3.060. From these calculations,

it shows that $F_{\text{calculate}} > F_{\text{table}}$ ($8.391 > 3.060$). The magnitude of the value of $F_{\text{calculate}}$ than F_{table} , this is due to the large influence of interest rates and inflation rates on stock returns, so it can be concluded that the variables of interest rates and inflation rates, simultaneously significantly affect stock returns.

Next, testing the hypothesis partially, in this case the independent variable interest rate has a variable constant coefficient value $\beta_1 = 0.750$ which means that $\beta_2 \neq 0$. Thus, it can be concluded that interest rates affect stock returns in banking companies listed on the Indonesia Stock Exchange for the 2016-2020 period.

The next hypothesis test is on the independent variable of the inflation rate, which obtained the value of the constant coefficient of the inflation rate variable of $\beta_3 = 0.437$ which means that $\beta_3 \neq 0$. Thus, it can be concluded that the inflation rate affects stock returns in banking companies listed on the Indonesia Stock Exchange for the 2016-2020 period.

5. DISCUSSION

Based on the results of previous studies, it is known that the value of the constant coefficient or constant obtained from the independent variable and the dependent variable is 3.795. This means that if the interest rate and inflation rate are considered constant, then the stock return is 3,795 or 379.5%. This means that simultaneously, there is an influence of interest rates and inflation rates on stock returns in banking companies listed on the Indonesia Stock Exchange for the 2016-2020 period.

The variable interest rate has a coefficient value of 3.812 which means that partially the interest rate affects stock returns. Furthermore, the magnitude of the variable coefficient of the inflation rate is 4.696 which means that the inflation rate partially affects stock returns. Based on the hypothesis proposed, if it can be concluded to reject H_0 and accept H_a , which means that the level of interest rates and inflation rates partially affect stock returns in banking companies listed on the Indonesia Stock Exchange for the 2016-2020 period.

Interest rates and forecasts of their future value are important inputs in investment decisions. Increasing interest rates will reduce the present value of dividend income in the future, so this condition will reduce stock prices in the capital market. Investors prefer to invest their money in other forms of investment, for example by keeping their money in a bank rather than investing it in stocks. Interest rates that are too high will affect the present value of the company's cash flow, so that existing investment opportunities will no longer be attractive. A high interest rate will also increase the cost of capital that the company will bear and will also cause the investor's hinted return from an investment to increase.

In unstable economic conditions, inflation can occur at any time. As an investor, you must be able to anticipate these conditions when investing. Inflation is a state of constant increase in prices in general, or a condition of constantly falling in the value of money because the increase in the money supply is not offset by an increase in the supply of goods. The inflation rate can have a positive or negative influence depending on the degree of inflation itself. Excessive inflation can cause harm to the economy as a whole, which can make many companies go bankrupt. High inflation will bring down stock prices in the market, while very low inflation rates will cause economic growth to be very slow, and in the end stock prices will also move slowly.

The results obtained from this study based on the aspect of correlation coefficient (R) are 0.706. The correlation coefficient is a value that indicates the strength / absence of the linear relationship between two variables. The usual correlation coefficient is denoted by the letter r where the value of r can vary from -1 to +1. An r value close to -1 or +1 indicates a strong relationship between the two variables and an r value close to 0 indicates a weak relationship between the two variables. While the + (positive) and - (negative) signs provide information about the direction of the relationship between the two variables. If it is + (positive) then the two variables have a unidirectional relationship. In another sense, an increase in X will coincide with an increase in Y , and vice versa. If the value is - (negative), it means that the correlation between the two variables is opposite. An increase in the value of X will be accompanied by a decrease in Y .

In this study the value of R (0.706) or close to 1, and is positive so that it can be said that the relationship between variables is quite strong and goes in the same direction or not opposite. Meanwhile, if you look at the magnitude of the coefficient of determination (R^2) is 0.499. This means that the interest rate (X_1), and inflation rate (X_2) affect stock returns by 49.90%, while the rest by 51.10%, are influenced by other variable factors outside of those that are variables in this study, such as company value factors, capital structure, assets, and others.

Wiradharma (2014) in his research also found that interest rates and inflation rates together have a positive and significant effect on stock returns. One of the investment options can be done through the capital market. However, something different was obtained by Akbar (2014), that inflation had a negative and significant effect on Stock Return in banking sector companies listed on the IDX for the 2008-2010 period. Tandelilin (2011: 26) explained that the capital market is a meeting place for parties who have excess funds with parties who need funds to trade securities that generally have a lifespan of more than one year, such as stocks. Investor expectations in investing in shares in addition to being the owner of a company with a certain proportional ownership, the invested shares are expected to be able to provide a certain rate of return or return.

6. CONCLUDING

6.1 Conclusion

Based on the discussion of research results that have been stated previously, it can be concluded that:

1. The interest rate and inflation rate together affect the return of shares in the banking sector listed on the Indonesia Stock Exchange for the period 2016-2020.
2. The interest rate affects the return of shares in the banking sector listed on the Indonesia Stock Exchange for the period 2016-2020 ($\beta_1 = 0.750$).
3. The inflation rate affects the return on shares in the banking sector listed on the Indonesia Stock Exchange for the period 2016-2020 ($\beta_2 = 0.437$).
4. The value of R (0.706) is close to 1, and positive value so that it can be said that the relationship between variables is quite strong and goes in the same direction or not opposite.
5. The magnitude of the coefficient of determination (R^2) is 0.499. This means that interest rates and inflation rates affect stock returns by 49.90%.
6. Along with the development of the business world in Indonesia, the capital market is one of the sectors that can provide considerable profits with stocks as an investment object. Investment in stocks is a type of investment that is quite attractive to investors because in stocks there are two benefits expected by an investor. One of the attractive sectors for investors to invest in is in the banking sector. This is because the banking sector has a high financial investment risk where the higher the risk of an investment, the higher the stock return hinted by investors. The advantage of stock investment is the presence of dividends and capital gains. Dividend is the distribution of company profits to shareholders, while capital gain is a positive difference between the selling price and the purchase price of a share. Namun dengan melihat hasil koefisien determinasi yang tidak mencapai di atas 50% mengharuskan pihak perbankan meningkatkan kinerja dengan cara berpengaruh pada upaya dalam menjaga kesehatan perbankan. Agar para investor memiliki keputusan yang mantap sebelum berinvestasi.

6.2 Recommendations

To examine further research references, there are several suggestions that can be put forward, including:

1. This research is only carried out in banking sector companies, for further research is expected to expand the subject of research, not only in banking companies because it allows the discovery of different results and conclusions if carried out on different subjects or in different companies.
2. It is expected in future research to add several other new factors that are thought to affect stock returns, such as liquidity, company value, capital structure and capital intensity.
3. In order to use the time span of financial statement data of more than three years, so that the results can describe maximum conditions.

4. For creditors and investors, before deciding to provide loans or invest in companies that are the subject of this study, to first consider the variables that affect the company's stock return.

REFERENCES

- [1] Akbar, (2014). Pengaruh Inflasi, Suku Bunga dan Nilai Tukar Rupiah, Terhadap Return Saham di Bursa Efek Indonesia. E-Jurnal Manajemen Unud, Vol. 7, No. 6, ISSN: 3172-3200
- [2] Ali, Masyhud. 2012. Manajemen Risiko, Strategi Perbankan dan Dunia Usaha Menghadapi Tantangan Globalisasi Bisnis. Jakarta: PT. Raja Grafindo Persada.
- [3] Arikunto, 2010. Prosedur Penelitian. Jakarta : Rineka Cipta.
- [4] Bakti, T Diana, dkk. 2010. Teori Ekonomi Makro. Medan: USU Press.
- [5] Darmadji & Fakhruddin, 2012. Pasar Modal di Indonesia (pendekatan tanya jawab). Edisi Ketiga. Jakarta: Salemba Empat.
- [6] Erni, (2012). Pengaruh Inflasi Dan Tingkat Suku Bunga Terhadap Return Saham PT Indofood Sukses Makmur Tbk. Jurnal Wahana Bisnis, Vol. 4, No. 2
- [7] Ginting, (2016). Pengaruh Tingkat Suku Bunga, Nilai Tukar dan inflasi Terhadap Harga Saham (Studi Pada Sub-Sektor Perbankan Di Bursa Efek Indonesia Periode 2011-2015). Jurnal Administrasi Bisnis (JAB) Vol. 35 No. 2 Juni 2016
- [8] Halim. 2012. Manajemen Keuangan. Edisi Kedua. Jakarta : PT. Gelora Aksara Pratama
- [9] Indriantoro & Supomo, 2011. Metodologi Penelitian Bisnis Untuk Akuntansi & Manajemen. Yogyakarta: BPFE
- [10] Jogyianto, Hartono, 2012. Teori Portofolio dan Analisis Sekuritas. Edisi 6. Yogyakarta: BPFE
- [11] Kasmir, 2010. Pengantar Manajemen Keuangan. Jakarta : Kencana Prenada Media Group
- [12] Kasmir, 2011. Analisis Laporan Keuangan. Jakarta: Rajagrafindo Persada
- [13] Loen, Boy dan Sonny Ericson. 2012. Manajemen Aktiva Pasiva Bank Devisa. Jakarta: Grasindo
- [14] Putong, Iskandar dan Andjaswati. 2011. Pengantar Ekonomi Makro. Jakarta: Mitra Wacana Media
- [15] Samuelson dan Nordhaus. 2014. Ilmu Makroekonomi. Edisi VII. Jakarta: PT Media Global Edukasi
- [16] Sugiyono. 2012. Metode Penelitian Kuantitatif Kualitatif dan R&D. Bandung: Alfabeta
- [17] Sukirno Sadono. 2011. Mikro Ekonomi Teori Pengantar. Jakarta : PT. Raja Grafindo Persada
- [18] Sumarni, 2012. Metodologi Penelitian Bisnis. Yogyakarta: Andi
- [19] Sunariyah. 2012. Pengantar Pengetahuan Pasar Modal. Edisi ke 3. Yogyakarta: UPP-AMP YKPN
- [20] Tandelilin, Eduardus. 2011. Analisis Investasi dan Manajemen Portofolio. Yogyakarta: BPFE
- [21] Usmar, Husein. 2011. Strategic Management in Action. Jakarta: PT Gramedia Pustaka Umum
- [22] Weston & Copeland, 2010. Manajemen Keuangan. Edisi 8, Jakarta: Bina Rupa Aksara
- [23] Weston & Brigham. 2013. Manajemen Keuangan. Jakarta: Penerbit Erlangga

- [24] Wiradharma, (2014). Pengaruh Tingkat Suku Bunga, Tingkat Inflasi, Nilai Kurs Rupiah Dan Produk Domestik Bruto Terhadap Return Saham. Jurnal Manajemen Keuangan, Vol. 5, No. 6, ISSN: 2302-8912
- [25] Zubir, Zalmi, 2011. Manajemen Portofolio: Penerapannya dalam Investasi Saham, Jakarta: Salemba Empat