

The Effect of Interest Rates, Growth of Gross Domestic Product and Profitability on Stock Returns of Property Companies Listed in Indonesia stock exchange

Mahendra Jayawarsa and Sylvia Ketut

Faculty of Economics and Business, Warmadewa University Denpasar, Bali-Indonesia

Abstract: This study takes the title Effect of Interest Rates, Growth of Gross Domestic Product and Profitability on Stock Returns of Property Companies Listed on the Indonesia Stock Exchange. The formulation of the problem in this study is how the influence of Interest Rates, Gross Domestic Product Growth and Profitability on stock returns of property sector companies either simultaneously or partially. The purpose of this study is to empirically prove the effect of interest rates, growth of gross domestic product and profitability on stock returns of property sector companies simultaneously or partially. The population of this study is all property sector companies listed on the Indonesia Stock Exchange for the 2011-2019 observation period as many as 79 companies. The method of determining the sample using purposive sampling technique is to obtain 35 companies as a sample with data on economic growth, monetary policy, and financial statements for 9 years, the data obtained is 315 data which will be processed using SPSS 17.0 For Windows. The data analysis technique used is the classical assumption test, multiple regression analysis, F-test, t-test, and analysis of determination. From the results of the analysis, it was found that the interest rate had an insignificant negative effect on stock returns. Gross Domestic Product growth has a significant positive effect on stock returns. Profitability has a significant positive effect on stock returns monetary policy. Profitability has a significant positive effect on stock returns and determination analysis. From the results of the analysis, it was found that the interest rate had no significant negative effect on stock returns. Gross Domestic Product growth has a significant positive effect on stock returns. Profitability has a significant positive effect on stock returns.

Keywords: interest rates, stock returns, profitability, gross domestic product, property companies

PRELIMINARY

Economic growth, monetary policy and financial reports are a breath of fresh air for investors because these factors can project returns as expected. Stock returns have always been a source of controversy in the capital market because it is an interesting phenomenon for investors and financial analysis. In order to get the desired stock return, investors must be more selective in choosing a company and pay attention to the supporting factors before investing their capital. Based on data sourced from www.bi.go.id the data is processed by the author in 2021 the average interest rate of Bank Indonesia from 2011-2019 fluctuated, where the lowest interest rate occurred in 2017 at 4.56% and the highest interest rate occurred in 2014 at 7.54% According to Adnyana (2017), it shows that interest rates are one of the attractions for investors to invest in the form of deposits or SBIs so that investments in shares will be rivaled by an increase in interest rates which will cut company profits.

Based on data sourced from www.bps.go.id the data is processed by the author in 2021 the average growth of Indonesia's Gross Domestic Product from 2011-2019 has increased from year to year, but for growth there is fluctuation and tends to decrease every year, where the lowest Gross Domestic Product Growth rate occurred in 2019 which was 6,72% and the highest Gross Domestic Product Growth occurred in 2014 at 16.06%. According to Wiranata (2021) with an increase in Gross Domestic Product (GDP) it can reflect an increase in the scale of the company's sales turnover, an increase in the scale of sales turnover will lead to an increase in company profits which will have an impact on rising stock prices so as to increase stock returns. Based on data sourced from www.idx.go.id the data is processed by the author in 2021 the average Return on Equity (ROE) of property sector companies from 2011-2019 fluctuated, where the lowest average Return on Equity (ROE) occurred in 2019 which was 2.59% and

the average The highest Return on Equity (ROE) occurred in 2013 at 12.06%. According to Devi (2019) that a good financial report is a signal or a sign that the company has also been operating well.

Investors in making every investment decision try to minimize the various risks that arise. Investors must decide what actions to take and what strategies to implement from changes in micro and macro conditions in order to keep getting the desired return (Wiranata, 2021). The way that investors can use to avoid the risk of loss (capital loss) that may be experienced is to analyze both technically and fundamentally. Technical analysis is stock analysis by looking at the behavior of investors in the capital market. While fundamental analysis is an analysis conducted by looking at valid data published by the company in the form of financial statements.

This study uses a fundamental analysis of the external and internal aspects of the company. External aspects can be analyzed through monetary theory using the reference interest rate (BI Rate) and through economic growth theory using Gross Domestic Product (GDP) growth, while internal aspects can be analyzed using company profitability. Based on the above background and the inconsistency of the results of previous research, the authors are interested in examining and studying more deeply about the effect of interest rates, gross domestic product (GDP), and profitability on stock returns by taking the research title "The Effect of Interest Rates, Growth Gross Domestic Product (GDP) and Profitability on Stock Returns of Property Companies Listed on the Indonesia Stock Exchange".

LITERATURE REVIEW

(DSta) Bank Indonesia (2016) The BI rate as the reference interest rate is the policy interest rate that reflects the monetary policy stance or stance set by Bank Indonesia and announced to the public. McEachern (2015:146) in Wiranata (2021) defines Gross Domestic Product (GDP) as a measure of the market value of final goods and services produced by resources residing in a country for a certain period of time, usually one year. Profitability is a ratio used to measure a company's ability to generate profits. One type of profitability ratio that can be used by investors in analyzing the company's financial statements is Return on Equity (ROE). Return on Equity (ROE) is a profitability ratio to assess the company's ability to generate profits from the investment of the company's shareholders expressed as a percentage (Kasmir, 2018). Stock return is the level of profit enjoyed by investors on an investment they make. In capital market theory, the rate of return received by an investor from shares traded in the capital market (shares of publicly traded companies) is usually termed Return (Alam, 2016).

Previous research relevant to this study is as follows: Adnyana et al (2017) with the title 'The Effect of Gross Domestic Product, Rupiah/US Dollar Exchange Rate, Inflation, and Interest Rates (BI) on Stock Returns of Registered Property and Real Estate Sub-Sector Services Companies on the Indonesia Stock Exchange in 20122017. Afiyati and Topowijono (2018) with the title 'The Effect of Inflation, BI Rate, and Exchange Rate on Stock Returns in the Study of Food & Beverages Sub-Sector Companies listed on the IDX. Suriyani et al (2018) with the title 'The effect of interest rates, inflation and exchange rates on stock returns on the Indonesian stock exchange. Maulita (2019) with the title 'The Effect of Rupiah Exchange Rate, Inflation, Interest Rates, And Gross Domestic Product on Stock Returns in Coal Mining Subsector Companies Listed on the Indonesia Stock Exchange. Wiranata (2021) with the title 'The Effect of Gross Domestic Product, Gold Prices, and Interest Rates on Stock Returns in the Banking Sector on the Indonesia Stock Exchange. Devi and Artini (2019) with the title 'The Effect of ROE, DER, PER, and Exchange Rate on Stock Returns.

METHOD

This study uses quantitative research methods. This research was conducted on the Indonesia Stock Exchange (IDX) by accessing www.idx.co.id to obtain the necessary information about property sector companies as well as to obtain the company's annual financial reports, besides that there are also other secondary sources of required data that can be obtained. from the Central Statistics Agency (BPS), Magic Securities, BI Rate / BI interest rate and Osiris. Data analysis techniques used by researchers to solve problems in problem formulation and test hypotheses using statistical analysis are Multiple Linear Regression Analysis, Classical Assumption Test, simultaneous test (F test) and partial test (t test)

RESULTS AND DISCUSSION

Based on the values from the analysis of research data, the multiple linear regression equation becomes: $Y = -0.223 + -1.136 X_1 + 2.537 X_2 + 0.827 X_3 + e$

From the equation above, it can be interpreted as follows: The constant value is -0.223%, which means that if the variables of Interest Rate, Gross Domestic Product Growth (GDP), and Profitability (ROE) are 0 then the stock return variable is -0.223%. The regression coefficient value for the Interest Rate of -1.136% is negative, then this indicates that every one percent increase in the Interest Rate will reduce stock returns by -1.136%. The regression coefficient value for Gross Domestic Product of 2.537% is positive, this indicates that every one percent increase in Gross Domestic Product will increase stock returns by 2.537%. The regression coefficient value for profitability (ROE) of 0.827% is positive,

Table 1. Multiple Linear Regression Analysis Test Results

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.223	.118		-1.887	.060
	BI Rate	-1.136	2.194	-.034	-.518	.605
	PDB	2.537	.720	.235	3.522	.001
	ROE	.827	.230	.212	3.596	.000

a. Dependent Variable: Return Saham

Based on the determinant test of the adjusted R square value of 0.105, it means that the variation in the stock return value of 10.5% is influenced by interest rates, growth of gross domestic product (GDP), and profitability (ROE) while the remaining 89.5% is influenced by variables outside the model. So this model is quite weak in explaining the relationship between the variables in the model on stock returns.

Table 2. Results of Determination Analysis (R²)

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.340 ^a	.115	.105	.3028079	1.863

a. Predictors: (Constant), ROE, BI Rate, PDB

b. Dependent Variable: Return Saham

The F test in this study was used to test whether or not there was a significant effect of the variable Interest Rate (X₁), Gross Domestic Product Growth (X₂), and Profitability (ROE) simultaneously on the dependent variable Stock Return (Y), then the F test was carried out and obtained F_{count} = 11.770 compared to the value of F_{table} = 2.60. Where F_{count} is greater than F_{table}. This means that at the level of = 5% all independent variables (X) simultaneously have a significant effect on the Stock Return variable (Y)

Table 3. F Test Results

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.238	3	1.079	11.770	.000 ^a
	Residual	24.849	271	.092		
	Total	28.086	274			

a. Predictors: (Constant), ROE, BI Rate, PDB

b. Dependent Variable: Return Saham

The t-test in this study was conducted to determine the level of significance between the regression coefficients, so that it can be known partially or individually the effect of the Interest Rate variable (X1) on stock returns (Y), the influence of the Gross Domestic Product Growth variable (X2) on stock returns (Y), and the variable influence of profitability (ROE) on stock returns (Y).

Table 8.t test results

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.223	.118		-1.887	.060
	BI Rate	-1.136	2.194	-.034	-.518	.605
	PDB	2.537	.720	.235	3.522	.001
	ROE	.827	.230	.212	3.596	.000

a. Dependent Variable: Return Saham

From the results of the t test, it was found that the value of tcount (X1) = -0.518 with a value of ttable = -1.660 then the value of tcount (X1) is greater than the value of ttable (Left side test). This means that the partial effect of the Interest Rate (X1) on the company's stock return in the property sector is not a significant negative effect. so the second hypothesis (H2) is not supported. From the results of the t-test, it was found that the value of tcount (X2) = 3,522 with a value of ttable = 1,660 then the value of tcount (X2) is greater than the value of ttable (Right side test). This means that the partial effect of Gross Domestic Product Growth (X2) on the company's stock return in the property sector is positive and significant. so that the third hypothesis (H3) is supported. From the results of the t test, it was found that the value of tcount (X2) = 3, 596 with a value of ttable = 1.660 then the value of tcount (X3) is greater than the value of ttable (Right side test). This means that the partial effect of Profitability Influence Growth (X3) on the company's stock return in the property sector is positive and significant. so that the fourth hypothesis (H4) is supported.

The results of testing the hypothesis of the effect of interest rates on stock returns in property sector companies listed on the Indonesia Stock Exchange from 2011 to 2019 concluded that interest rates do not have a significant negative effect on stock returns of property sector companies listed on the Indonesia Stock Exchange. The results of this study are in line with the results of research by Ni KadekSuriyani et al (2018) which states that interest rates have no significant effect on stock returns but contradict the research results of PutuWidya Putra Adnyana et al (2017) which states that interest rates have a significant negative effect on stock returns. In the author's opinion, high interest rates cause the price of raw materials to be expensive, the company will choose alternative financing that is cheaper and more efficient with a high selling price so that it will not affect the company's profitability on stock returns that will be received by investors. High interest rates do not affect investors in determining investment in property sector companies because investment decisions involve factors other than interest rates such as economic growth, fiscal and monetary policies to the psychology of investors themselves so that the existing theory is not always proven.

The results of hypothesis testing the effect of Gross Domestic Product (GDP) growth on stock returns in property sector companies listed on the Indonesia Stock Exchange from 2011 to 2019 concluded that Gross Domestic Product (GDP) growth has a positive and significant effect on stock returns in property sector companies that listed on the Indonesia Stock Exchange. The results of this study are in line with the results of research by Wiranata (2021)

which states that Gross Domestic Product (GDP) has a significant positive effect on stock returns. The results of this study indicate that the growth of gross domestic product (GDP) has a positive effect on stock returns, which means that if the growth of gross domestic product (GDP) increases, the stock return will also increase. In the author's opinion Gross Domestic Product Growth (GDP) is a measure of economic growth in a country, with an increase in Gross Domestic Product (GDP) growth indicating an increase in the total production of goods and services of a country so that it will indirectly lead to an increase in the scale of the company's sales turnover. . Increasing the scale of sales turnover will lead to an increase in company profits which will have an impact on rising stock prices so as to increase stock returns. On the other hand, a decrease in Gross Domestic Product (GDP) growth will cause a decrease in people's purchasing power in real terms. This means a decrease in the ability of the public to invest their funds in the stock market which results in a decrease in transactions in the stock market.

The results of testing the hypothesis of the effect of profitability (ROE) on stock returns in property sector companies listed on the Indonesia Stock Exchange from 2011 to 2019 concluded that profitability (ROE) has a positive and significant effect on stock returns in property sector companies listed on the Indonesia Stock Exchange. The results of this study are in line with the research results of Devi and Artini (2019) which state that there is a significant positive relationship between ROE and stock returns. The results of the study state that profitability (ROE) has a positive and significant effect on stock returns, which means that if profitability (ROE) increases, stock returns will also increase. In the author's opinion, the effect of the Profitability (ROE) variable on stock prices is because ROE is an important ratio for owners and shareholders because this ratio shows the company's ability to manage capital from shareholders to earn net income. The higher the ROE means the better the company's performance in managing its capital to generate profits for shareholders. It can be said that the company can use the capital from shareholders effectively and efficiently to earn a profit. The higher the ROE means the better the company's performance in managing its capital to generate profits for shareholders. It can be said that the company can use the capital from shareholders effectively and efficiently to earn a profit. The higher the ROE means the better the company's performance in managing its capital to generate profits for shareholders. It can be said that the company can use the capital from shareholders effectively and efficiently to earn a profit.

CONCLUSION

Based on the research results that have been described, it can be concluded that simultaneously Interest Rates, Gross Domestic Product (GDP) and Profitability have a significant effect on stock returns in property sector companies listed on the Indonesia Stock Exchange. Partially the interest rate has no significant effect on stock returns. Partially Gross Domestic Product (GDP) growth has a positive and significant effect on stock returns. Partially, profitability (ROE) has a positive and significant effect on stock returns in property sector companies listed on the Indonesia Stock Exchange.

REFERENCES

1. Adnyana, PutuWidya Putra. (2017). The Effect of Gross Domestic Product, Rupiah/US Dollar Exchange Rate, Inflation, and Interest Rates (BI) on Stock Returns of Property and Real Estate Service Companies Listed on the Indonesia Stock Exchange in 2012-2017. (Doctoral dissertation, UIN SunanGunungDjati Bandung).
2. Adusei, M. 2016. The Inflation-Stock Market Return Nexus: Evidence from The Ghana Stock Exchange. *Journal of Economics and International Finance*, Vol. 6 No. 2, pp. 38-46.
3. Afiyati, HT (2018). Effect of Inflation, Bi Rate and Exchange Rate on Stock Return (Study on Food & Beverages Sub-Sector Companies Listed on the Indonesia Stock Exchange 2013-2016 Period) (Doctoral dissertation, UniversitasBrawijaya).
4. Anwaar, Maryyam. 2016. Impact of Firms' Performance On Stock Returns Evidence From Listed Companies Of Ftse-100 Index London, Uk. *Global Journal of Management and Business Research: D Accounting and Auditing*, Vol. 16, No. 1, pp. 31-39.
5. Asih, Ni Wayan Sri, et al. 2016 "Analysis of the Effect of Inflation, Interest Rates, Exchange Rates (Exchange) and Growth of Gross Domestic Product (GDP) on the Composite Stock Price Index (JCI)". Thesis Journal.

6. Atmadja, A. T., & Saputra, K. A. K. (2017). *Kajian Riset Akuntansi (Kuantitatif dan Kualitatif)*.
7. Atmadja, A. T., & Saputra, K. A. K. (2018). The Influence of University Culture on Accounting Student Performance with Creativity as a Moderation Variable. *Journal of Actual Accounting*, 5(1), 22-30.
8. BI. 2021. Bank Indonesia. Accessed 15 November 2021. Jakarta: <http://www.bi.go.id>
9. Bisara, C. 2015. The Effect of Financial Performance on Stock Returns. Thesis. STIESIA College of Economics in Indonesia. Surabaya.
10. Bobbi, Mulyo Haryanto. 2017. Analysis of the Effect of Foreign Inflow, Inflation, Interest Rates and Exchange Rates on Stock Returns Case Study in the Financial Sector Period July 2016 – January 2017. *Diponegoro Journal Of Management*, Vol. 6 No. 2, pp. 1-11.
11. Brigham, EF and JF Houston. 2017. *Fundamentals of Financial Management Ten Edition*. Salemba Four: Jakarta.
12. Butarbutar, N. 2016. Factors Affecting the Level of Disclosure of Financial Statements in Manufacturing Companies listed on the Indonesia Stock Exchange. Thesis University of North Sumatra. North Sumatra.
13. Desy Geriadi, Made Ayu and I Gusti Bagus Wiksuana. 2017. The Effect of Inflation on Stock Returns in Property and Real Estate Companies Listed on the Indonesia Stock Exchange Systematic Risk and Profitability as Mediation Variables. *E-Journal of Economics and Business Udayana University*, Vol. 6, No. 9, pp. 3435-3461.
14. Devi, NNSJP, & Artini, LGS (2019). Effect of ROE, DER, PER and Exchange Rate on Stock Return. *E-Journal of Management*, 8(7), 4183-4212.
15. Dewi, Made Yustiari & I Ketut Sujana. 2014. The Effect of Firm Size and Profitability on Income Smoothing Practices by Industry Type As a Moderating Variable on the IDX. *Udayana University Accounting E-journal*, Vol. 8, No. 2, pp. 170-184.
16. Ghozali, Imam. 2016. *Application of Multivariate Analysis with the Seventh Edition of the SPSS Program*. Semarang: Diponegoro University Publishing Agency.
17. Jogiyanto Hartono. 2018. *Portfolio Theory and Investment Analysis*. Eighth Edition. Yogyakarta: BPFE.
18. KBBI. 2021. Big Indonesian Dictionary of the KBBI. Accessed 15 November 2021. Jakarta: <http://kbbi.web.id/center>
19. Krisna Putra, I Wayan & I Made Dana. 2018. The Effect of Economic Conditions and Financial Performance on Stock Returns of Food And Beverages Companies on the Indonesia Stock Exchange. *Udayana University Accounting E-Journal*, No. 5, No. 3, pp. 3170-3194.
20. Kurniawan Saputra, K. A., Ketut Jayawarsa, A. A., & Priandani, N. I. (2022). Antonio Gramsci Hegemonical Theory Critical Study: Accounting Fraud of Hindu-Bali. *International Journal of Business*, 27(2).
21. Maulita, R. (2019). The Effect of Rupiah Exchange Rate, Inflation, Interest Rates, and Gross Domestic Product on Stock Returns in Coal Mining Subsector Companies Listed on the Indonesia Stock Exchange (Doctoral Dissertation, Sultan Syarif Kasim State Islamic University, Riau).
22. Mirayanti, Ni Made and Dewa Gede Wirama. 2017. The Effect of Macroeconomic Variables on LQ45 Stock Returns on the Indonesia Stock Exchange. *E-Journal of Accounting*, Vol. 21 No. 1, pp. 505-533.
23. Mufidah, Faizatul, et al. 2016 “The Effect of Stock Trading Volume, Inflation Rate, Interest Rate, Exchange Rate, Tax Rate on the Composite Stock Price Index (JCI)”. Thesis Journal.
24. Nurhakim, Anistia, Irni Yunita & Aldilla Radianty. 2016. The Effect of Profitability and Inflation on Stock Return at Pharmaceutical Industries at BEI in The Period of 2011-2014. *Asia Pacific Institute of Advanced Research APIAR*, Vol. 2 No. 2, pp. 202-210
25. Pradipta, Kadek Agus & Ketut Alit Suardana. 2015. The Effect of Economic Conditions, Capital Market Conditions and Financial Performance on Stock Returns. *E-Journal of Accounting*, Udayana University, Vol. 13, No. 2, pp. 476-488.
26. Putri, P. Y. A., & Saputra, K. A. K. (2021). Opportunist And Efficient Perspective Of Management Based On The Motivational Aspects That Based On It. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 18(08), 1629-1643.
27. Saputra, K. A. K., Pradnyanitasari, P. D., & Putri, P. A. “P” Developed Accounting Through Self Purification Towards Sattwam-Based Self-Awareness.

28. Saputra, K. A. K., Kawisana, P. G. W. P., & Larasdiputra, G. D. (2019). *Paradigma Riset Akuntansi*. Penerbit: *Indomedia Pustaka*.
29. Simanjuntak, Pibrianti Dahlia Lastria. 2016. Analysis of the Effect of Profitability, Net Profit Margin, Earning Per Share on Stock Returns in Banking Companies Listed on the IDX. *Journal of Economics and Finance*, Vol. 2, No. 7, pp. 423-434.
30. Sugiyono. 2016. *Educational Research Methods Quantitative, Qualitative and R&D Approaches*. Bandung: Alfabeta.
31. Suriyani, NK, & Sudiarta, GM (2018). The effect of interest rates, inflation and exchange rates on stock returns on the Indonesia Stock Exchange (Doctoral dissertation, Udayana University).
32. Widodoarmodjo, Sawidji, 2015. *Knowledge of Capital Markets for the Indonesian Context*. PT Elex Media Komputindo, Jakarta
33. Wiranata, R., Salim, MA, & Mustapita, AF (2021). The Effect of Gross Domestic Product, Gold Prices, and Interest Rates on Stock Returns in the Banking Sector on the Indonesia Stock Exchange. *Scientific Journal of Management Research*, 9(25).