The Effect of Current Ratio, Debt to Equity Ratio, and Return on Equity on Profit Growth in LQ-45 Index Companies

Fatonah[1], Dedi Hariyanto[1(CA)], Ardiansyah[1]

Corresponding Email: dedi.heriyanto99@gmail.com

[1]Department of Management, Faculty of Economics and Business, University of Muhammadiyah Pontianak, Indonesia

Abstract

This research sought to examine the impact of Financial Ratios utilizing Current Ratio (CR), Debt to Equity Ratio (DER), and Return on Equity (ROE) on Profit Growth across LQ-45 Index Companies. In this work, the Saturated Sample approach was used for sampling. Normality test, autocorrelation test, multicollinearity test, and heteroscedasticity test are used for analysis. Multiple linear regression, correlation coefficient (R test), coefficient of determination (R^2), simultaneous effect test (F), and partial effect test (P) are used as statistical tests (t). The results of the normality test indicate that all sampled data have a normal distribution with asymptotes. Significance (2-tailed): $0.0934 > 0.05$. Simultaneous test results using the F test indicate that the three independent variables, namely CR, DER, and ROE have no significant effect on the dependent variable (profit growth) as evidenced by the calculated F value of 3.328 and sig. 0.026 which is less than 0.05, while the partial test using the t-test indicates that the independent variable, namely CR does not have a significant effect on profit growth, whereas DER does. The results of the R test (correlation) for the three variables are 0.713. The (R test) CR values are -0.172, DER is 0.095, and ROE is -0.333. R Square has a value of 0.159 for the results of the coefficient of determination (R^2) This demonstrates that the simultaneous impact of variables X1, X2, and X3 on variable Y is 15.9 percent profit growth, whereas the remaining 84.1 percent profit growth may be affected by other factors not investigated in this research.

Keywords: Current Ratio (CR), Debt to Equity Ratio (DER), and Return On Equity (ROE), Profit growth

Introduction

The LQ-45 index is a calculation of 45 stocks, which were selected through several selection criteria (Satryo et al., 2017). In addition to the assessment of liquidity, the selection of these stocks considers market capitalization (Pramanaswari & Yasa, 2018). The LQ-45 index contains 45 stocks adjusted every six months (early February and August) (Arif & Sudjono, 2021). Thus the stocks contained in the index will always change.

Methods

In this study, researchers used quantitative methods. This study aims to determine the relationship between two or more variables. This study analyzes the Effect of Current Ratio, Debt to Equity Ratio, and Return On Equity on Profit Growth in LQ-45 Index Companies.

In this study, the population used were all LQ-45 Index companies listed on the Indonesia Stock Exchange (IDX) for the 2018-2020 period.

Results and Discussion

Based on the results of the analysis and discussion that has been carried out, it can be concluded as follows:

The number of samples that match the specified criteria are 45 companies, with the number of data (n = 135). After the researchers tried to test the 135 data using SPSS 18, the data did not pass the classical assumption test, namely the normality test. Then so that the data can pass the normality test, the researcher transforms the data using the Ln formula in SPSS 18 (, after the data is transferred, normality test, multicollinearity test, autocorrelation test and heteroscedasticity test, the data passes the four classical assumption tests, the researcher transforms The data uses the Ln formula, so that 57 research data can be obtained.

The results of the descriptive statistical analysis test, the number of n = Ln X1 is 134, n = Ln X2 is 133, Ln x3 is = 131 and the number of n Ln Y is 58, but the valid n is 57. So in this study the researchers tested the data in the test. classical assumption uses n = 57. The results of the normality test are known to have a significance value of 0.934 > 0.05, so it can be concluded that the residual value is normally distributed (Wells & Hintze, 2007).

Multicollinearity test results if we look at the tolerance value of CR 0.877 > 0.10, it means that there is no multicollinearity, while if we look at the VIF value of 1.140 < 10.00, it means that there is no multicollinearity. Judging from the tolerance DER 0.877 > 0.10, it means that there is no multicollinearity, while if we look at the VIF value of 1.140 < 10.00, it means that there is no multicollinearity. Next, we see the ROE tolerance value of 0.944 > 0.10, meaning that there is no multicollinearity, while if we look at the VIF value of 1.006 < 10.00, it means that there is no multicollinearity. So it can be concluded that the regression model of the effect of CR, DER and ROE on earnings growth does not occur symptoms of multicollinearity (Kumoro et al., 2020).

The results of the autocorrelation test are Durbin-Waston with a value of 1.742, then it can be concluded that the value of dl is 1.4637, du is equal to 1.6845, the value of 4-dl is 2.5363, and the value of 4-du is 2.3155, then the decision is taken namely du < dw < 4-du or 1.6845 < 1.742 < 2.3155, which means that there is no autocorrelation. The results of the heteroscedasticity test concluded that the effect of CR, DER and ROE did not occur heteroscedasticity problems with a significance value greater than 0.05.

Multiple linear regression test results can be seen as follows: Y = 0.909 + 0.006 X1 + 0.062 X2 - 0.038 X3 (Ohemeng, 2017). The linear regression equation model that can be written from these results in the form of a standardized regression equation is the regression coefficient (a) of 0.909 explaining that if CR, DER and ROE are equal to zero, then profit growth is Rp. 0.909.00 (Marquardt, 1980). If the CR increases by 1%, the profit growth will increase by Rp. 0.006.00. If DER increases by 1%, profit growth will increase by Rp.0.062.00. If ROE increases by 1%, profit growth will decrease by Rp. – 0.038,00.

The results of the correlation coefficient (R) CR of -0.172 based on the guideline of the interpretation value of the correlation value is in the range approaching 0 then the relationship is getting weaker. For the results of the DER correlation coefficient of 0.095 based on the guideline the value of the correlation interpretation value is in the range between "0.00 - 0.199" which means the level of relationship is very low. While the results of the ROE correlation coefficient of -0.333 based on the guideline of the correlation interpretation value, the value is in the range close to 0 then the relationship is getting weaker.

The results of the Coefficient of Determination (R2) test are known that the R Square value is 0.159. This shows that the effect of variables X1, X2 and X3 on variable Y is 15.9% on profit growth, and the remaining 84.1% profit growth can be influenced by other variables not examined in this study.

The results of the F test with a significant value for the effect of X1, X2, and X3 simultaneously on Y of 0.026, which means that simultaneously X1, X2 and X3 have no significant effect on profit growth. and the calculated F value is 3.328 > Table F 2.78 so it can be concluded that H1 is rejected, which means that there is no simultaneous effect of X1, X2, X3 on Y.

The results of the t test can be concluded that it is known that the sig value for X1 against Y is $0.039 < 0.05$. It can be concluded that there is no significant effect on Y. It is known that the sig value for X2 against Y is $0.913 > 0.05$. It can be concluded that there is a significant effect of X2 on Y. It is known that the sig value for X3 against Y is $0.025 < 0.05$. It can be concluded that there is no significant effect on Y.

Conclusion

Based on the results of research that has been carried out to determine the Effect of Current Ratio, Debt to Equity Ratio, and Return On Equity on Profit Growth in LQ-45 Index Companies, the following conclusions can be drawn:

The number of samples that match the specified criteria are 45 companies, with the number of data (n = 135). After the researchers tried to test the 135 data using SPSS 18, the data did not pass the classical assumption test, namely the normality test. Then so that the data can pass the normality test, the researcher transforms the data using the Ln formula in SPSS 18, after the data is transferred, normality test, multicollinearity test, autocorrelation test and heteroscedasticity test, the data passes the four classical assumption tests, the researcher transforms The data uses the Ln formula, so that 57 research data can be obtained.

The simple linear regression equation obtained is Y = 0.909 + 0.006 X1 + 0.062 X2 – 0.038 X3. The value of the correlation coefficient (R) The results of the CR correlation coefficient of -0.172 based on the guideline of the interpretation value of the correlation value is in the range approaching 0 then the relationship is getting weaker. For the results of the DER correlation coefficient of 0.095 based on the guideline the value of the correlation interpretation value is in the range between "0.00 - 0.199" which means the level of relationship is very low. While the results of the ROE correlation coefficient of -0.333 based on the guideline of the correlation interpretation value, the value is in the range close to 0 then the relationship is getting weaker.

The value of the coefficient of determination (R Square or R2) that the value of R Square is 0.159. This shows that the effect of variables X1, X2 and X3 on variable Y is 15.9% on profit growth, and the remaining 84.1% profit growth can be influenced by other variables not examined in this study.

The results of the F test with a significant value for the effect of X1, X2, and X3 simultaneously on Y of 0.026, which means that simultaneously X1, X2 and X3 have no significant effect on profit growth. and the calculated F value is 3.328 > Table F 2.78 so it can be concluded that H1 is rejected, which means that there is no simultaneous effect of X1, X2, X3 on Y.

The results of the t test can be concluded that the sig value for X1 against Y is $0.039 < 0.05$. It can be concluded that there is no significant effect on Y. It is known that the sig value for X2 against Y is $0.913 > 0.05$. It can be concluded that there is a significant effect of X2 on Y. It is known the sig value for X3 against Y is $0.025 < 0.05$, it can be concluded that there is no significant effect on Y.

References

Arif, A. A., & Sudjono, S. (2021). The Impact of Indonesian Presidential Election the 2019 on Abnormal Return and Stock Trading Volume Activity onn IDX (Empirist Event Study On Stock Listed in the LG 45 Index in 2019). *Dinasti International Journal of Education Management And Social Science*, 2(6), 966-976.

Denis, D. J. (2018). *SPSS data analysis for univariate, bivariate, and multivariate statistics*. John Wiley & Sons.

Kumoro, D. F. C., Novitasari, D., Yuwono, T., & Asbari, M. (2020). Analysis of the Effect of Quick Ratio (QR), Total Assets Turn Over (TATO), and Debt To Equity Ratio (DER) on Return On Equity (ROE) at PT. XYZ. *Journal of Industrial Engineering & Management Research*, 1(3), 166-183.

Marquardt, D. W. (1980). Comment: You should standardize the predictor variables in your regression models. *Journal of the American Statistical Association*, 75(369), 87-91.

Ohemeng, M. A. (2017). *A Comparative Study on Support Vector Machines* (Doctoral dissertation).

Pramanaswari, A. S. I., & Yasa, G. W. (2018). Graham & Dodd theory in stock portfolio performance in LQ 45 index at Indonesia stock exchange. *International research journal of management, IT and social sciences*, 5(6), 52-59.

Satryo, A. G., Rokhmania, N. A., & Diptyana, P. (2017). The influence of profitability ratio, market ratio, and solvency ratio on the share prices of companies listed on LQ 45 Index. *The Indonesian Accounting Review*, 6(1), 55-66.

Wells, C. S., & Hintze, J. M. (2007). Dealing with assumptions underlying statistical tests. *Psychology in the Schools*, 44(5), 495-502.