

The Effect of Current Ratio, Total Asset Turnover, Debt to Equity Ratio and Working Capital Turnover on Stock Returns with Return on Assets as a Moderating Variable in LQ45 Companies

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Abstract

This research aimed to analyze the effect of variable Current Ratio (CR), Total Asset Turnover (TAT), Debt Equity Ratio (DER), and Working Capital Turnover (WCT) with stock return, put the test and analyze is Return on Asset (ROA) moderate effect on relations Current Ratio (CR), Total Asset Turnover (TAT), Debt Equity Ratio (DER), and Working Capital Turnover (WCT) with Stock return in Company LQ45. Population in this research as much 45 Company with 5 selected as sample of the research during period 2009-2015 with multi-shapes sampling in a purposive. The data is analyzed using multiple regression analysis and moderated regression analysis. The result of this research proving that : CR, TAT, DER, and WCT have no effect on stock return, Return on Asset (ROA) have moderate Current Ratio (CR) on stock return, but Return on Asset (ROA) have no moderate Total Asset Turnover (TAT), Debt Equity Ratio (DER), and Working Capital Turnover (WCT) with stock return.

Keywords: fundamental ratio, return on assets, stock returns.

1. Introduction

The capital market is a meeting between parties who have excess funds and those who need funds by trading securities (Tandelilin, 2010). With the capital market, investors can invest their funds into the company. In supporting the economy, the capital market has an important role, because the capital market can connect those who need funds with those who have excess funds. In addition, the capital market can encourage the creation of an efficient allocation of funds, because with the capital market, the excess parties Funds (investors) can choose investment alternatives that provide the most optimal return (Tandelilin, 2010). For an investor, investment in selected securities is certainly expected to provide a rate of return in accordance with the risks that must be borne by investors. For investors, this rate of return is the main factor because return is the result obtained from an investment (Jogiyanto, 2013).

Income from stock investment or return can be in the form of dividends and capital gains. Investors often want immediate profits so they want profits in the form of capital gains rather than dividends (Jogiyanto, 2013). In the capital market, not all shares of companies that have a good profile will provide good returns to investors so a more in-depth analysis of the company is needed. A company may experience fluctuating returns at any time because various kinds of factors both micro and macro. Investors need to conduct an in-depth analysis of these changes. One way is to conduct fundamental analysis based on financial ratios.

Fundamental analysis is an analysis to calculate the intrinsic value of the company using company financial data, the intrinsic value of the company can be realized with the stock price (Jogiyanto, 2013). For investors, financial statements are an important factor to determine which securities to choose as investment options. In addition, financial statements are the easiest and cheapest analytical tool to get by investors / potential investors. In addition, accounting reports are enough to describe to us the extent of the development of the company's condition and what it has achieved (Tandelilin, 2010).

In previous studies, there are still inconsistent results. For example, the results of research on the effect of liquidity ratios proxied by Current Ratio on stock returns. In research conducted by Yuliantri & Sujana (2014); Ulupui (2010); Wibowo and Wartini (2014) who stated that the Current Ratio is significant against stock returns. Contrary to the research of Aditya & Isnurhadi (2013), Hutauruk et al, (2014); Farkhan & Ika (2012); Teddy et al, (2016) showed that the effect of Current Ratio is not significant on stock returns. The effect of the ratio of activity to stock returns also still shows mixed results. Research conducted by Yuliantri & Sujana (2014); Martani et al, (2009), Teddy et al (2016) showed Total Asset Turnover is significant to stock returns. However, the results of the study contradict Aditya & Isnurhadi (2013); Hutauruk et al, (2014); Ulupui (2010); Farkhan & Ika (2012) show that Total Asset Turnover is not significant to stock returns. Furthermore, the findings on the effect of financial leverage on stock returns. Research results of Yuliana et al, (2013); Suherman & Siburian (2013); Arista & Astohar (2012); Oktiar (2013) concluded that the Debt to Equity Ratio has a significant effect on stock returns. But contrary to research results that the Debt to Equity Ratio is not significant to stock returns (Aditya & Isnurhadi, 2013; Hutauruk et al, 2014; Malintan, 2012; Ulupui, 2010; Farkhan & Ika, 2012; Teddy et al, 2016). Research conducted by Farkhan & Ika (2012); Arista (2012) shows that Return on Assets has a significant effect on stock returns. But contradicting the results of Asmi's (2014) research; Yunita (2013) that Return on Assets does not have a significant effect on stock returns.

Based on the findings that are still mixed, the motivation of this study is to re-examine the effect of liquidity ratios, financial leverage, activity, markets and on stock returns. Then this study also conducts moderation testing by including the role of profitability ratios proxied Return On Asset (ROA) as a moderation variable to see whether Return On Asset (ROA) strengthens or weakens the influence of liquidity ratios, financial leverage, activity, markets and on stock returns.

There is also the formulation of the problem in this study is : Does the Current Ratio (CR) have a positive effect on stock returns in LQ45 companies? Does Total Asset Turnover (TAT) have a positive effect on stock returns in LQ45 companies? Does the Debt to Equity Ratio (DER) have a positive effect on stock returns in LQ45 companies? Does Working Capital Turnover (WCT) have a positive effect on stock returns in LQ45 companies? Does Return on Assets (ROA) moderate the relationship between Current Ratio (CR), Total Asset Turnover (TAT), Debt Equity Ratio (DER), and Working Capital Turnover (WCT) and stock returns in LQ45 companies?

2. Literature Review

Signaling Theory. Information is an important element for investors and business people because information essentially presents information, records or images both for past,

current and future conditions for the survival of a company and how the securities market is. Complete, relevant, accurate and timely information is needed by investors in the capital market as an analytical tool to make investment decisions (Jogiyanto, 2013).

The assumption of signaling theory is that company managers have more accurate information about the company that is not known to outsiders (investors). This will result in an information asymmetry between interested parties (Jogiyanto, 2013). Information asymmetry is a condition where private information is only owned by investors who only get information. It will It can be seen that if management does not fully convey all the information obtained about all things that can affect the company, then generally the market will respond to the information as a signal to an event that will affect the value of the company which is reflected through the stock price (Jogiyanto, 2000).

Shares can be defined as securities as evidence of participation or individual owners or institutions in a company. (Brigham, 2011). Return is the return on an investment which is usually expressed as an annual percentage rate. Return is the result obtained from investment. Here is the formula of stock return (Jogiyanto, 2013).

Current Ratio. According to Brigham & Houston (2011), the current ratio is the most common measure of a company's ability to pay debt in the short term..

Total Asset Turnover. According to Brigham & Houston (2011), Total asset turnover measures the turnover of all company assets from all company assets. This ratio is calculated by comparing sales to total assets.

Debt to Equity Ratio. According to Brigham & Houston (2011), Debt to equity ratio is a simple leverage calculation that compares the total debt owned by the company with the total equity (own capital) in carrying risk. Total debt is total liabilities, while total equity is total own capital.

Working Capital Turnover. Working Capital Turnover According to Brigham and Houston (2011), a ratio that shows the ability of net working capital rotates in one period of the cash cycle of the company. When the volume of sales increases, investment in inventory and receivables also increases, which means also an increase in working capital.

Return On Asset. According to Brigham & Houston (2011), Return on assets (ROA) is used to measure management's ability to generate overall profits.

Hipotesis: H₁ : Current Ratio (CR) has a positive effect on stock returns in LQ45 companies; H₂ : Total Asset Turnover (TAT) has a positive effect on stock returns in LQ45 companies; H₃ : Debt to Equity Ratio (DER) positive effect on stock returns in LQ45 companies; H₄ : Working Capital Turnover (WCT) positive effect on stock returns in LQ45 companies; H₅ : Return on Asset (ROA) moderating the relationship between Current Ratio (CR), Total Asset Turnover (TAT), Debt to Equity Ratio (DER), and Working Capital Turnover (WCT) with stock returns in LQ45 companies.

3. Research Method

The data used in this study is secondary data obtained from the Indonesia Stock Exchange (www.idx.co.id) in the company's performance summary. The population of this study were all company shares listed in the calculation of the LQ45 index for the period 2009 - 2015. The population in this study consisted of 45 companies. The sample selection was

carried out based on purposive multi-shapes sampling, with the following criteria: Focused on the stocks of companies that are included in the calculation of the LQ 45 index consistently during the observation period of 2009 - 2015. Never suspended/stopped trading by the Indonesia Stock Exchange. Companies whose financial statements must have financial ratios or factors to calculate complete financial ratios. Thus companies that have a connoted ratio of n/a (not available) and banking companies are excluded from the sample. The Company presents the necessary data on financial ratios that will be examined, both through annual reports and financial statements during observations. Based on these criteria, the companies that will be used as research samples as many as 5 companies, each sample will be observed financial ratios to be examined from 2009-2015.

Multiple regression analysis is used to obtain a regression coefficient that will determine whether the hypothesis created will be accepted or rejected. Model I Regression Equation:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e$$

Moderated Regression Analysis (MRA) or interaction test is a special application of linear multiple regression where in the regression equation contains an element of interaction (multiplication of two or more independent variables) (Ghozali, 2011).

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5Z + b_6\{X_1*Z\} + b_7\{X_2*Z\} + b_8\{X_3*Z\} + b_9\{X_4*Z\} + e.$$

4. Findings and Discussions

Table 1. Regression Result

Model		Standardized Coefficients	T	Sig.
		Beta		
1	(Constant)		-,918	,366
	Current Ratio	,359	1,034	,309
	Total Asset Turnover	,258	,862	,395
	Debt to Equity Ratio	,206	,720	,477
	Working Capital Turnover	-,010	-,055	,957
a. Dependent Variable: Return Saham				

Based on Table 1 above, the regression coefficients used are standardized coefficients because the independent variables in this study have different sizes so that the multiple linear regression equation is as follows :

Model Regression Equation I:

$$Y = b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e$$

$$Y = 0,359X_1 + 0,258X_2 + 0,206X_3 - 0,010 X_4 + e$$

Table 2. Results of Moderated Regression Analysis

Coefficients ^a				
Model		Standardized Coefficients	T	Sig.
		Beta		
1	(Constant)		-1,365	,185
	Current Ratio	,064	,169	,867
	Total Asset Turnover	,362	1,011	,322
	Debt to Equity Ratio	,603	1,699	,102
	Working Capital Turnover	-,091	-,292	,772
	Return on Asset	-1,446	-,958	,347
	CR*ROA	1,820	3,034	,006
	TAT*ROA	,134	,150	,882
	DER*ROA	-,546	-,543	,592
	WCT*ROA	-,221	-,635	,531
a. Dependent Variable: Stock Return				

Model Regression Equation II :

$$Y = b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5Z + b_6\{X_1*Z\} + b_7\{X_2*Z\} + b_8\{X_3*Z\} + b_9\{X_4*Z\} + e$$

$$Y = 0,064X_1 + 0,362X_2 + 0,603X_3 - 0,091X_4 - 0,091 - 1,446Z + 1,820X_1*Z - 0,134X_2*Z - 0,546X_3*Z - 0,221X_4*Z$$

Results of the First Hypothesis Testing (H_1). Based on Table 1, it can be seen that the calculated value is 1.034 with a significance level of 0.309. Because the significance value is greater than 0.05, it can be concluded that the Current Ratio (CR) has no effect on stock returns. The results of this study support research conducted by Hutaeruk et al, (2014); Farkhan & Ika (2012); Aditya and Isnurhadi (2013); and Teddy Kurniawan et al (2014), concluded that CR does not have a significant effect on return. However, the results of this study contradict Yuliantri & Sujana (2014) which states that CR is significant to stock returns. Farkhan & Ika (2012) stated that if the company's current assets rise, it shows that the company is able to pay off its short-term obligations which will later increase the company's profitability and will also affect stock returns. However, the investors are more Pay attention to other ratios, which can consistently affect stock returns, for example in cash ratios or cash positions.

Results of the Second Hypothesis Testing (H_2). Based on Table 1, it can be seen that the

calculated value is 0.862 with a significance level of 0.395. Because the significance value is greater than 0.05, it is concluded that Total Asset Turnover (TAT) has no effect on stock returns. The results of this study are in line with those conducted by Farkhan & Ika (2012); Aditya & Isnurhadi (2013); Hutauruk et al, (2014), which concludes that TAT has no significant effect on returns. However, this result contradicts the research of Martani et al, (2019) states that TAT has a significant effect on stock returns.

Third Hypothesis Testing Results (H_3). Based on Table 1, we can see the calculated value of 0.720 with a significance level of 0.477. Because the significance value is greater than 0.05, it is concluded that the Debt to Equity Ratio (DER) has no effect on stock returns. The results of this study are in line with those conducted by Farkhan & Ika (2012); Malintan (2012); Aditya & Isnurhadi (2013); Hutauruk et al, (2014). However, the results of this study contradict Arista & Astohar (2012); Oktiar (2013); Yuliana et al, (2013); Suherman & Siburian (2013), which states that DER has a significant effect on stock returns. Malintan (2012) stated that the greater the value of DER will increase the company's dependents. DER that is too high has a negative impact on company performance, because the higher level of debt means that the company's interest expense will be greater and will reduce profits. Level High debt and charged to shareholders, will certainly increase investment risk to shareholders.

Results of Testing the Fourth Hypothesis (H_4). Based on Table 2, it can be seen that the calculated value is -0.055 with a significance level of 0.957. Because the significance value is greater than 0.05, it is concluded that Working Capital Turnover (WCT) has no effect on stock returns. The direction of the regression coefficient seen for this variable is negative, so it can be interpreted that the influence that given by the variable WCT to the stock return is negative.

Results of the Second Hypothesis Testing (H_5). Based on the results of the Moderated Regression Analysis (MRA) analysis in Table 2, the CR*ROA interaction calculation value is 3.034 and the significance value is $0.006 < 0.05$, the TAT*ROA interaction is 0.150 and the significance value is $0.882 > 0.05$, the DER*ROA interaction is -0.543 and the significance value is $0.592 > 0.05$, the WCT*ROA interaction count is -0.635 and the significance value is $0.531 > 0.05$. Thus ROA is not a moderating variable that strengthens or weakens the relationship between TAT, DER, and WCT to stock returns, but ROA moderates the relationship of CR to stock returns. This shows that high and low ROA does not affect the relationship of TAT, DER, DPR, WCT with stock return, but affects the relationship of CR with stock return.

Result Of The Coefficient of Determination. The strength of the influence of the independent variable on the dependent variable can be known from the magnitude of the value of the determinant coefficient (R^2) which is between 0 (zero) and 1 (one). The lower the R^2 value explains the more limited the ability of the independent variable to explain the dependent variable.

Table 3. Regression Model R^2 Test Results I

Model	Adjusted R Square	
1	,180	

a. Predictors: (Constant), WCT, DER, TAT, CR

b. Dependent Variable: Stock Return

In the coefficient of determination of the regression model I, an adjusted R Square value of 0.180 was obtained. This means that 18% of stock returns can be explained by Current Ratio (CR), Total Asset Turnover (TAT), Debt to Equity Ratio (DER), Working Capital Turnover (WCT), while the other 82% can be explained by other factors besides these independent variables.

Table 4. Regression Model R² Test Results II

Model Summary ^b		
Model	Adjusted R Square	
1	,353	
a. Predictors: (Constant), WCT*ROA, DER, CR*ROA, TAT, CR, WCT, TAT*ROA, DER*ROA, ROA		

In the coefficient of determination of the regression model II, an adjusted R Square value of 0.353% was obtained. This means that 35.3% stock returns can be explained by Current Ratio (CR), Total Asset Turnover (TAT), Debt to Equity Ratio (DER), Working Capital Turnover (WCT), CR*ROA Interaction, TAT*ROA Interaction, DER*ROA Interaction, and WCT*ROA Interaction, The other 64.7% can be explained by factors other than the independent variable.

5. Conclusion

Based on the results of the tests that have been carried out, it can be concluded that: *The variables Current Ratio (CR), Total Asset Turnover (TAT), Debt Equity Ratio (DER), and Working Capital Turnover (WCT) did not affect the return of shares in LQ45 companies for the period 2009-2015 on the IDX. Return on Asset (ROA) does not moderate the relationship between Total Asset Turnover (TAT), Debt Equity Ratio (DER), and Working Capital Turnover (WCT) to stock returns, but partially moderates the relationship between CR and stock returns in LQ45 companies on the IDX. In the R2 Test Regression Model I variables Current Ratio (CR), Total Asset Turnover (TAT), Debt Equity Ratio (DER), and Working Capital Turnover (WCT) are only able to explain the variability of stock returns by 18%, the rest is explained by variables that are not included in the model. While in the R2 Test Regression Model II it was only 35.3%.*

References

Aditya, Ken dan Isnurhadi. (2013). Analysis of the Effect of Current Ratio, Total Asset Turnover, Debt to Equity Ratio, Return on Equity, and Earnings Per Share on Stock Return of Infrastructure, Utilities and Transportation Sector Companies Listed on the Indonesia Stock Exchange for the 2007-2011 Period". *Sriwijaya Journal of Management and Business*. Vol.11(4):287-300.

Arista, Desi dan Astohar. (2012). Analysis of Factors Affecting Stock Return (Case of

aManufacturing Company that went public on the IDX for the period 2005-2009)". Journal of Management Science and Applied Accounting. Vol 3.(1):1-15.

Asmi, Tri Laksita, (2014). Current Ratio, Debt to Equity Ratio, Return on Asset, Price Book to Value to stock return". Management Analysis Journal 3 (2) 2014.

Brigham, Eugene F. dan Joel F. Houston. (2011). Fundamentals of Financial Management Book 1. Edition 11, Jakarta : Salemba Empat Publishers.

CK, Van Kates, Madhu Tyagi, dan Ganesh L. (2012). "Fundamental Analysis and Stock Return: An Indian evidence". Global Advance Research Journal of Economics, accounting and Finance. Vol. 1(2):33-39.

Data Current Ratio, Total Asset Turnover, Debt to Equity Ratio, Dividen Payout Ratio, Working Capital Turnover, Company Number LQ45 taken on September 20, 2016 from <http://www.idx.co.id>.

Estuari, Artik. (2011). "Pengaruh Current Ratio, Debt to Equity Ratio, Return On Investment, Earning Per Share, dan Dividen Payout Ratio on the Company's Share Return on the Indonesia Stock Exchange. E-Journal of Accounting Udayana University. Bali.

Farkhan dan Ika. 2012. "The Effect of Financial Ratio on Stock Return of Manufacturing Companies

on IDX (Case Study of Food Sector Manufacturing Companies and Beverage)". Value added. Vol. 9(1):118.

Hansen, Verawati dan Juniarti. 2014. "The Effect of Family Control, Size, Sales Growth, and Leverage on the Probability and Value of Companies in the Trade, Services and Investment Sectors". Bussines Accounting Revue. Vol. 2(1):121-130.

Hutauruk, Martinuz Robert, Sri Mintartidan Andi Paminto. 2014. "Influence of Fundamental Ratio, Market Ratio, and Bussines Performance to The Systematic Risk and Their Impact to The Return on Share At Agricultural Sector Companies at The Indonesia Stock Exchange for The Period of 2010-2013. Academic Research International. Vol:5(5):149-168.

Jogiyanto, 2013. Teori Portofolio and Investment Analysis, Second Edition, First Print, Yogyakarta : BPFE.

Kurnianto, Ajeng Dewi, 2013, "Analysis of the effect of EPS, ROE, DER, and CR on Stock Prices with PER as a Moderating Variable", Skripsi, Undip, Semarang.

Kurniawan, Teddy, Yuliani & Ghasarma, Reza. 2015. "The Effect of Liquidity, Finacial Leverage, Activities on Stock Return with Profitability Variables as Mediating Variables in Automotive and Component Sub-Sector Companies". E-journal.unsri.ac.id. Palembang.

Malintan. Rio. 2012. "The Effect of Current Ratio (CR), Debt to Equity Ratio (DER), Price Earning Ratio (PER), and Return on Asset (ROA) on Stock Return of Mining Companies Listed on the Indonesia Stock Exchange in 2005-2010". Student Scientific Journal FEB. Vol1(1):1-25.

Nuryana, Ida. 2012. " The Effect of Financial Ratio on Stock Return in LQ45 Companies

on the Jakarta Stock Exchange. Kanjuruhan University Malang. Hapless

Oktiar, Tri. 2013. "The Effect of Debt to Equity Ratio, Return On Equity, Interest Rates and Inflation on Stock Return of Property and Real Estate Sub-Sector Companies Listed on the Indonesia Stock Exchange for the 2007-2012 Period". Journal of Accounting. Vol. 2(2):80-93.

Patriawan, Dwiatma. 2011. "Analysis of the Effect of Earnings per Share (EPS), Return on Equity (ROE), and Debt to Equity Ratio (DER) on Share Prices in Wholesale and Retail Trade Companies Listed on the Indonesia Stock Exchange (IDX) in 2006-2008". Thesis, Diponegoro University, Semarang.

Putra, Y. Yudha Dharma dan Wiagustini, Ni Luh Putu. 2013. "The Effect of Liquidity and Leverage on Profitability and Company Value in Banking Companies on the IDX. Journal of Management Insights. Vol. 1(2):215-232

Saerang, David & Winston Pontoh, 2011. "Analysis of the Effect of Return on Assets on Company Stock Prices on the Indonesia Stock Exchange (Study on Company Shares LQ-45 for the Period 2004 to 2008)". Journal, Samn Ratulangi University, Manado.

Setiawati, Kadek Ayu Yogamurti dan Purbawangsa, Ida Bgs. Anom. 2015. "The Effect of Company Size and Leverage on Profitability and Company Value". E-Journal Universitas Udayana. Vol 4(2):596-609.

Suherman dan Siburian, Anwar. 2013. "Influence Earning Per Share, Debt to Equity Ratio, Return to Equity, Price to Book Value Against Stock Return (Case Study on Food and Beverage Industry Company Listed on Indonesia Stock Exchange)". Jurnal Riset Manajemen Sains Indonesia. Vol. 4(1):16-30.

Tandean, Eduardus. 2010. Portfolios and Investments: Theory and Applications. Yogyakarta:Kanisius.

Ulupui, I.G.K.A. 2010. "Analysis of the Effect of Liquidity, Leverage, Activity and Profitability Ratios on Stock Return (Study on Food and Beverage Companies with Consumer Goods Industry Categories on JSX". Scientific Journal of Accounting and Business. Vol. 2(2): 230-250.

Van Horne, James C, John M. Wachowicz, JR..2012. Principles of Financial Management. Edisi 13, Buku 1. Jakarta : Penerbit Salemba Empat.

Wibowo, Agus, dan Wartini, Sri. 2012. "Working Capital Efficiency, Liquidity, and Leverage on Profitability in Manufacturing Companies on the IDX". Journal of Dynamics Manajemen. Vol 3(1):49-58.

Yuliana, Novia Maharani, Dewi Putri Sari, dan Mohammad Chabachib. 2012. "Analysis of the Effect of Leverage, Asset Effectiveness and Sales on Profitability and Its Impact on Company Value (Study on Companies in the Goods and Consumer Industry Sector Listed on the Indonesia Stock Exchange Year 2007-2011)". Diponegoro Journal of Management. Vol. 2(3):1-13.

Yunita, Nova. 2011. "Analysis of the Effect of Profitability Ratio and Solvency Ratio on Stock Return of Companies Listed on IDX Periode 2008-2010. Manajemen Dian Nuswantoro, Semarang.

Yuliantri, Ni Nym Ayudan Sujana, I Ketut. 2014. 'Influencer Financial Ratio, Firm Size, dan Cash Flow Operating Towards Return Share Company Food dan Beverage'. E-Jurnal Akuntansi Universitas Udayana. Vol. 7(3):547-558

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