Available Online at http://www.recentscientific.com

CODEN: IJRSFP (USA)

International Journal of Recent Scientific Research
Vol. 9, Issue, 7(F), pp. 28091-28095, July, 2018

ISSN: 0976-3031

International Journal of Recent Scientific Research

DOI: 10.24327/IJRSR

Research Article

ANALYSIS OF THE EFFECT OF NET PROFIT MARGIN, PRICE TO BOOK VALUE, AND DEBT TO EQUITY RATIO ON STOCK RETURN

Dedi Kusmayadi[1]., Rani Rahman[2]., Yusuf Abdullah[3]

[1,2] Accounting Department, Economics Faculty, Siliwangi University
[3]Lecturers at Program of Master Management, Postgraduate Faculty, Siliwangi University

DOI: http://dx.doi.org/10.24327/ijrsr.2018.0907.2392

ARTICLE INFO

Article History:
Received 15th April, 2018
Received in revised form 7th May, 2018
Accepted 13th June, 2018
Published online 28th July, 2018

Key Words:

LQ45, Stock Return, Indonesia Stock Exchange

ABSTRACT

The purpose of this study is to analyze the effect of Net Profit Margin, Price to Book Value, and Debt to Equity Ratio partially and simultaneously to Stock Return at Indonesia Stock Exchanges company. The population in this research company LQ45 as many as 45 companies. Sampling technique using purposive sampling with company criterion LQ45 which recorded more than 8 periods during the period of the year 2011-2017, obtained sample 27 company. This research is explanatory research. The type of data is secondary data is the publication of financial statements of companies LQ45 period 2011-2017. The analysis tools used are the classical assumption test, multiple regression, and multiple correlations. The results show that partially Net Profit Margin, Price to Book Value, and Debt to Equity Ratio have the significant negative effect on Stock Return on LQ45 company in Indonesia Stock Exchange, and simultaneously Net Profit Margin, Price to Book Value and Debt to Equity Ratio have no significant effect.

INTRODUCTION

Background

The establishment of a company must have clear objectives, among others, the optimality of profits, prosperous principal and maximize the value of the company is reflected in the stock price. The purpose and expectations of investors in investing funds in the capital market are to obtain maximum returns with certain risks. In this regard, financial information will be very useful for investors who will invest in a company to assess how much improvement the company's financial performance and make predictions on the risks and benefits to be received from information obtained. Media that can be used to view the financial performance of the company is the financial statements by analyzing the financial ratios.

Financial ratio analysis is not only used to know the strengths and weaknesses of companies in the field of finance but can also be used as an early warning system to deteriorate the company's financial condition. Through financial ratios can make a comparison of financial ratios of a company from time to time to observe the current trend, comparing the financial ratios of a company with other companies that are still engaged in the industry is relatively equal to a certain period, as well as analyze the performance of the company either from the aspect of liquidity, solvency, and profitability of the company. So that will help the investors and users of financial statements to know the position of the company as a basis for decision making.

Stock return is a measure seen by investors in investing in a company. Return of shares is the result obtained from the investment or the level of profit enjoyed by investors on an investment that it does. A good rate of return shows good corporate performance. If the ability of a company to generate profits increases, then the stock price will also increase (Husnan, 2015), Net Profit Margin (NPM), is one of the parameters to see the profitability of the company, which describes how much percentage of net profit obtained by the company from sales do. So it can be said the higher the value of NPM indicates that the company is a more efficient operation. This will further strengthen investor confidence in the company in building an investment relationship. In addition, the ratio of NPM can give an influence in determining the rate of return generated.

In addition, with the higher ratio of Price to Book Value (PBV) of a company will affect the high stock return. PBV is one of the fundamental indicators used by many investors to know the fair value of shares, through comparison of stock market prices with the book value of shares (Bringham, 2001, in Rodoni&

Corresponding author:* **Dedi Kusmayadi
Accounting Department, Economics Faculty, Siliwangi University

Ali, 2014). The PBV ratio can be a rational measure to assess the high return prospects that a firm can generate by looking at how the market responds to the company's financial performance as reflected in the high stock market price (Shabib-ul-Hasan, *et al*, 2015). So the PBV ratio can be an important consideration for investors to choose which shares to buy. The higher the PBV value, the higher the investor's assessment of the company's stock, so that it will push up the stock market price and increase the capital gain.

Besides, the leverage aspect is one of the important factors which becomes the investor's attention in an investment decision. Companies that have leverage will be selected by rational investors. Debt to Equity Ratio (DER), a solvency ratio, this ratio is related to the company's ability to return its debt. Companies that are able to return their debts well will increase investor confidence in the company and can affect the value of the company itself. If DER company experienced an increase from the previous year then assessed solvable, if experienced decreased insolvable value (Sunyoto, 2013). From the above description of this study want to analyze the effect of NPM, PBV, and DER on stock returns on the LQ45 company, as listed issuer of Indonesia Stock Exchange which has the highest liquidity (blue-chip stock).

Literature review

Net profit margin (npm)

Net Profit Margin is a measure of the company's profitability from sales after taking into account all costs and income taxes. According to Siegel and Shim in Fahmi (2013: 81), by examining the profit margins and industry norms of a company in previous years, we can assess the operating efficiency and pricing strategy as well as the company's competitive status with other companies in the industry. NPM ratio between net profit (net profit) ie sales after deducting with all expenses including taxes compared to sales. The higher the net profit margin, the better the operation of a company (Syamsuddin, 2007:62); Riyanto (2008:37).High net income compared to sales can show how the efficiency and effectiveness of the company's operations in suppressing the existing costs so that the company can still generate maximum net profit from sales that occurred (Cashmere, 2014:200). Several NPM studies on stock returns by Savitri and Haryanto (2012); Nurhakim (2016); Maryyam (2016); shows that NPM has a significant positive effect on stock return, but this finding is inconsistent with the results of Putri and Sampurno (2012) research; Saleh (2015); and Allozi, *et al*, (2016) that NPM has no significant effect.

NPM = Net Income After Tax / Sales (1)

Price to Book Value

The value of a firm can be measured by Price Book Value (PBV), which is a comparison between the stock market value and the book value of shares (Brigham, 2001). Increasing the value of a company is an achievement, in accordance with the wishes of its owners, because increasing the value of the company, then the welfare of the owners will also increase. In other words, the high corporate value indicates high shareholder prosperity.

PBV is a comparison between market price and book value of shares. So companies that have high PBV ratios show that the company's growth has a very good prospect as reflected in the high stock market price of its book value, whereas companies that have low growth will have low PBV (Husnan: 2015).

PBV = Stock Market Price / Book Value per Share (2)

If the stock market price is below the book value, the inventor considers that the company is not enough potential (Prastowo & Juliaty, 2005: 99). Good company, generally this ratio reached above one, which indicates that the stock market value is greater than the value of his book (Husnan: 2015). The bigger the PBV ratio the higher the company is rated by the investors (investors). The higher the investor's assessment of the company can affect the demand for the stock directly affect the increase of capital return. Some research conducted by Purnamaningsih & Putu W (2014); that price book value has a significant positive effect on stock return. This study is inconsistent with the research of Meythi & Mathilda (2012), that PBV has an insignificant effect on Stock Return, while Piotroski (2007), concluded that PBV has the negative effect on Stock Return.

Debt to Equity Ratio

Debt to Equity Ratio is a solvency ratio in which this ratio is related to the ability of a company in returning its debt. Debt to Ekuti Ratio (DER), the debt-to-equity ratio shows the extent to which funding from debt is used when compared to equity financing (Horne & Wachowicz Jr. in Fitriasari & Kwary, 2012: 235). Companies that have an optimal capital structure expressed as a combination of debt, preference, and equity usually cause the stock's price to be maximum (Brigham & Houston, in Rodoni & Ali, 2014: 7).

High leverage ratios jeopardize the company because the company will be stuck in high debt levels and difficult to release the debt burden. The decision on the use of leverage should be carefully considered between the likelihood of the risk and the expected returns to be earned. Research on AL-Qudah & Laham (2013), Utami, *et al* (2015); Ghi, (2015); shows that DER has a significant effect on stock return. However inconsistent with research from Sumarsono & Istiani (2016); and Supadi & Amin (2012), that DER has no significant effect on stock return.

Debt to Equity Ratio = Total Debt /Equity (3)

Stock Returns

According to Fahmi (2013: 358), the return is the profit gained by companies, individuals, and institutions of the results of investment policies that do. So it can be said the stock return is the yield obtained by investors of the capital invested in the stock market. Return or rate of return is the difference between the amount received and the amount invested, divided by the amount invested. (Brigham & Houston, in Rodoni, 2014: 215). The stock play has the potential of gains in two ways: dividend and capital gains.

Capital gain (loss) = (Pt-Pt-1) / (Pt-1) (4)

Where:
Pt = Stock Price of the current period
Pt-1 = Stock Price of a previous period

Hypothesis

1. Partially NPM and PBV positively affect the Return of shares, while the DER negatively affect
2. Simultaneously NPM, PBV, and DER have a significant effect on stock Return

RESEARCH METHOD

Objects in this study are Net Profit Margin (NPM), Price To Book Value (PBV), Debt to Equity Ratio (DER), and Stock Return. The population of this study is the Issuers of Indonesia Stock Exchange which includes LQ45 company, sampling technique using purposive sampling with issuer criteria recorded more than 8 times as issuer LQ45 from the period of assessment in 2011 until 2017. Obtained by research sample of 27 issuers LQ 45. This research explanatory research, meaning that this research will explain the variables studied or something (Copper & Schindler: 2005).

Variable Operationalization

The variables used in this study consist of four variables, namely: 1) Net Proft Margin (Net profit after tax/Sales indicator, (X1)); 2) Price Book Value/PBV (Stock Market Value indicator (closing price)/Value of Share Book, (X2)); 3) Debt to Equity Ratio/DER (indicator: total debt / Equity, (X3)); and 4) Stock return (Stock price indicator of the current period, the stock price of the previous period, (Y)).

Data Analysis Technique

Data Ratio-based Research Data, which obtained from the source of publication Financial Report LQ45 Company Period 2011 to 2017. Analyzer used in this research

1. Classical assumption test (normality test, multicollinearity test, heteroscedasticity test and autocorrelation test),
2. Multiple Regression

In this research use parametric statistic of multiple regression, with the equation as follows

$SR = a + b_1NPM + b_2PBV + b_3DER + e$ (5)

Where :

Y : Stock Return
a : Constanta
b_1NPM : NPM variable coefficient
b_2PBV : PBV variable coefficient
b_3DER : DER variable coefficient
e : Residual Factor Variable

RESULT AND DISCUSSION

Based on the sampling technique obtained 27 samples (company LQ45). Furthermore, the collected data are analyzed to fulfill the requirements of a regeneration test through the classical assumption test consisting of a normality test, autocorrelation test, heteroscedasticity test and multicollinearity test.

Table 1 presents a resume of the classical assumption test results, with the following explanation: Normality test. The result of the normality test (Kolmogorov Smirnov) shows Asymp value. Sig (2-tailed) is 0.200. This value is greater than 0.05 or 5%. So the data is declared normal distribution. Test autocorrelation, Based on the analysis of Durbin Watson (DW) value of 2.065, this value is close to number 2 so it does not occur autocorrelation. Heteroskedasticity test, This test is used to determine whether or not the variant inequality of the residual in the regression model. By using gletser test obtained by sig value. all independent variables are greater than 0.05, this means there is no heteroscedasticity.

Table 1 Classical Assumption Test Results

Kolmogorov-Smirnov Test	*Asymp. Sig. (2-tailed)*	0,200
Durbin Watson		2,065
Glejser Test	Sig. NPM	0,577
	PBV	0,344
	DER	0,446
Collinearity Statistics	VIF. NPM	TOL. NPM
	1,825	0,548
	PBV 1,013	PBV 0,987
	DER 1,831	DER0,546

Source: IBM SPSS output, processed data

Test multicollinearity, this test can be done with a correlation matrix by looking at the value of VIF and tolerance. The test results show that the VIF value of each independent variable is less than the number 10 and the tolerance value (TOL) obtained shows more than 0.1, this shows no multicollinearity between independent variables. Thus the data used has met the criteria of classical assumptions, as for the output regression analysis presented in table 2.

Table 2 Coefficients Regression, t-test, Significance and r-partial

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	4.554	.753		6.049	.000			
	NPM	-.063	.049	-.389	-1.286	.219	-.435	-.325	-.288
	PBV	-.051	.036	-.319	-1.416	.179	-.314	-.354	-.317
	DER	-.067	.244	-.083	-.274	.788	-.363	-.073	-.061

Source: SPSS Output

From table 2, we obtain the regression equation, RS = 4.554 - 0.063NPM -0.051PBV-0.067DER, the equation indicates a negative functional relationship. The value of 4.554 constant, the value indicates when the NPM, PBV and DER values are considered 0. When the NPM value rises one unit assuming PBV and DER values are considered constant will have a decrease of stock return of 0.063, for PBV and DER assuming other variables are considered constant, it will have an effect on decreasing stock returns of 0.051 and 0.067. With these results indicate that NPM and PBV for investors in taking the decision is not a factor that is considered very urgent, allegedly there are factors other factors into consideration and considered more important by investors such as factors other fundamental variables and technical variables. DER variables indicate that investors remain consistent considering the solvency of the company before making a decision to invest.

The partial test of Net profit margin (NPM) to stock return, obtained partial influence of 10.56%, t-test of negative 1.286, and the value of significance of 0.219. Can be concluded that the NPM negative significant effect on stock returns, so the hypothesis proposed NPM positively affect the stock returns on LQ45 companies in Indonesia rejected. NPM describes the company's ability to control costs, the higher the NPM demonstrates its ability to maximize net profit earned from sales. So that will strengthen the public perception to consider the investment relationship and hope to get the maximum return. However, what happens to LQ45 companies in Indonesia for 2011 to 2017 periods, NPM does not contribute positively and significantly. The results of this study are relevant to the research of Putri & Sampurno (2012); Saleh (2015); and Allozi, *et al*, (2016), which states the net profit margin yield is not significant. However inconsistent with research from Savitri & Haryanto (2012), Nurhakim (2016); Maryyam (2016), that net profit margin has a significant positive effect on stock return.

Judging from the price book value (PBV) on stock return, a partial effect is 12.32%, a t-test is negative, 1.416, and significance value is 0.179. It can be concluded that the PBV does not affect the stock return, so the hypothesis proposed PBV positively affect the stock return on LQ45 companies in Indonesia rejected. The ratio of PBV is one measure to assess the high return, which can be used to be an important consideration for investors to make investment decisions. The higher value of Price to Book Value is expected to contribute positively to the increase in the market price of a stock, while also affecting the increase of stock return (capital gain). However, the ideal condition is contradictory to what happened to the LQ45 company in Indonesia period 2011 to 2017, that PBV has the negative effect is insignificant. The results of this study strengthen research from Priotroski (2007), that Book to Market Value negatively affect Stock Return, but inconsistent with research conducted by Purnamaningsih & Putu W (2014); and Meythi & Mathilda (2012).

While the debt to equity ratio (DER) contributes partially to the stock return of 0.533%, with t-test of negative, 0.274, and significance value of 0.788. It can be concluded that DER negatively affects the stock return, so the hypothesis proposed by DER negatively affects the stock return on the LQ45 company in Indonesia is accepted. DER describes the company's ability to meet long-term obligations. A high DER will jeopardize the company in relation to the obligations that must be met as a result of long-term debt, which has an impact on the chance of obtaining maximum return for investors. This result is consistent with research from Istanti (2016); and Supadi & Amin (2012); that the DER is negatively insignificant to stock returns, but is inconsistent with research from AL-Qudah and Laham (2013); Utami, *et al* (2015); and Ghi (2015).

Table 3 F-test and Significance

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	14.092	3	4.697	1.992	.161[a]
Residual	33.008	14	2.358		
Total	47.100	17			

Source: SPSS Output

For the simultaneous test obtained value of influence of NPM, PBV and DER to Return of stock equal to 29.9% (table 4), with the value of F-test equal to 1,992, and significance value 0.161 (table 3). It can be concluded that NPM, PBV, DER, simultaneously have no significant effect on stock returns on LQ45 Company in Indonesia Stock Exchange. So the proposed hypothesis of NPM, PBV, and DER simultaneously have a significant effect on the return of legitimate company LQ45 in Indonesia denied. This shows that NPM, PBV and DER contributes not strong influence to stock return that is equal to 29.9%, while 70.1%, is a residual factor that is suspected to be influenced by fundamental factor and another technical factor.

Table 4 Summary Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.547[a]	.299	.149	1.53548

Source: SPSS Output

CONCLUSION

Partially Profit Margin (NPM), Price to Book Value (PBV) and Debt to Equity Ratio (DER) to Return of stock at LQ45 company in Indonesia Stock Exchanges have negative effect not significant, and influence simultaneously Net profit margin (NPM), Price to Book Value (PBV) and Debt to Equity Ratio (DER) have no significant effect on Return on LQ45 company in Indonesia Stock Exchange.

References

Allozi, Nurah Musa *et al*. 2016. The Relationship between the Stock Return and Financial Indicators (Profitability, Leverage): An Empirical Study on Manufacturing Companies Listed in Amman Stock Exchange. *Centre of Excellence for Scientific & Research Journalism.*

Al-Qudah, Anas and Laham, Mahmoud. 2013. The Effect of Financial Leverage & Systematic Risk on Stock Returns in the Amman Stock Exchange (Analytical Study – Industrial Sector). *Research Journal of Finance of Accounting*: 4(6).

Brigham, E. F. & Houston , J. F., 2014. *Dasar-dasar manajemen Keuangan*. Eds 11. Jakarta: Salemba Empat.

Cooper, Donald R, and Pamela S. Schindler. 2005. *Business Research Methodes.* 7 th Edition, McGraw-Hill International Edition, Boston

Fahmi, Irham. 2013. *Analisis Laporan Keuangan*. Bandung: Alfabeta

Fitriasari, Dewi and Kwary, Deny Arnos. 2012. *Prinsip-Prinsip Manajemen Keuangan*. Second Book. 13rd edition. Jakarta: Salemba Empat.

Ghi, Tran Nha. 2015. The Impact of Capital Structure and Financial Performance on Stock Returns of The Firms in HOSE. *International Journal of Information Research and Review*. 2(6), 734-737.

Husnan, Suad. 2015. *Dasar-dasar Teori Portofolio dan Analisis Sekuritas*. Yogyakarta: UPP AMP YKPN

Kasmir. 2014. *Analisis Laporan Keuangan.*1st Edition. Jakarta: PT Raja Grafindo Persada.

Maryyam, Anwaar. 2016. Impact of Firms Performance on Stok Returns (Evidence from Listed Companies of FTSE-100 Index London, UK). *Global Journal of Management and Bussiness Research.*

Nurhakim, Anistia. 2016. The Effect of Profitablitiy And Inflation on Stock Return at Pharmaceutical Industries at BEI in The Period of 2011-014. *Asia Pacific Journal of Advanced Bussines and Social Studies.*

Piotroski, Joseph D. 2007. Discussion of The Book-to-Price Effect in Stock Returns: Accounting for Leverage. University of Chicago: *Journal*.

Putri, Anggun Amelia Bahar and Sampurno, R. Djoko. 2012. Analisis Pengaruh ROA, EPS, NPM, DER dan PBV terhadap Return Saham.*Journal of Universitas Diponegoro*

Purnamaningsih, Dita and Putu W, Ni Gusti. 2014. Pengaruh Return On Asset, Struktur Modal, Price to Book Value dan Good Corporate Governance pada Return Sahampada seluruh perusahaan di BEI. *Journalof Universitas Udayana*

Prastowo, Dwi and Juliaty, Rifka. 2005. *Analisis Laporan Keuangan Konsep dan Aplikasi*, edisi kedua. Yogyakarta: UPP AMP YKPN.

Prasetyo, Dwi Budi Supadi, and M. Nuryatno Amin. 2012. PengaruhFaktor Fundamental Dan RisikoSistematisTerhadap Return SahamSyariah, Jurnal Media Riset Akuntansi, Auditing, dan Informasi, 12(1), DOI: http://dx.doi.org/10.25105/mraai.v12i1

Rodoni, A. and Ali, H., 2014. *Manajemen Keuangan Modern*. Jakarta: Mitra Wacana Media.

Riyanto, Bambang. 2008. *Dasar-Dasar Pembelanjaan Perusahaan*. Yogyakarta: BPFE-Yogyakarta.

Saleh, Muhammad. 2015. Relationship berween Firm Financial Performance and Stock Returns: Evidence from Oil and Gas Sector Pakistan. *Journal of Energy Technologies and Policy*.

Savitri, Dyah Ayu and Haryanto, A. Mulyo. 2012. Analisis Pengaruh ROA, NPM, dan PER terhadap Return Saham. *JurnalAkuntansi*. Universitas Diponegoro

Sumarsono, Fariska Istanti and Khuzaini. 2016. Pengaruh Faktor Fundamental dan Risiko Sitematis Terhadap Return Saham Perbankan di BEI. *Jurnal Ilmu dan Riset Manajemen*. 5(1).

Syamsuddin, Lukman. 2007. *Manajemen Keuangan Perusahaan*, New Edition. Jakarta: Raja Grafindo Persada.

Sunyoto, D., 2013. *Metode Penelitian Akuntansi*. Bandung: PT Refika Aditama

Shabib-ul-Hasan, Syed., Farooq, Sumair and Muddassir, Muhammad. 2015. Stock Return Indicators: Debt to Equity, Book to Market, Firm Size and Sale to Price. *Journal of Property Investment and Developtment*. www.iiste.org ISSN 2422-846X An International Peer-reviewed Journal, 16

Utami, Widya Retno., Hartoyo, Sri., and Maulana, Tubagus Nur Ahmad. 2015. The Effect of Internal and External Factors on Stock Return: Empirical Evidence from the Indonesian Construction Subsector. *Asian Journal of Business and Management*. 3(5).

How to cite this article:

Dedi Kusmayadi *et al.* 2018, Analysis of the Effect of Net Profit Margin, Price to Book Value, and debt to Equity Ratio on Stock Return. *Int J Recent Sci Res.* 9(7), pp. 28091-28095. DOI: http://dx.doi.org/10.24327/ijrsr.2018.0907.2392

****