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Research Paper

Price Earnings Ratio as the Basis for Assessing Fair Price of LQ45 Index Stock in BEI (Indonesia Stock Exchange)

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ABSTRACT

Basically, capital market is intended for various long term financial instruments which can be bought and sold, either in cash or in capital. It plays an important role in the economy of a country since it has two functions: a facility for financing and for getting fund from investors. The fund obtained from capital market can be used for developing a business, expansion, addition for work capital, etc. The objective of the research was to analyze and to find out some factors which influenced price earnings ratio (PER) in LQ45 Index companies from February, 2015 until January, 20018. Independent variables were return on equity (ROE), debt to equity ratio (DER), and firm size (FS). There were 30 samples, and the data were gathered from financial statement of LQ45 Index listed in BEI which met the research criteria and analyzed by using multiple linear regression analysis with e-views program. The result of the research showed that ROE had positive and significant influence on PER and DER had negative and significant influence on PER in LQ45 Index companies. It is recommended that the company's financial manager make a policy on increasing investors' welfare and company's profit so that investors can have accurate decision to invest. Investors should use this research for assessment so that fair price through PER and the factors which influence PER on making decision to sell and stock in capital investment in the company.

Keywords: *Price Earnings Ratio, Return on Equity, Debt to Equity Ratio, Firm Size*

INTRODUCTION

Basically, the capital market is a market for various long-term financial instruments that can be traded, either in the form of debt or equity. The capital market has an important role for the economy of a country because the capital market runs two functions, namely the first as a means for business funding or as a means for companies to get funds from investors. Funds obtained from the capital market can be used for business development, expansion, additional working capital and others.

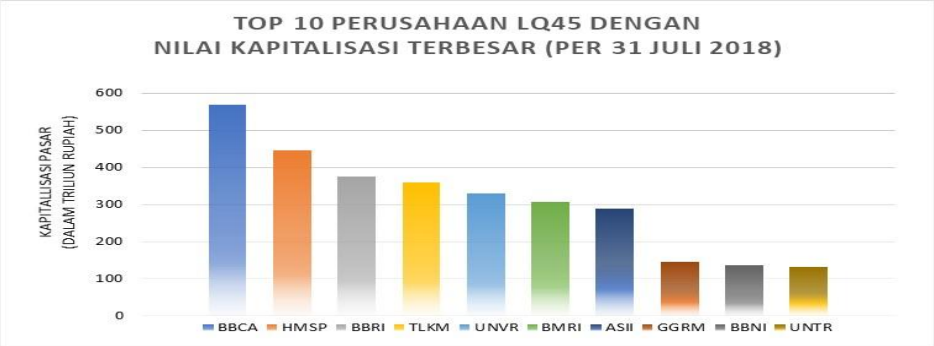
Both capital markets are a means for people to invest in financial instruments such as stocks, bonds, mutual funds, and others. Thus the community can place its own funds in accordance with the characteristics of the advantages and risks of each instrument.

Among various capital market instruments, stocks are investment instruments that have a high level of return and risk. The value of the transaction or in capital market terms better known as high capitalization value indicates the potential for high profit. On the other hand, returns on stock investments, namely dividends and

capital gains are more difficult to predict, so investors must analyze stocks in order to obtain the expected benefits (Subekti, 1999).

Stock trading takes place on the Indonesia Stock Exchange (IDX). To provide more complete information about the development of the exchange to the public, the IDX distributes data on stock price movements through print and electronic media. One indicator of stock price movements is the stock price index. As of October 2018, the IDX has 11 types of stock price indices. One of the frequently used reference price indexes is the LQ45 index.

The LQ45 index is an index consisting of 45 company shares selected based on consideration of liquidity and market capitalization, with criteria that have been determined. Stock reviews and replacements are conducted every 6 months. Ten LQ45 companies with the largest market capitalization value as of July 31, 2018 can be seen in Figure 1.

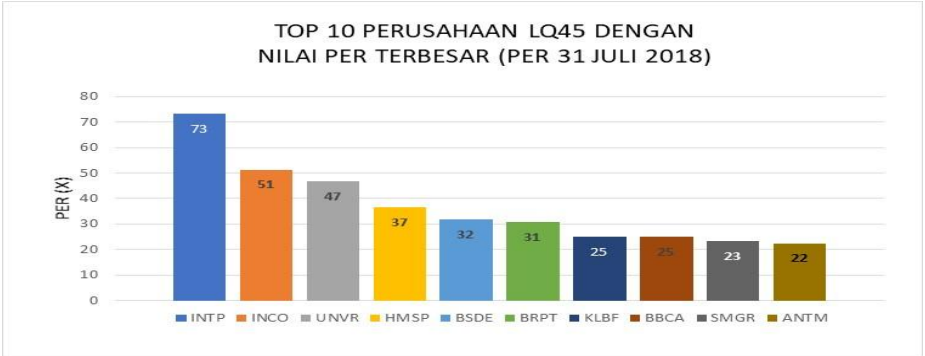


Source: IDX, processed 2018

Figure 1 Top 10 LQ45 Companies with the Largest Capitalization Value

According to Sunariyah (2004), there are two approaches used to assess stock prices, namely technical analysis and fundamental analysis. This technical analysis uses published market data such as stock prices, trading volume, individual and joint stock price indices, and other technical factors. Fundamental analysis is a study that studies things related to the benefits of a business with the intention to better understand the nature and characteristics of public companies that issue shares (Ang, 2010).

There are two fundamental approaches that are often used in conducting stock valuations, namely the price earnings ratio and the present value approach. The ratio that is often used in stock analysis is price earnings ratio (PER). This approach is most widely used by investors and securities analysts. This approach is based on the expected results in the expected future earnings per share, so that it can be known how long the stock investment will return (Sunariyah, 2004).



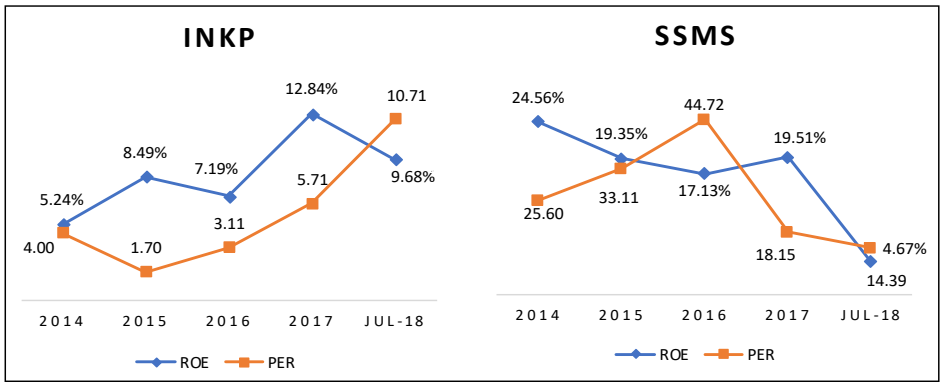
Source: IDX, processed 2018

Figure 2 Top 10 LQ45 Index Companies with the Biggest PER Value

From Figure 2 it can be seen the top 10 companies of the LQ45 index which have the largest PER value. Companies with large PER values generally attract investors' attention. PER will facilitate and assist analysts and investors in stock valuation. In addition, PER also helps analysts to improve judgment because current stock prices are a reflection of the company's future prospects. According to Sharif, et al. (2015), investors believe that a company will have a promising future if it has a high PER. The factors that influence the magnitude of the PER value of a company are Return on Equity (ROE), Debt to Equity Ratio (DER), and Firm Size.

Return on Equity (ROE) is one of the main tools of investors that is most often used in valuing a stock. In its calculations, ROE is generally generated from the distribution of profits with equity over the past year. ROE can provide an overview of three main things, namely the company's ability to generate profits (profitability), the efficiency of the company in managing assets (assets management), and debt used in doing business (financial leverage) (Prathama, et al., 2004).

ROE shows the amount of net income generated for each equity. The ROE growth is expected to increase the share price which is greater than the increase in earnings due to the better prospects of the company (Kholid, 2006). Damasita (2011) in his research stated that ROE has a positive effect on PER, but this is contrary to the research of Kurnianto (2013) and Ali (2012) which states that ROE does not affect PER.



Source: IDX, processed 2018

Figure 3 ROE Comparison of PER Value in INKP & SSMS Shares

In Figure 3, it can be seen that ROE is not always going to increase PER as happened in INKP shares. INKP's ROE increased from 2014 to 2015, but its PER actually declined. A similar thing also happens to SSMS shares. From 2016 to 2017 the company's ROE increased but its PER declined.

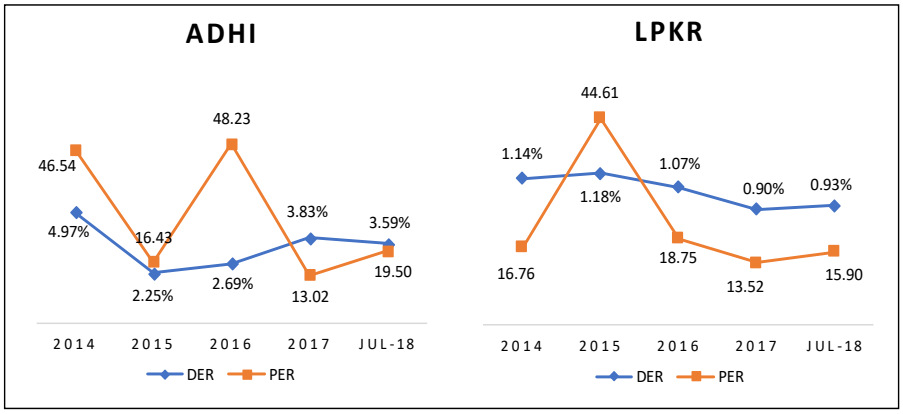
Companies that rely solely on capital or equity will certainly find it difficult to expand their business which requires additional capital. This is where companies sometimes need to take a debt policy to increase their capital. Debt decision making by companies aims to leverage or boost company performance. However, if the amount of debt exceeds the amount of equity held, then the company's risk in terms of financial liquidity is also higher. For this reason, a special ratio is needed to see the performance, namely Debt to Equity Ratio (DER).

DER is a ratio that compares the amount of debt to equity. This ratio is often used by analysts and investors to see how much the company's debt is compared to the equity held by the company or shareholders (Marli, 2010). In the study of Kholid (2006) and Anggraini (2012) stated that DER had a negative effect on PER. This statement contradicts the research results of Hayati (2010) and Setiawan (2011) which state that

there is a positive influence between DER on PER. The ability of a company to pay off its debts is also often used as a consideration for investors to invest.

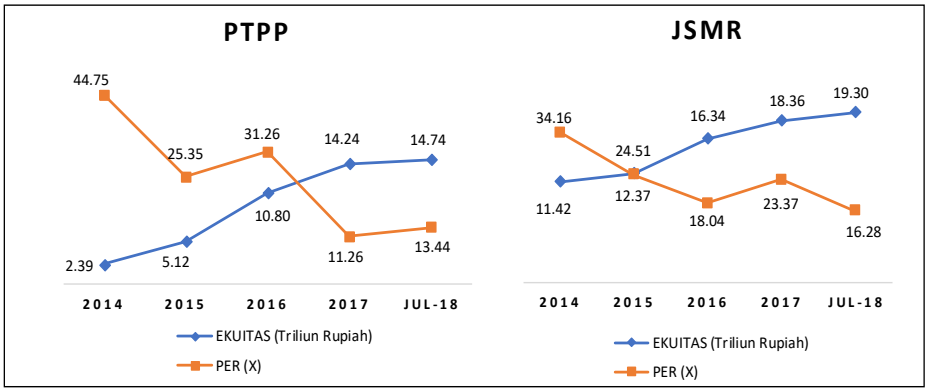
A company that has liquid assets is so large that it is able to fulfill all its financial obligations in the short term, it is said that the company is liquid. Conversely, if a company does not have sufficient liquid assets to meet all its financial obligations that must be fulfilled immediately, then the company is said to be insolvable (Riyanto, 2008).

From Figure 1.4 can be seen from 2014 to 2015, DER PT Adhi Karya has decreased. At the same time the PER value of the company also declined. The same thing happened to LPKR shares. From 2016 to 2017, the DER & PER of the company simultaneously decreased.



Source: IDX, processed 2018
Figure 4 Comparison of DER to PER Value in ADHI & LPKR Shares

Another factor that is thought to affect PER is the Firm Size. Firm Size is the size of the company that can be seen from the amount of equity value, sales value, and total asset value (Riyanto, 1999). Large companies are generally more diversified, easier to access the capital market, and pay lower interest rates, so the risk of bankruptcy is relatively smaller (Sartono, 2001). Damasita (2011) in his research stated that Firm Size had a positive effect on PER, while Ramadhani (2014) and Hasanah (2009) found that Firm Size had a negative effect on PER.



Source: IDX, processed 2018
Figure 5 Comparison of Equity Against Value of PER in PTPP & JSMR Shares

From Figure 5 it can be seen that not always if the firm size (measured in terms of equity) of a company increases, the value of PER also increases as well. From 2016 to 2017, PT PP's equity increased but its PER value declined. A similar thing also happened to PT Jasa Marga. From 2015 to

2016, the company's equity value increased. However, the PER value actually decreases.

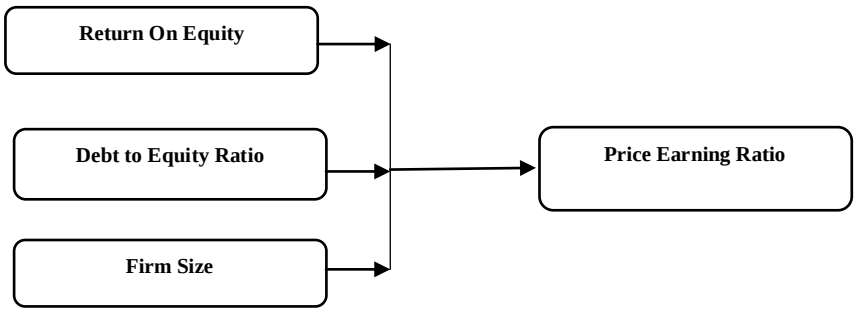


Figure 6 Conceptual Framework

Hypothesis

The research hypothesis is formulated as follows:

1. Return on Equity has a positive and significant effect on Price Earnings Ratio.
2. Debt to Equity Ratio has a negative and significant effect on Price Earnings Ratio.
3. Firm Size has a positive and significant effect on Price Earnings Ratio.
4. Return on Equity, debt to equity and firm size have a significant effect on Price Earning Ratio.

MATERIAL AND METHODS

This study uses a causal associative research design. Causative associative research is research that aims to identify causal relationships between various variables (Erlina, 2008). This study aims to examine the effect of independent variables on the dependent variable.

Population is a generalization area consisting of objects / subjects that have certain qualities and characteristics set by researchers to be studied and then drawn conclusions (Sugiyono, 2017). The population in this study were 54 companies registered in the LQ45 Index for the period of February 2015 - January 2018.

Samples are part of the number and characteristics of the population (Sugiyono, 2017). The sampling technique in this study was purposive sampling technique, which is data selected based on certain criteria that are suitable with the research objectives. So that the sample in this study amounted to 30 companies.

The data used in this study are secondary data in the form of ratio data. The data is taken from the financial statements of the LQ45 Index listed on the Indonesia Stock Exchange that meet the criteria of the study sample. Financial report data is obtained from www.idx.co.id. Ratio data taken is data for variable Price Earnings Ratio, Return on Equity, Debt to Equity Ratio, and Firm Size.

The data collection method used in this study is the documentation method. Documentation method is collecting data with documents that can be in the form of financial statements that have been collected and published. Collection of sample financial reports found at www.idx.co.id, journals both at home and abroad and other supporting references.

RESULTS AND DISCUSSION

Panel Data Regression Analysis

Regression analysis is used to test the hypothesis in the study. Regression analysis used in this study is a regression analysis that is used to test whether the independent variables, namely return on equity, debt to equity ratio, firm size have a direct effect on price earnings ratio.

1. Common Effect Model (CEM)

This method uses the ordinary least square (OLS) approach or the least squares technique to estimate the panel data model.

Table 1 Common Effect Model (CEM)

Dependent Variable: LOGPER?				
Method: Pooled Least Squares				
Date: 03/09/19 Time: 06:26				
Sample: 2015 2018				
Included observations: 4				
Cross-sections included: 30				
Total pool (balanced) observations: 120				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOGROE?	-0.165168	0.057450	-2.875002	0.0048
LOGDER?	-0.090510	0.041476	-2.182227	0.0311
LOGFS?	0.026560	0.038407	0.691542	0.4906
C	1.092695	0.048105	22.71489	0.0000
R-squared	0.104582	Mean dependent var		1.223179
Adjusted R-squared	0.081424	S.D. dependent var		0.220840
S.E. of regression	0.211659	Akaike info criterion		-0.234918
Sum squared resid	5.196732	Schwarz criterion		-0.142002
Log likelihood	18.09508	Hannan-Quinn criter.		-0.197184
F-statistic	4.516128	Durbin-Watson stat		1.231885
Prob(F-statistic)	0.004930			

Source: Processed EViews Data

2. Fixed Effect Model (FEM)

The fixed effect model (FEM) assumes that differences between individuals can be accommodated from the difference in intercepts. In order to estimate the fixed effect model (FEM) with different intercepts between individuals, the dummy variable technique is used.

Table 2 Fixed Effect Model (FEM)

Dependent Variable: LOGPER?				
Method: Pooled Least Squares				
Date: 03/09/19 Time: 06:26				
Sample: 2015 2018				
Included observations: 4				
Cross-sections included: 30				
Total pool (balanced) observations: 120				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOGROE?	-0.163624	0.054229	-3.017272	0.0033
LOGDER?	0.110001	0.168221	0.653905	0.5149
LOGFS?	0.016158	0.032152	0.502558	0.6165
C	1.097730	0.044032	24.93047	0.0000
Fixed Effects (Cross)				
_LOGADHI--C	0.078973			
_LOGADRO--C	-0.209298			
_LOGAKRA--C	0.063106			
_LOGANTM--C	-0.127112			
_LOGASII--C	-0.044686			
_LOGBBCA--C	-0.039816			
_LOGBBNI--C	-0.319185			
_LOGBBRI--C	-0.288665			
_LOGBBTN--C	-0.190622			
_LOGBMRI--C	-0.234396			
_LOGBMTR--C	-0.004480			
_LOGBUMI--C	-0.056439			
_LOGEXCL--C	0.017076			
_LOGGGRM--C	0.137701			
_LOGHMSP--C	0.242147			
_LOGINDF--C	-0.137895			
_LOGINTP--C	0.110320			
_LOGJSMR--C	0.134787			
_LOGKLBF--C	0.362544			
_LOGLPKR--C	-0.016670			
_LOGLPPF--C	0.046727			
_LOGPGAS--C	-0.110080			
_LOGPTBA--C	-0.173830			
_LOGSCMA--C	-0.127153			
_LOGSMGR--C	0.096155			
_LOGSSMS--C	0.210095			
_LOGTLKM--C	0.030208			
_LOGUNVR--C	0.343538			

Table 2 to be continued…				
_LOGWIKA--C	-0.073950			
_LOGWSKT--C	0.280900			
	Effects Specification			
Cross-section fixed (dummy variables)				
R-squared	0.564885	Mean dependent var		1.223179
Adjusted R-squared	0.404843	S.D. dependent var		0.220840
S.E. of regression	0.170370	Akaike info criterion		-0.473266
Sum squared resid	2.525271	Schwarz criterion		0.293294
Log likelihood	61.39597	Hannan-Quinn criter.		-0.161963
F-statistic	3.529603	Durbin-Watson stat		2.500962
Prob(F-statistic)	0.000002			

Source: Processed EViews Data

3. Random Effect Model (REM)

Table 3 Random Effect Model (REM)

Dependent Variable: LOGPER?				
Method: Pooled EGLS (Cross-section random effects)				
Date: 03/09/19 Time: 06:28				
Sample: 2015 2018				
Included observations: 4				
Cross-sections included: 30				
Total pool (balanced) observations: 120				
Swamy and Arora estimator of component variances				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOGROE?	-0.166565	0.051461	-3.236700	0.0016
LOGDER?	-0.072664	0.059417	-1.222948	0.2238
LOGFS?	0.025781	0.031043	0.830489	0.4080
C	1.091969	0.048609	22.46433	0.0000
Random Effects (Cross)				
_LOGADHI--C	-0.000115			
_LOGADRO--C	-0.138266			
_LOGAKRA--C	0.069089			
_LOGANTM--C	-0.134819			
_LOGASII--C	-0.031451			
_LOGBBCA--C	0.082273			
_LOGBBNI--C	-0.121634			
_LOGBBRI--C	-0.091819			
_LOGBBTN--C	-0.048688			
_LOGBMRI--C	-0.054230			
_LOGBMTR--C	-0.040510			
_LOGBUMI--C	-0.015101			
_LOGEXCL--C	0.059079			
_LOGGGRM--C	0.074087			
_LOGHMSP--C	0.154597			
_LOGINDF--C	-0.106055			
_LOGINTP--C	-0.023331			
_LOGJSMR--C	0.120548			
_LOGKLBF--C	0.162675			
_LOGLPKR--C	-0.003514			
_LOGLPPF--C	0.005130			
_LOGPGAS--C	-0.088322			
_LOGPTBA--C	-0.149337			
_LOGSCMA--C	-0.135802			
_LOGSMGR--C	0.017632			
_LOGSSMS--C	0.060135			
_LOGTLKM--C	-5.93E-05			
_LOGUNVR--C	0.287266			
_LOGWIKA--C	-0.078749			
_LOGWSKT--C	0.169292			
	Effects Specification			
			S.D.	Rho
Cross-section random			0.134114	0.3826
Idiosyncratic random			0.170370	0.6174
	Weighted Statistics			
R-squared	0.098904	Mean dependent var		0.655816
Adjusted R-squared	0.075600	S.D. dependent var		0.175958
S.E. of regression	0.169177	Sum squared resid		3.320002
F-statistic	4.244043	Durbin-Watson stat		1.924151
Prob(F-statistic)	0.006944			
	Unweighted Statistics			
R-squared	0.103149	Mean dependent var		1.223179
Sum squared resid	5.205049	Durbin-Watson stat		1.227306

Source: Processed EViews Data

In principle, the random effect model (REM) model differs from the common effect model (CEM) and fixed effect model (FEM), especially this model does not use the principle of ordinary least square but uses the principle of maximum likelihood or general least square.

Selection of Panel Data Regression Models

There are three forms of panel data regression models, namely common effect model (CEM), fixed effect model (FEM), and random effect model (REM). In choosing the best model, use the chow test to choose CEM or FEM, and the Hausman test (Hausman test) to choose FEM or REM.

1. Chow Test

Chow test (chow test) to choose between CEM or FEM models. If the probability of a chi-square cross-section is greater than 0.05 then the best model used is CEM, and vice versa if the probability of the chi-square cross-section is smaller than 0.05 then the best model used is FEM.

Decision criteria (Daryanto and Hafizrianda, 2010: 140):

Ho = accepted if the probability of chi-square cross-section ≥ error rate (α) 0.05, then the CEM model is better than the FEM model.

Ha = accepted if the probability of cross-section chi-square <error rate (α) 0.05, then the FEM model is better than the CEM model.

Table 4 Chow Test Estimation Results

Redundant Fixed Effects Tests			
Pool: DATA			
Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	3.173672	(29,87)	0.0000
Cross-section Chi-square	86.601779	29	0.0000

Source: Processed EViews Data

From the output Eviews the results of the chow test (chow test) show the value of the 0,000 chi-square cross-section is smaller than 0.05 meaning the null hypothesis is rejected. Thus between CEM and FEM, the best regression model is FEM.

2. Hausman Test

Because the model chosen based on the chow test (Few) is FEM, it is necessary to re-test it with a hausman test (hausman test) to choose whether the best model is between FEM or REM. If the probability of a random cross-section is less than 0.05 then the FEM model is chosen, and vice versa if the probability of a random cross-section is greater than 0.05 then the REM model is selected.

Decision criteria (Daryanto and Hafizrianda, 2010: 140):

Ho = accepted if the cross-section probability value is random ≥ error rate (α) 0.05, the REM model is better than the FEM model.

Ha = accepted if the cross-section random probability value <error rate (α) 0.05, then the FEM model is better than the REM model.

Table 5 Hausman Test Estimation Results

Correlated Random Effects - Hausman Test			
Pool: DATA			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	1.379870	3	0.7103

Source: Processed EViews Data

From the Eviews output Hausman test results (Hausman test) shows the random cross-section value of 0.7103 5 0.05, which means that the null hypothesis is accepted. Thus between REM and FEM, the best model used is REM. In accordance with the theory revealed (Gujarati, 2005) when the results obtained in panel data regression are REM, it is no longer necessary to carry out the classic assumption test because random effect models (REM) have met the classic assumption test equation, the generalized least square (GLS) method.

Hypothesis Testing

In this study the independent variable used is price earnings ratio (PER), while the dependent variable is return on equity (ROE), debt to equity ratio (DER), and firm

size (FS). In testing the hypothesis, the coefficient of determination analysis will be carried out, testing for simultaneous influence (F test), and testing for partial influence (t test). The following is the output of EViews panel data regression using random effect model (REM).

Table 6 Random Effect Model (REM) Panel Data Regression

Dependent Variable: LOGPER?				
Method: Pooled EGLS (Cross-section random effects)				
Date: 03/09/19 Time: 06:28				
Sample: 2015 2018				
Included observations: 4				
Cross-sections included: 30				
Total pool (balanced) observations: 120				
Swamy and Arora estimator of component variances				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
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LOGFS?	0.025781	0.031043	0.830489	0.4080
C	1.091969	0.048609	22.46433	0.0000
Random Effects (Cross)				
_LOGADHI--C	-0.000115			
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_LOGAKRA--C	0.069089			
_LOGANTM--C	-0.134819			
_LOGASII--C	-0.031451			
_LOGBBCA--C	0.082273			
_LOGBBNI--C	-0.121634			
_LOGBBRI--C	-0.091819			
_LOGBBTN--C	-0.048688			
_LOGBMRI--C	-0.054230			
_LOGBMTR--C	-0.040510			
_LOGBUMI--C	-0.015101			
_LOGEXCL--C	0.059079			
_LOGGGRM--C	0.074087			
_LOGHMSP--C	0.154597			
_LOGINDF--C	-0.106055			
_LOGINTP--C	-0.023331			
_LOGJSMR--C	0.120548			
_LOGKLBF--C	0.162675			
_LOGLPKR--C	-0.003514			
_LOGLPPF--C	0.005130			
_LOGPGAS--C	-0.088322			
_LOGPTBA--C	-0.149337			
_LOGSCMA--C	-0.135802			
_LOGSMGR--C	0.017632			
_LOGSSMS--C	0.060135			
_LOGTLKM--C	-5.93E-05			
_LOGUNVR--C	0.287266			
_LOGWIKA--C	-0.078749			
_LOGWSKT--C	0.169292			
	Effects Specification			
			S.D.	Rho
Cross-section random			0.134114	0.3826
Idiosyncratic random			0.170370	0.6174
	Weighted Statistics			
R-squared	0.098904	Mean dependent var		0.655816
Adjusted R-squared	0.075600	S.D. dependent var		0.175958
S.E. of regression	0.169177	Sum squared resid		3.320002
F-statistic	4.244043	Durbin-Watson stat		1.924151
Prob(F-statistic)	0.006944			
	Unweighted Statistics			
R-squared	0.103149	Mean dependent var		1.223179
Sum squared resid	5.205049	Durbin-Watson stat		1.227306

Source: Processed EViews Data

1. Determination Coefficient Analysis

Based on Table 4.7, it is known that the coefficient of determination (R-squared) is R2 = 0.098. This value can be interpreted that the return on equity (ROE), debt to equity ratio (DER), and firm size (FS) are

able to influence or explain the price earnings ratio (PER) simultaneously or together at 9.8%, the remainder is equal to 90.2% is explained by other factors not included in the research variable.

2. Simultaneous Effect Probability Test (Test F)

The F test aims to test the effect of independent variables together or simultaneously on non-independent variables.

Based on Table 4.7, it is known the Prob value. (F-statistics), which is 0.006 <0.05, it can be concluded that all independent variables, namely return on equity (ROE), debt to equity ratio (DER), and firm size (FS) simultaneously have a significant effect on the price variable earnings ratio (PER).

3. Partial Effect Probability Test (t Test)

The t test is used to find out whether individually or partially independent variables have an influence on firm value, assuming the other independent variables are constant.

Based on table 4.7, the regression model formed is as follows:

Y = 1,091–0,166X1 –0,072X2 + 0,025X3

Where:

Y: Price Earning Ratio (PER)
X1: Return On Equity (ROE)
X2: Debt To Equity Ratio (DER)
X3: Firm Size (FS)

Based on the results of the regression equation each variable explains that:

1. Constant value 1.091 shows if the value of the variable return on equity (ROE), debt to equity ratio (DER), and firm size (FS) is constant, the price earnings ratio (PER) is 1.091.
2. The return on equity (ROE) variable has a coefficient of -0.166, which is negative. This value can be interpreted that the return on equity (ROE) variable has a negative effect on the price earnings ratio (PER). This can be seen also on the probability (p) value of 0.0016, which is smaller than 0.05, so it is concluded that return on equity (ROE) has a significant effect on the price earning ratio (PER) variable.
3. The variable debt to equity ratio (DER) has a coefficient of -0.072, which is negative. This value can be interpreted that the variable debt to equity ratio (DER) has a negative effect on the price earnings ratio (PER). This can be seen also on the probability (p) value of 0.2238 which is greater than 0.05, so it is concluded that the debt to equity ratio (DER) has no significant effect on the price earning ratio (PER) variable.
4. Variable firm size (FS) has a coefficient of 0.025, which is positive. This value can be interpreted that the firm size (FS) variable has a positive effect on the price earnings ratio (PER). This can be seen also on the probability (p) value of 0.4080 which is greater than 0.05, so it is concluded that firm size (FS) has no significant effect on the variable price earnings ratio (PER).

DISCUSSION

Effect of Return on Equality on Price Earning Ratio

The results of partial hypothesis testing (t test) show that the return on equity (ROE) variable has a negative and significant effect on the price earnings ratio (PER) variable. The ROE coefficient value indicates that this negative and significant value is in line with the research conducted by Fery (2005), Setiawan (2011), Meygawan (2012) and Aji (2012) which states that return on equity has a negative and significant effect on price earnings ratio. This explains that the increase in return on equity actually decreases the price earnings ratio. It can be concluded that the company's ability to obtain profits is still doubted by investors in making decisions. But it is not in line with the research conducted by Nurul (2010), Hayati (2010) and Supriyanto (2009) which states that there is a positive and significant effect on the price earnings ratio.

The return on equity variable an increase in profit after tax causes ROE to

increase. While the price earning ratio variable increases profit after tax causes changes in earnings per share will also increase. Increased earnings per share causes the results of the price share per share with earnings per share to decrease, so this causes the price earning ratio to decrease.

Effect of Debt to Equality Ratio on Price Earning Ratio

The results of partial hypothesis testing (t test) show that the variable debt to equity ratio (DER) has a negative and not significant effect on the variable price earnings ratio (PER). Debt to equity ratio describes the comparison between total debt and total own capital which is intended for business funding. The greater the debt to equity ratio shows that the capital structure uses debt more than equity. The greater the debt to equity ratio reflects the lower solvency of the company so that the company's ability to pay its debt is low, this causes the company's risk to be relatively high. The existence of a high risk causes investment in a stock will be less attractive, as a result the stock price will decline so that the price earnings ratio will also decline.

This research is in line with the research conducted by Supriyanto (2009) which states that there is a negative influence and is not significant towards PER. Likewise with the results of Harry (2001) and Nurul (2006), Kholid (2010) and Hayati (2010) who stated that debt to equity ratio has a negative influence on price earning ratio and the study of kholid (2006) debt to equity ratio has no effect to price earnings ratio.

Effect of Firm Size on Price Earning Ratio

The results of partial hypothesis testing (t test) indicate that the variable firm size (FS) has a positive and not significant effect on the price earnings ratio (PER) variable. The greater the total assets of the company shows the higher the company's ability to fund investments owned by the company and also the ability of the company to finance its high operational activities, so that it does not rule out the possibility of companies expanding market share and increasing company profits and not close the possibility to expand earnings and dividends in the future which also increases. So, the greater the total assets, the positive effect on the greater the value of the company's earnings ratio.

Research that shows the size of a positive and not significant firm size measure is in line with the research conducted by Aji (2012) and Supriyanto (2009) which shows that total assets have a positive and significant effect on the price earnings ratio.

Firm size shows the ability of companies to conduct business activities to generate profits that will affect stock prices. But it is not in line with the research conducted by Indra (2009) which shows that total assets have a negative and not significant effect on the price earnings ratio.

Research Implications

Based on the results of the analysis and discussion of this research, it is expected to be able to provide benefits for LQ45 Companies on the Indonesia Stock Exchange in terms of the effect of return on equity, debt to equity ratio, and firm size on price earnings ratio (PER). The implications of the benefits of this study are as follows:

1. Variable debt to equity ratio (DER) is a ratio to measure how far the company is financed by debt, where the higher the ratio describes the symptoms that are not good for the company. The results of this study indicate that the debt to equity ratio (DER) has a negative and significant effect on the variable price earnings ratio (PER). This implies that the company must maintain the stability of the amount of debt that is available by carrying out policies by the company management to reduce the value of debt. Therefore, companies need to calculate current liabilities that must be paid appropriately so that excess current assets can be allocated and used in

operational activities so that they can suppress the debt to equity ratio (DER). If the debt to equity ratio (DER) is successful, the company will avoid financial imbalances so that the company continues to expand its business or expand.

2. Variable return on equity (ROE) is a ratio to measure the company's ability to obtain profits available to the company's shareholders. The results of this study indicate that return on equity (ROE) has a negative and not significant effect on the price earning ratio (PER) variable. If there is a high risk it will cause investment in a stock to be less attractive, as a result the stock price will drop so that the price earnings ratio will also decline. Companies need to make risk control strategies that are too large to become a more attractive share investment opportunity for investors so investors expect high returns. Companies that have low profitability need to improve their company's performance so as not to reduce investor interest in investing in the company. When the performance of a company is good, investors will catch up on it and they will flock to buy shares of the company and the company will get an injection of funds to continue to develop a good business so that the welfare of investors can be carried out.
3. Variable firm size (FS) or company size is the size of the company which can be seen from the amount of equity value, sales value, and total asset value. The results of this study indicate that firm size (FS) has a positive and significant effect on the price earning ratio (PER) variable. This implies that the management should make a policy to more easily access the capital market, increase its sales which will have an impact on the company's profits so that it will increase the size of the company.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

1. Variable return on equity (ROE) has a negative and significant effect on the variable price earnings ratio (PER).
2. Variable debt to equity ratio (DER) has a negative and not significant effect on the variable price earnings ratio (PER).
3. Variable firm size (FS) has a positive and not significant effect on the variable price earnings ratio (PER).
4. ROE, DER and Firm Size simultaneously have a significant effect on Price Earning Ratio (PER).

Recommendations

1. As a company that has been recognized for its liquidity, it is better that companies listed in LQ45 shares must be able to better maintain and improve the company's performance in order to attract the attention of investors to invest and can increase the price earnings ratio (PER).
2. For Financial Managers Companies can determine attractive policies to improve the welfare of investors and company profits from the results and discussion of this research so that investors can determine the right investment decisions.
3. For investors the results and discussion of this research can be used as an assessment so that fair prices through price earnings ratio ratios and factors that influence price earning ratios to selling and stock decision making in placing capital and investing in the company.
4. This research is only limited to 4 years of observation, starting from 2015-2018, to the next researcher can increase the number of years of observation.
5. For further research, other additional variables can be used so that the results of the study are better able to predict the price earnings ratio (PER) more accurately and accurately.
6. The next researcher is expected to be able to reexamine firm size (FS) as an intervening variable, because it can be

used as a comparison and support for the results obtained.

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