THE EFFECT OF EARNINGS PER SHARE (EPS) & RETURN ON EQUITY (ROE) ON STOCK PRICE OF BANKING COMPANY LISTED IN INDONESIA STOCK EXCHANGE (IDX) 2010-2014

PENGARUH *EARNINGS PER SHARE* (EPS) & *RETURN ON EQUITY* (ROE) TERHADAP HARGA SAHAM PERBANKAN YANG TERDAFTAR DI BURSA EFEK INDONESIA (BEI) TAHUN 2010-2014

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Abstract: *Capital market is one of the instruments in the world of business to make profit. Investors invest at capital markets because of the expected profit. Investors often suffer loss of funds when investing because they do not see the factors that affect the value of the stock price. The purpose of this research was analyzing the effect of Earnings per Share (EPS) and Return on Equity (ROE) on Stock Price of banking company listed on Indonesia Stock Exchange in 2010-2014. The samples used were 5 banking companies that passed the test of purposive sampling. Correlation coefficient (R) indicates the variable has a strong relationship. Coefficient of determination shows that the Stock Price is influenced by the EPS and ROE. Simultaneously both EPS and ROE variables affect stock price. Partially, EPS have significant positive effect on Stock Price while ROE does not affect partially on Stock Price. Thus, banking companies listed in the Indonesia Stock Exchange in improving corporate performance need to pay attention to Earnings per Share and Return on Equity because both variables simultaneously have a significant effect on stock prices*

Keywords*: stock price, EPS, ROE*

Abstrak: Pasar modal merupakan salah satu instrumen dalam dunia bisnis untuk memperoleh keuntungan. Investor berinvestasi di pasar modal karena keuntungan yang diharapkan. Investor sering kali menderita kerugian dana ketika berinvestasi, karena mereka tidak melihat faktor-faktor yang mempengaruhi nilai harga saham. Tujuan penelitian ini untuk mengetahui pengaruh *Earnings per Share* dan *Return on Equity* pada Harga Saham perbankan yang terdaftar di Bursa Efek Indonesia tahun 2010-2014. Sampel yang digunakan adalah 5 perusahaan perbankan yang lulus uji *purposive sampling*. Koefisien korelasi (R) menunjukkan variabel memiliki hubungan yang kuat. Koefisien determinasi menunjukkan bahwa harga saham dipengaruhi oleh EPS dan ROE. Secara simultan kedua variabel EPS dan ROE mempengaruhi harga saham. Secara parsial, EPS berpengaruh positif dan signifikan terhadap Harga Saham sementara ROE secara parsial tidak berpengaruh terhadap Harga Saham. Manajemen perbankan yang berinvestasi di Bursa Efek Indonesia dalam meningkatkan kinerja perusahaan perlu memperhatikan *Earnings per Share* dan *Return on Equity* karena kedua variabel tersebut secara simultan berpengaruh positif dan signifikan terhadap harga saham.

Kata kunci : *harga saham, EPS, ROE*

INTRODUCTION

Research Background

The capital market is a meeting between parties with excess funds with those in need of funds by trading in securities. Capital markets can also be interpreted as a market to trade securities that generally have a lifespan of more than one year, such as stocks and bonds (Tandelilin, 2008:13). Investment is a monetary asset purchased with the expectation of capital appreciation, dividends (profit), interest earnings, rents or some combination of these returns. One form of investment is by purchasing common stock at the stock exchange.

Tandelilin (2010:2) defined investment as the commitment of a number of funds or other resources were done at the present time, with the goal of obtaining a number of advantages in the future. An investor buys a stock at the present time with the hope of gaining profit from rising stock prices or some dividends in the future, as a reward for the time and risk associated with these investments. Stock exchange is a form of exchange which provides services for stock brokers and traders to buy or sell stocks, bonds, and other securities. Stock exchanges also provide facilities for issue and redemption of securities and other financial instruments, and capital events including the payment of income and dividends.

Banking companies is extremely required to be the mediator between those who have excessive fund and those who need financial help. Bank funds sources are collected from the society. The funds are then used for developing business through loan or credit. The Banking Companies stocks at Indonesia Stock Exchange are highly sought by the investors because the capital is smaller than investing in other sectors and banking company management is overseen and regulated by the government, ensuring the banking sector will always be professional and transparent in managing public funds.

Research Objectives

The objectives of this research are to analyze the effect of:
1. Earnings per Share and Return on Equity on Stock Price Simultaneously.
2. Earnings per Share on Stock Price Partially.
3. Return on Equity on Stock Price Partially.

THEORETICAL FRAMEWORK

Financial Management

Gitman (2006:4) said that finance is concerned with the process, institutions, markets, and instruments involved in the transfer of money among individuals, businesses and governments. Finance also can be considered as the art and science of managing money. Lasher (2008:5) defined financial management as the control of money related operations within a business. Keown (2005:4) stated that Financial Management deals with the maintenance and creation of economics value by focusing on decision making with the purpose to creating wealth. Gallagher & Andrew, Jr (2003:5) essentially defined financial management as a combination of accounting and economics. Financial management is about managing business firm finance, assesses risk, analyze and plans a firm's finance, evaluates and select investments, decide where and when to find money sources and how much money to raise and return to the investors.

Earnings per Share

EPS is the measurements of managerial efficiency as well as firm performance (Umar & Musa. 2013). Tandelilin (2010:373), Stated that Earnings per Share information of a company show the company's net profit is ready to be distributed to all shareholders of the company. High EPS can be interpreted that the company will provide a great income opportunity for investors. Earnings per share (EPS) are considered as an analytical tool that uses the level of profitability of the company.

Return on Equity

Return on Equity (ROE) is a profitability ratio that is used to measure the level of return the company or the effectiveness of the company in generating profits that are the rights of capital owners. ROE is calculated as net profit after tax divided by the total shareholder's equity. This ratio measures the shareholders rate of return on their investment in the company (Kabajeh, et al. 2012).

Stock Price

The stock price is a selling or buying price in the securities market which are determined by market forces that depends on the strength of demand (supply) and offers (request to sell).

Previous Research

Umar & Musa (2013) on their research in Nigeria on relationship between Stock Price and Firm Earnings per Share, using a simple linear regression model on a panel of 140 Nigerian firms from a total population of 216 firms' operated in Nigerian Stock Exchange, it is found that that relationship between stock prices and Earnings per Share is insignificant. Kabajeh, et al (2012), examined the relationship between the ROA, ROE and ROI ratios together and separately with Jordanian insurance public companies share prices during the period (2002-2007), separated analysis showed no relationship between the ROE ratio with market share prices of Jordanian insurance public companies.

Conceptual Framework

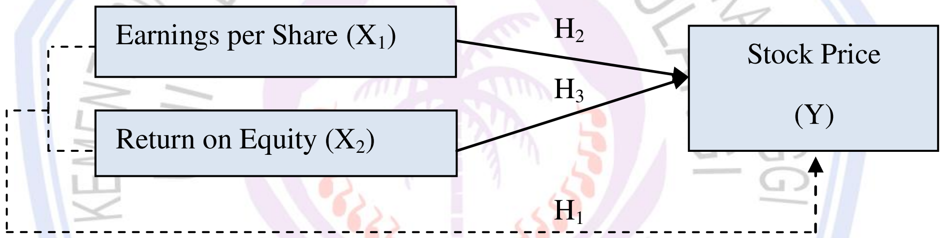

Figure 1. Conceptual Framework

Research Hypothesis

This research hypothesized that:
H_1: Earnings per Share and Return on Equity have simultaneous effect on Stock Price of Banking Companies in Indonesian Stock Exchange.
H_2: Earnings per Share has partial effect on Stock Price of Banking Companies in Indonesian Stock Exchange.
H_3: Return on Equity has partial effect on Stock Price of Banking Companies in Indonesian Stock Exchange.

RESEARCH METHOD

Type of Research

Type of this research is causal type research where it will analyze the effect of Earnings per Share and Return on Equity on Stock Price.

Place of Research

The research was conducted at Indonesian Stock Exchange using data from the annual report from 2010-2014.

Population and Sample

Sekaran & Bougie (2009:35) defined population as the entire group of people, events, or things that the researcher desires to investigate.

The Population that is observed in this research is the Banking Companies Listed in IDX. The sampling method that will be used in this research is purposive sampling method. In this case the criteria are:

1. Sample used is from Annual Report of BNI, BCA, BRI, Mandiri & Danamon
2. Shares used are the closing stock price from annual report 2010 to 2014.
3. Earnings per Share is from annual report 2010 to 2014.
4. Return on Equity is from annual report 2010 to 2014.

Data Collection Method

Method of data collection in this research is with collecting secondary data retrieved from Banking Companies Annual Report from 2010-2014, Stock performance of Banking Companies acquired from Indonesia Stock Exchange (IDX), journals, articles, scientific papers and notes from print and electronic media. The data collected is Banking Companies stock price 2010-2014 as well as Earnings per Share and Return on Equity Data.

Data Analysis Method

Multicollinearity

Multicollinearity test is used to find whether correlation exist between the independent variables. A good regression model shows no correlation between the independent variables. Multicollinearity test is done by looking at the tolerance and the inflation factor value.

Heteroscedasticity

Heteroscedasticity is an assumption to examine the dissimiliar of residual from one to another observation. A model is free from heteroscedasticity if the chart does not form any specific pattern

Normality

Normality Test are used to determined whether a data set is well modeled by a normal distribution or not. A P-P plot or histogram of the residual can help researcher to check the assumption of normality of the error term.

Autocorrelation

Autocorrelation is the correlation between observed data that is organized based on data in a certain time or time series or is cross-sectional. It is used to test correlation between errors in a linear regression model. Autocorrelation could be identified by calculating the critical value of Durbin-Watson statistic.

Multiple Regression Method

Multiple regression analysis is a statistical technique to predict the variance in the dependent variable by regressing the independent variable against it (Sekaran & Bougie, 2009:350).

The formula of multiple regression analysis method is as follows:

$$\mathbf{Y = \alpha + b_1X_1 + b_2X_2 + e}$$

Where:
Y : Stock Price
α : The constant, when all the independent variable equal to 0
b_1 : The slope of Earnings per Share variable
b_2 : The slope of Return on Equity variable
X_1 : Value of Earnings per Share variable
X_2 : Value of Return on Equity variable
e : Error

RESULT AND DISCUSSION

Result of Classical Assumption

Multicolinearity

Table 1. Multicolinearity

Coefficients[a]

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	LnX_1	.703	1.422
	LnX_2	.703	1.422

a. Dependent Variable: LnY
Source: Data processed, 2015

Since all the tolerance value is more than 0.2 and the Variable Inflation Factor (VIF) is less than 10. It can be concluded that in the regression model there is no multicolinearity problem or there is no multicollinearity between independent variables in the regression model.

Heteroscedasticity

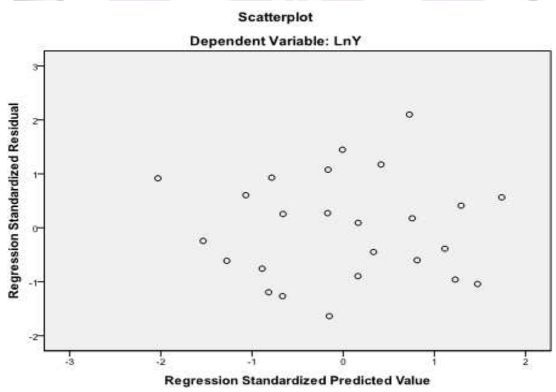

Figure 2. Heteroscedaticity Test Output
Source: Data processed, 2015

Figure 2 shown that the pattern of the dots is spreading and do not create a clear pattern, and the dots is spreading above 0 (Zero) in the Y Axis, which means that the model is free from heteroscedasticity.

Normality

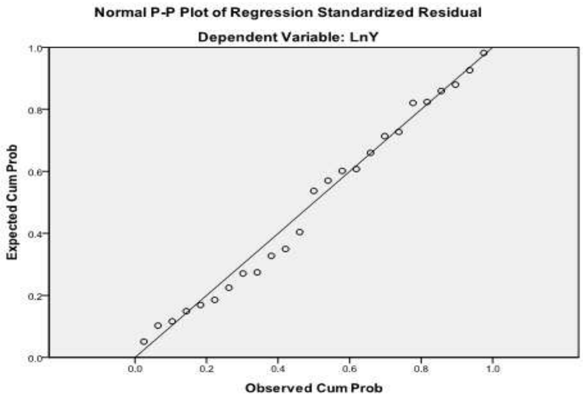

Figure 3. Normality Test Output

Source: Data Processed, 2015

The Figure 3 shows that the data represented by the dots are spreading near the diagonal line and the spreading is following the direction of the diagonal line. This proves that the model is passing the normality test.

Multiple Regression Analysis

Table 3. Multiple Regression Result

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.800	.388		4.645	.000
	LnX1	.609	.154	.668	3.945	.001
	LnX2	.062	.081	.128	.758	.456

a. Dependent Variable: LnY
Source: Data processed, 2015

From the result it can be seen that the regression models obtained are:

$$\mathbf{Y = 1.800 + 0.609X_1 + 0.062X_2}$$

Interpretation of the equation is:

1. α value of 1.800 which means that if X_1 and X_2 constant or equal to zero then the value of Y variable is predicted to be 1.800.
2. X_1 (Earnings per Share) has an effect to Y (Stock Price) with a regression coefficient of 0.609. This means that the variable Earnings per Share have a positive effect on the Y variable. In a condition where other variables are constant, if there is one unit increasing in X_1 (Earnings per Share), Y (Stock Price) is predicted to be increased by 0.609.
3. X_2 (Return on Equity) has an effect to Y (Stock Price) with a regression coefficient of 0.068. This means that the variable Return on Equity have a positive effect on the Y variable. In condition where other variables are constant, if there is one unit increasing in X2 (Return on Equity), Y (Stock Price) is predicted to be increased by 0.068.

Coefficient Correlation R and R^2

Table 4. R and R^2

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.746[a]	.556	.516	.11116	1.047

a. Predictors: (Constant), LnX_2, LnX_1
b. Dependent Variable: LnY
Source: Data processed, 2015

The analysis of correlation (r) is equal to 0.746 indicating that the Correlation of Earnings per Share (X_1) and Return on Equity (X_2), on Stock Price (Y) has a strong relationship. The analysis of determination (R^2) value of 0.556 in this study may imply that the contribution of the effect of Earnings per Share (X_1) and Return on Equity (X_2) on Stock Price (Y) is 55.6% while the remaining 44.4% is affected by other variables not examined in this study.

Hypothesis Testing

F test

Table 5. F test result

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.341	2	.170	13.797	.000[a]
	Residual	.272	22	.012		
	Total	.613	24			

a. Predictors: (Constant), LnX_2, LnX_1
b. Dependent Variable: LnY
Source: Data processed, 2015

ANOVA F-test results on Table 5 shows that the F_{Count} Value of 13.797 with significance of 0.000. Because the sig < 0.05 means the confidence of this prediction is above 95% and the probability of this prediction error is below 5% which is 0.000. Therefore accepting H_1. Thus, the hypothesis formula that is Earnings per Share and Return on Equity have simultaneous effect on Stock Price of Banking Companies in Indonesian Stock Exchange is accepted.

t Test

t Test result

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.800	.388		4.645	.000
	LnX1	.609	.154	.668	3.945	.001
	LnX2	.062	.081	.128	.758	.456

a. Dependent Variable: LnY
Source : Data processed, 2015

The t-test results are as follows:

1. T_{count} for X_1 is at 3.945 is greater than the value of 3.44 t_{table} means X_1 has significant influence partially on Y. The sig. value at 0.001 means that prediction of X_1 effect on Y doing errors is 0.1%, thus the confidence of this prediction is above 95%. Therefore, H_2 is accepted, meaning that Earnings per Share have partial effect on Stock Price of Banking Companies listed in Indonesia Stock Exchange.

2. T_{count} for X_2 is at 0.758 is lower than the value of 3.44 t_{table} means X_2 has no significant influence partially on Y. The sig. value at 0.456 means that prediction of X_2 effect on Y doing errors is 45.6 %, thus the confidence of this prediction is below 95%. Therefore, H_3 is rejected. It means that Partially, Return on Equity does not affect the stock Price of Banking Company listed in Indonesia Stock Exchange.

Discussion

When investors want to invest, they look first at the financial performance, good and bad financial performance can be measured through the financial ratios, which among others, are examined in this study, namely Earnings per Share (EPS) and Return on Equity (ROE). Simultaneously, Earnings per Share and Return on Equity affect the stock price, Results of this research is supported by the results of the analysis of multiple correlation coefficients and determination which shows that the earnings per Share and Return on Equity has a strong relationship with Stock Price.

Earnings per Share variable significantly affect the stock price. This is because Earnings per Share are important indicator of a company's financial health. High Earning per Share can be interpreted that the company will provide a great income opportunity for investors. An investor buying and maintaining a company's stock with the hope of getting dividends, Profit is usually the basis for determining the payment of dividends and increases in stock value in the future. This result is supported with the research of Silviana & Rocky (2013) in Indonesia Stock Exchange. The research shows that Earnings per Share have important impacts on stock prices. Return on Equity does not have partial effect on stock price. It is because Return on Equity is not an absolute indicator of a company value. A high Return on Equity doesn't show if a company has excessive debt and is raising its funds though borrowing rather than issuing shares. This result is supported with the research of Kabajeh, et al (2012), the research was done at Jordanian insurance public companies during the period of 2002-2007. It showed that partially, there are no relationships between the Return on Equity ratio with market share prices of Jordanian insurance public companies.

CONCLUSION & RECOMMENDATION

Conclusion

The result of the previous discussion, there are constructive findings that can be concluded from the overall result in this research, which are listed as follow:

1. Earnings per Share and Return on Equity have a simultaneous effect on Stock Price.
2. Earnings per Share variable significantly affect the stock price.
3. Return on Equity does not have partial effect on stock price

Recommendation

This research recommends the following:

1. For investors that want to invest their funds at banking company at Indonesia Stock Exchange, the financial ratio analysis can affect share prices significantly, therefore this ratio is important to be used as indicators in decision-making in investing and for banking companies listed in Indonesia stock exchange in improving corporate performance variables need to pay attention to Earnings per Share and Return on Equity due to both variables simultaneously have a significant effect on stock prices.
2. Banking companies listed in Indonesia stock exchange in improving corporate performance variables need to pay attention to Earnings per Share and Return on Equity due to both variables simultaneously have a significant effect on stock prices.

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