
ANALYSIS OF FINANCIAL RATIO ON EARNING PER SHARE IN CONSTRUCTION COMPANIES IN INDONESIA

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ABSTRACT

This study aims to determine the effect of Debt to Asset Ratio, Debt to Equity Ratio, Total Asset Turnover, Firm size, and Ownership on Earning Per Share in construction companies in Indonesia. The sample in this study is construction companies listed on the IDX, with a sampling technique using purposive sampling and data analysis tools using multiple regression analysis. The results of the analysis indicate that debt to asset ratio, debt to equity ratio, ownership and firm size has no significant effect on earning per share, while total asset turnover significantly has an effect on earning per share. The positive effect shows that the faster the asset turnover in generating sales, the more Earning Per Share will increase.

KEYWORDS: Earning Per Share, Debt to Asset Ratio, Debt to Equity Ratio, Total Asset Turnover, Firm Size, Ownership

1. INTRODUCTION

Infrastructure becomes one of the pillars in supporting Indonesia's national economic growth. The construction sector ranked third position in 2016 as a source of economic growth in Indonesia. A productive economy is impossible to achieve if it is not supported by the availability of adequate infrastructure. Therefore, infrastructure is the key to economic growth, including equitable development (Ministry of Public Works and Housing of the Republic of Indonesia, 2017). The availability of infrastructure will be a solution to the fundamental problems related to poverty and gap that have shackled some of Indonesia's population. Thus, the government has a mission to raise infrastructure development, reaching the remote areas of the country (Ministry of Public Works and Housing of the Republic of Indonesia, 2017). This becomes an interest for investors in the construction sector, including building construction, toll roads, bridges, power plants, LRT, dams, factories, oil and gas, and other constructions. According to CDMI research, in the last five years (2012-2016), the performance of domestic construction companies has increased fantastically. Their income continued to increase until September 2016. The performance of construction companies listed on the Indonesia Stock Exchange (IDX) has also improved fantastically.

Company performance can be assessed from various aspects, but in general, the community considers that companies that achieve optimal performance are companies that can obtain high profits. Company performance is an overview of the company's condition or the company's financial condition in a certain period. In assessing company performance, most performance measurement

tools assess company performance based on one or more of the following: effectiveness, efficiency, quality, timeliness, productivity, and safety (Boldeanu & Pugna, 2014). The factors that affect company profits, both internal and external factors are required to analyze further. The internal factors include asset management, debt management, equity management, and sales strategies, while the external factors include political conditions, the global economy, and banking factors. In this study, the internal factors of the company that can affect company profit will be examined. The internal factors examined as independent variables are the debt to asset ratio, debt to equity ratio, total asset turnover, firm size, and ownership. Whereas the dependent variable is the earning per share. Earning per share is the most widely used indicator to assess the profitability of a company. Earning per share is also used as a proxy to assess company performance. Earning per share refers to the portion of a company's profit that is allocated to each outstanding common stock. Earning per share is usually considered as the most significant variable in determining company value and assessing company performance (Freihat & Kanakriyah, 2017).

2. LITERATURE REVIEW

A company brings dividend benefits to shareholders when it generates adequate profits to be distributed. Thus, profits are very important not only for managers but also owners. That is why a large number of studies pay a lot of attention to profitability aside from other financial performance parameters, such as liquidity, activity ratio, and leverage/solvency. The leverage ratio is an indicator of company solvency (Lieb et al., 2019). The solvency ratio is a key metric as it assesses the company's ability to pay its debt and other financial obligations. The leverage ratio can assess the company's position on all obligations to other parties, the company's ability to meet fixed obligations, and the balance between the value of fixed assets and capital. Financial leverage is assessed by three short-term debt ratios to total assets, long-term debt ratio to total assets, and total debt to total assets (Saedi, 2009; Ebaid, 2009).

2.1. Debt to asset ratio

This ratio assesses the number of funds originating from debt. This ratio shows the extent to which debt can be covered by company assets. The smaller the ratio, the safer (solvable). Creditors will prefer a low debt ratio.

2.2. Debt to equity ratio

This ratio shows the composition or structure of total loan capital (debt) to total capital (equity) of the company in meeting its long-term obligations. Debt to equity ratio is the ratio between total debt and total equity. Debt to equity ratio is used to assess the use of debt to the total equity of the company's shareholders (Ang, 1997). High debt to equity ratio shows the greater composition of total debt (short-term and long-term) than the total capital itself, so that it gives impact on the company's burden to outside parties (Ang, 1997).

2.3. Total asset turnover

Total asset turnover is also one measurement of the efficiency ratio. Total asset turnover assesses how efficient the assets used to earn income (Crane, 1998). The higher the asset turnover rate, the better the company uses its assets to generate sales. The higher the total asset turnover, the higher the income invested in assets (Nuhu, 2014). Total asset turnover refers to an assessment that shows the efficiency in which a company uses its assets to generate sales (Gitman, 2015; Horne and Wachowicz, 1992) and according to Weston and Copeland (1992), the total asset turnover ratio is the calculation of investment management efficiency in each item of individual assets. The higher the ratio numbers mean that the company can manage their assets to earn an income so that higher profits can be obtained by the company.

2.4. Firm Size

Firm size can affect performance. Larger companies may have more capacity and capability (Frank & Goyal, 2003; Ebaid, 2009). One benchmark that shows the firm size is the size of the company's assets. The higher the company's total assets, the more it can generate profits. Firm size is one of the important factors that affect stock returns (Hou and Dijk, 2008).

2.5. Ownership

The quality of management and transparency of ownership structure are the most important criteria for assessing the financial stability of a company (Dolgopyatova, 2017; Ivashkovskaya & Stepanova, 2011; Iwasaki, Mizobata & Muravyev, 2018). The study of the relationship between ownership structure and company performance is one of the important areas in the field of strategic management (Ciampi, 2015; Ciftci et al., 2019; Darrat et al., 2016; Demsetz & Villalonga, 2001; Fukuda et al., 2018; Liang et al., 2016). The ownership structure in an organization provides an arrangement in which management is in control and responsible for every decision carried out in daily business activities, including reporting (Allegrini & Greco, 2013; Muniandy & Ali, 2012).

2.6. Earning per share

Earning Per Share is generally considered the most crucial factor for determining stock prices and company value. Literature shows that most individual investors make each investment decision based on earning per share (Md. Rashidul Islam, Tahsan Rahman Khan, Tonmoy Toufic Choudhury, Ashique Mahmood Adnan, 2014). Earning per share is the indicator most widely used to assess the profitability of a company. Earning per share is also used as a proxy to assess company performance. Earning per share refers to the portion of a company's profit that is allocated to each outstanding common stock. Earning per share is usually considered as the most significant variable in determining company value and assessing company performance (Freihat & Kanakriyah, 2017).

3. RESEARCH HYPOTHESIS

Debt to asset ratio is a ratio used to assess the rate of use of debt in financing assets. The increase in debt will affect the size of the net income available to shareholders, including the income received because the obligation to pay debts becomes the priority over profit sharing.

H1 : debt to asset ratio has a negative effect on earning per share

Debt to equity ratio functions to find out every rupiah of its own capital used as debt collateral. The higher the ratio, the higher the source of funds from debt. Thereby, the higher the assets owned by the company mostly funded from debt, the higher the risk borne by the company.

H2 : debt to equity ratio has a negative effect on earning per share.

Total asset turnover assesses the extent to which the assets have been used in activities or shows how many times the asset rotates in a certain period. The higher the total asset turnover, the better because all assets used to support sales activities will also certainly increase the company’s profit.

H3 : total asset turnover has an effect on earning per share

Firm size is an important factor in profit establishment. A larger company might have more capacity and capability. The higher the company’s total assets, the more it can generate profits.

H4 : firm size has an effect on earning per share

The quality of management and transparency of ownership structure are the most important criteria for assessing the financial stability of a company. Institutional ownership can minimize conflicts of interest between principals and agents. With the existence of institutional control, it can optimize the control of management performance to avoid any misconduct by management.

H5: There is an influence between institutional ownership on earning per share.

4. RESEARCH METHODS

This study uses secondary data from financial statements of each construction sector company listed on the Indonesia Stock Exchange (IDX), which was published for the years 2013-2017. Purposive sampling was used as the sampling technique. The data analysis in this study used multiple linear regression analysis. The data processing in this study used the Statistical Package for the Social Science (SPSS) program Version 23.0. The equation used in this study is:

$$EPS = \alpha + \beta_{debt\ to\ asset\ ratio} + \beta_{debt\ to\ equity\ ratio} + \beta_{total\ asset\ turnover} + \beta_{total\ assets} + \beta_{ownership} + \epsilon$$

Notes :

EPS	: Earning per Share
α	: Constanta
β	: Regresion Coefficient
ϵ	: error

5. RESULTS AND DISCUSSION

5.1. Data Analysis Results

5.1.1. Normality Test

Normality test results show that the data are normally distributed.

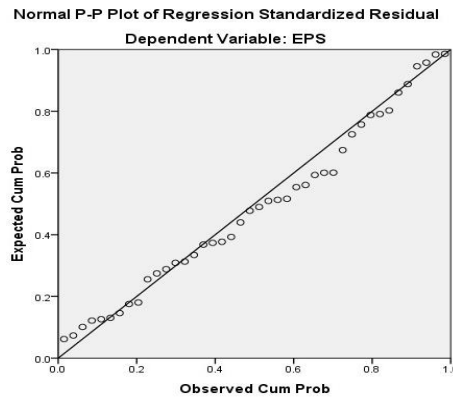


Figure 1. Normality Test

5.1.2. Multicollinearity Test

Multicollinearity test results show that the VIF values of each independent variable are below 10 and tolerance values are above 0.1. This indicates that there is no correlation between the independent variables or it is multicollinearity free.

Table 1. Multicollinearity Test Results

Variabel	Tolerance	VIF
<i>debt to asset ratio</i>	0,132	7,579
<i>debt to equity ratio</i>	0,155	6,448
<i>total asset turnover</i>	0,630	1,587
<i>ownership</i>	0,646	1,547
<i>LnTotal Assets</i>	0,440	2,274

5.1.3. Heteroscedasticity Test

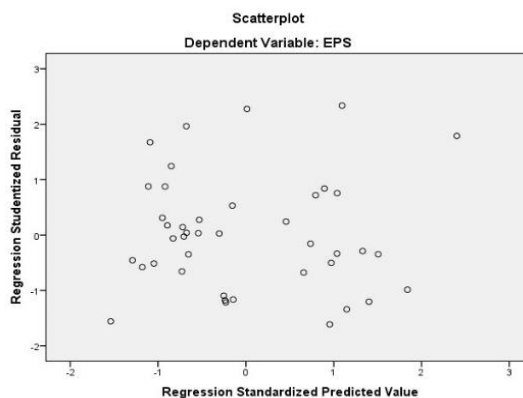


Figure 2. Heteroscedasticity Test Results

Based on Figure 2, it can be seen that the plot is spread irregularly or does not form a certain pattern. This shows that there was no heteroscedasticity in the regression model.

Based on the results of the classical assumptions test, it can be concluded that the regression model used is free from the problem of linear unfamiliarity, so that it can be used to draw conclusions.

5.1.4. Multiple Regression

The results of multiple regression analysis can be seen in Table 2.

Variable	Regression Coefficient	Standar error	t	Sign
<i>Constanta</i>	-51,364			
<i>Debt to asset ratio</i>	-17,620	31,871	-0,553	0,584
<i>Debt to Equity Ratio</i>	4,448	3,759	1,183	0,244
<i>Total Asset Turnover</i>	23,052	6,507	3,542	0,001
<i>Ownership</i>	0,052	0,139	0,372	0,712
<i>Ln Total Assets</i>	2,679	2,044	1,311	0,198
R ²	0,339			
Adj R ²	0,248			
F	3,699			
Prob F	0,008			

Based on the results of the regression analysis in Table 2, a regression equation can be made as follow:

$$EPS = -51.364 - 17.620_{debt\ to\ asset\ ratio} + 4.448_{debt\ to\ equity\ ratio} + 23.052_{total\ asset\ turnover} + 0.052_{ownership} + 2.679_{Ln\ Total\ Asset} + \epsilon$$

Based on the results of the regression equation, it can be concluded that the debt to asset ratio has a negative effect on earning per share. Debt to equity ratio has a positive effect on earning per share. Total asset turnover has a positive effect on earning per share. Ownership has a positive effect on earning per share and firm size (LnTotal Asset) has a positive effect on earning per share.

5.1.5. Coefficient of Determination

The results of Adj R² shows the coefficient of determination of 0.248 or 24.8%, which shows that the five independent variables including debt to asset ratio, debt to equity ratio, total asset turnover, ownership and LnTotal Asset have an effect on earning per share of 24.8%, the remaining 75.2% indicates that earning per share is influenced by other variables.

5.1.6. F Test

The F test result is 3.699 with a significance of 0.008. It shows that collectively, the debt to asset ratio, debt to equity ratio, total asset turnover, ownership, and LnTotal Asset has a significant effect on earning per share.

5.1.7. T Test

The t test result of the debt to asset ratio variable is -0.533 with a significance of 0.584, in which the significance value is higher than 0.05, which shows that the debt to asset ratio has no significant effect on earning per share. The t test result of the debt to equity ratio is 1.183 with a significance of 0.244, which means that the debt to equity ratio has no significant effect on earning per share. The t test result of total asset turnover is 3.542 with a significance of 0.001, which means that total asset turnover has a significant effect on earning per share. The t test result of the ownership is 0.372 with a significance of 0.712, which means that institutional ownership has no significant effect on earning per share. The t test result of the LnTotal Asset is 1.311 with a significance of 0.198, which means that LnTotal Asset has no significant effect on earning per share.

5.2. DISCUSSION

Companies that have higher leverage have greater accountabilities, so that it gives an impact on dividend distribution which is smaller because the profits obtained are used to cover accountabilities. An increase in debt will affect the size of the net income available to shareholders, including the profit received, because the obligation to pay the debt takes precedence over profit sharing. The result analysis shows that the debt to asset ratio and debt to equity ratio has no significant effect on earning per share. This could be due to an average of debt to asset ratio of 0.59 times and debt to equity ratio of 1.82 times. This shows that the company's debt is quite high compared to assets and capital owned by the company, which causes the profits obtained by the company are used to cover the company's debt. The activity ratio can be assessed using total asset turnover. This ratio shows the total asset turnover assessed by sales volume, or the extent to which the ability of all assets to create sales. The greater total asset turnover will be better because all assets used to support sales activities will also surely increase company profits, so that the profits shared by the company increase as well. Thus, the increase or decrease in total asset turnover will have an effect on the increase or decrease in the distribution of earning per share. The results of this study show that total asset turnover has a positive and significant effect on earning per share. The positive effect shows that the faster the asset turnover in generating sales, the more increase in profit of the company. Institutional ownership can minimize conflicts of interest between principals and agents. With the existence of institutional control, it can optimize the control of management performance to avoid any misconduct by management. The analysis shows that institutional ownership has no significant effect on earning per share. The firm size shows the relative extent of the company, which is an important factor in the establishment of profits. The results of the analysis in this study indicate that firm size has no significant effect on earning per share.

6. CONCLUSION

Based on the results of the analysis and discussion, it can be concluded that the debt to asset ratio, debt to equity ratio, ownership, and firm size have no significant effect on earning per share, while total asset turnover has a positive and significant effect on earning per share. The positive effect shows that the faster the asset turnover in generating sales, the more earning per share will increase.

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