


## DETERMINANTS OF CAPITAL STRUCTURE AND THEIR IMPLICATIONS TOWARD FINANCIAL PERFORMANCE OF CONSTRUCTION SERVICE COMPANIES IN INDONESIA STOCK EXCHANGE (IDX)



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### ABSTRACT

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#### Keywords

The size of the firm  
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Capital structure.

The purpose of this research are to know the influence of size of the firm, asset utilization, corporate growth, liquidity, asset tangibility, and capital structure on financial performance. The methods of this research used two model. Model I examine the effect of Corporate Size, Asset Utilization, Company Growth Potential, Liquidity, Asset Tangibility to Capital Structure. The proof of this model is done by using Model Panel Data. Based on Hausman's Test, the results show that p-value is greater than 5%, so it can be concluded that Random Effect Model is better to use. Model II examines the effect of Capital Structure, Company Size, Asset Utilization, Company Growth Potential, Liquidity, Asset Tangibility to Financial Performance. The proof of this model is done by using Model Panel Data. The Fixed Effect model is the selected model, since the random effect estimation can not be executed since E-views requires the number of individuals (cross section) to be larger than the coefficient including the intercept. The finding of this research is the size of the firm, asset utilization, corporate growth, liquidity, asset tangibility and capital structure simultaneous have a significant effect on financial performance. The most dominant variable of influence are capital structure and liquidity. The value of  $R^2$  is 0.768, which means that firm size, asset utilization, corporate growth, liquidity, asset tangibility and capital structure are together able to explain 76.8 percent variation of financial performance.

**Contribution/ Originality:** The paper primary contribution is finding that the most dominant variable of influence are capital structure and liquidity on financial performance of construction service companies in Indonesia Stock Exchange (IDX). Implying that capital structure and liquidity when increasing to construction service companies that will contribute significantly to the financial performance.

## 1. INTRODUCTION

The construction service industry is a capital-intensive industry, considering that for a construction service company it requires a large working capital, where generally internal funding is not sufficient to meet the existing needs. This makes construction service companies rely on external funding from banks or other sources. External

financing is certainly a burden of the company, because the company will be charged interest expense (Gupta *et al.*, 2011).

Based on existing historical data, construction service companies in Indonesia generally have a small net profit margin (María, 2004). When viewed more deeply, interest expense is enough to take a large portion of the burden component in the income statement of the company. This makes the management in charge of the company's finance is very trying to find the source of external funding with the lowest interest expense, of course to make a financial performance that can satisfy the shareholders (Gupta *et al.*, 2011).

This phenomenon invites researchers to conduct a deeper analysis, to see how the influence of funding policy, which in theory of financial management known as capital structure, will have an impact on the financial performance of the company. To complement the research, these factors will also be analyzed directly to the company's financial performance (Muritala, 2012).

## 2. THEORETICAL REVIEW

The capital structure in financial terms mean the way companies finance their assets through a combination of equity, debt, or mixed securities (Myers, 2001). In short, the capital structure are a combination of corporate debt (long-term and short-term), common stock and preferred stock. How it is done is important, given the incorrect combination of finance will affect the performance and sustainability of a company's business (Management and The Institute of Asset Management, 2012). Therefore, decisions related to capital structure become crucial because it is closely related to the achievement of corporate goals. Capital structure decisions represent an important financial decision on business organization, in addition to investment decisions. The importance of the decision is because it involves large sums of money and has long-term implications for the company (Giovanni and Arfianto, 2015).

In a managerial perspective, the policy of capital structure is determined not only by internal and external factors affecting risk and control, but also determined by values, objectives, preferences and management desires as inputs on capital structure decisions, which have implications on the financial performance of an enterprise (María, 2004).

In financial management literature, capital structure is generally proxies by comparison (ratio) between total debt or long-term debt to total equity. The financial performance of an ordinary company is measured through profitability (Baloch *et al.*, 2015; Giovanni and Arfianto, 2015; Mulyani, 2017) which can be seen in the figures contained in the financial statements. Profitability generally uses indicators such as earnings, both net income, gross profit and operating profit. Another commonly used measure is the rate of return and various ratios like Return on Investment (ROI), Residual Income (RI), Earning Per Share (EPS), Dividend Yield, Price to Earning Ratio and various other measures (Graham and Harvey, 2002). Theories that discuss the structure of capital and financial performance have diverse conclusions. The Trade-Off theory proposed by Graham and Harvey (2002) reveals that the higher the company uses the high leverage the profitability will increase. The Pecking Order Theory proposed (Myers, 2001) revealed that the lower the company uses the debt (low leverage) then profitability (financial performance) will increase. Previous researchers analyzing capital structure and financial performance also have diverse conclusions. Research conducted by Thornhill *et al.* (2004) and Pouraghajan *et al.* (2012) reveals that the capital structure have a positive and significant impact on financial performance, so it can be interpreted that the greater the company uses debt, the profitability of the company will increase. This is in contrast to research conducted by Baloch *et al.* (2015) where the results of their research actually revealed that the capital structure have a negative and significant effect on the financial performance of the company. Various existing studies reveal that management decisions on capital structure are influenced by very diverse factors, including company size, asset utilization, company growth potential, liquidity, asset tangibility, agency costs, profit volatility, dividend payout, managerial ownership, characteristics companies, availability of financial resources, market timing and so forth. These factors generally differ from industry to industry. Some of these factors also affect the company's financial

performance directly (Dietrich, 2007; Lu-Andrews and Yu-Thompson, 2015). The management of a company is required to produce a satisfactory financial performance of shareholders. In its efforts to realize this, the management is much related to various internal and external conditions of the company, where the management must be able to take the right decision by considering how the relevance and relevance of various conditions. One urgency of this research is to answer the question, so it is expected to be an input for the management of the company, especially in the construction services industry .

### 3. RESEARCH METHODS

#### 3.1. Data Sources and Research Variables

The data used in this study is the financial report data onto construction services companies listed on the BEI in the period 2008-2013. The variables used for this study are:

- Capital Structure (CAPS), with Debt to Asset Ratio proxy.
- Financial Performance (PERF), with a Return on Equity proxy.
- Company size (SIZE), with Revenue proxy.
- Asset Utilization (UTIL), with Asset Turnover Ratio proxy.
- Company Growth Potential (GROW), with Asset Growth proxies.
- Liquidity (LIQU), with Current Ratio proxy.
- Asset Tangibility (TANG), with Fixed Asset / Total Asset proxy.

#### 3.2. Model and Research Methodology

##### Testing Model I

Model I examine the effect of Corporate Size, Asset Utilization, Company Growth Potential, Liquidity, Asset Tangibility to Capital Structure. The proof of this model is done by using Model Panel Data. Based on Hausman's Test, the results show that p-value is greater than 5%, so it can be concluded that Random Effect Model is better to use.

##### Testing Model II

Model II examines the effect of Capital Structure, Company Size, Asset Utilization, Company Growth Potential, Liquidity, Asset Tangibility to Financial Performance. The proof of this model is done by using Model Panel Data. The Fixed Effect model is the selected model, since the random effect estimation can not be executed since E-views requires the number of individuals (cross section) to be larger than the coefficient including the intercept.

### 4. RESEARCH RESULT AND DISCUSSION

#### Testing Model I

Result of testing for Model I with Model Panel of Random Effect Data is shown in following table-1:

**Table-1. Test Results Model I**

Variable	Coefficient	t-stat	Probe
C	-0.515101	-1.267257	0.2132
SIZE?	0.046130	3.275306	0.0023
UTIL?	0.061400	2.403704	0.0215
GROW?	0.073509	2.149505	0.0384
LIQU?	-0.148310	-7.545070	0.0000
TANG?	-0.193773	-3.567676	0.0010
R-squared	0.628925		
Probe (F-stat)	0.000001		

Source: Data Processed with E-Views

Based on the data onto Table I, by looking at the output of the above random effect model, of the five independent variables used, all of these variables significantly affect the capital structure, respectively at  $\alpha$  0,05) ie Company Size (SIZE), Asset Utilization ( UTIL,) Liquidity (LIQU), Company Growth Potential (GROW) and Tangibility Assets (TANG). When viewed from the value of model significance (F statistics) of 0.0000 it can be concluded that the overall model is formed significantly into  $\alpha$  0,05). The value of  $R^2$  is 0.628 which means all independent variables used in this model are able to explain 62.8 percent variations on capital structure.

Of the four significant independent variables, namely SIZE, GROW, LIQU, TANG, the most dominant variable of influence is Liquidity (LIQU) and Asset Tangibility (TANG) with the largest regression coefficient. This proves that in the construction service industry, the aspect of the need for liquidity and the amount of fixed assets owned by the company is the most important factor affecting the company's funding decisions, whether through debt or capital (Moeller *et al.*, 2004; Rogers, 2004; Beck *et al.*, 2008; Lipson and Mortal, 2009; Krause *et al.*, 2012; Lu-Andrews and Yu-Thompson, 2015).

## Testing Model II

Result of testing for Model II with Model Panel of Fixed Effect Data is shown in following table-2:

**Tabel-2. Test Results Model II**

Variable	coefficient	t-stat	Probe
C	-1.144628	-3.560823	0.0016
SIZE?	-0.011980	-1.362365	0.1857
UTIL?	0.229725	2.603512	0.0156
GROW?	0.183314	2.928236	0.0074
LIQU?	0.265729	4.748550	0.0001
TANG?	0.212089	1.684927	0.1050
CAPS?	1.049301	2.781233	0.0104
R-squared	0.768157		
Probe (F-stat)	0.000322		

Source: Data Processed with E-Views

Based on the data onto Table 2, by looking at the output of the above fixed effect model, of the six independent variables used, there are four significant variables affecting financial performance at  $\alpha$  0,05), namely Capital Structure (CAPS), Utilization of Assets (UTIL), Corporate Growth Potential (GROW) and Liquidity (LIQU). If we see the significance of the model (F statistics) it can be said that the overall model is formed significantly. The value of  $R^2$  is 0.768 which means that all independent variables used in this model are able to explain 76.8 percent variations on financial performance.

Of the six significant independent variables, the most dominant variables of influence are the Capital Structure (CAPS) and Liquidity (LIQU) with the largest regression coefficients. This proves that in the construction services industry, management decisions on determining the capital structure, both in debt financing and own capitals, greatly affect the financial performance. This is acceptable given the slight profit / margin rate of the business, so it is in need of a financing decision in determining the best capital structure to obtain the least weighted average cost of capital, which in turn can make financial performance (in this case profitability) maximum. In addition, this study proves that liquidity is a factor that is also important to influencing financial performance, considering the industry is capital-intensive, so that a good liquidity condition will ensure the sustainability of the project and to run a new project (Coleman, 2000); (Danielsson, 2013).

## 5. CONCLUSION

- 1) The results showed that the capital structure are the most influential factor of financial performance. This proves that in the construction service industry, management decisions in determining the capitals

structure, both in debt financing and own capital, greatly affect the financial performance. This is acceptable given the relatively small profit margin of this business, so it is in need of funding decisions on determining the capital structure can minimize the cost of funds, in order to make the financial performance (profitability) to the maximum.

- 2) In addition, this study proves that liquidity condition is the second most important factor affecting financial performance. The construction service industry is a capital-intensive industry, so that a good liquidity condition will ensure the sustainability of the project being undertaken as well as to facilitate the acquisition of new projects in the future, thereby greatly affecting the sustainability of the company's business that has implications for financial performance.
- 3) The capital structure itself in this research are influenced mainly by asset tangibility factor, followed by liquidity factor. This proves that in the construction services industry, the large aspect of fixed assets owned by the company and the need for liquidity is the most important factor affecting the company's funding decision (capital structure), whether pursued through debt or capital.
- 4) The results of this study reveal that the size of the construction service company does not significantly affect the superiority over a company's financial performance. The existing facts also reveal that the relatively small construction service companies surpass the company's larger financial performance. This is partly triggered by selective efforts in selecting projects with large margins and also success in managing operational risks so as to maximize financial performance.
- 5) The results of this study reveal that the existence of fixed assets does not directly affect the financial performance, but it affects the capital structure that ultimately has implications for financial performance. The ownership of an enterprise over fixed assets makes the choice of debt more likely, thereby enhancing the company's financial performance.

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