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Capital Structure and Profitability of LQ45 Index in Indonesia : Pecking Order Theory Approach

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Abstract
Capital structure and profitability are part of company's financial system. Capital structure leads to company funding by utilizing long-term debt, preferred stock, and shareholder capital, while profitability refers to company's ability to generate profits. This study aims to analyze the effect of tangibility, growth, and company size on capital structure and profitability on LQ45 index. Sampling was carried out by purposive sampling technique and obtained 38 companies. Smart PLS program was utilized to assist research data analysis process. Results indicated that reliability, growth and company size had a significant effect on capital structure but they did not have a significant effect on profitability. Additionally, capital structure had a significant negative effect on profitability. The research results support pecking order theory which believes that the lower the company's debt, the higher the company's profitability.

Keywords: Tangibility; Growth; Firm Size; Capital Structure; Profitability

1.0 INTRODUCTION

Capital structure reflects company's financial proportion between its own capital which comes from long-term debt and its own capital which is a source of company financing. Capital structure refers to company's ability to fund its operations by utilizing long-term debt, preferred stock, and shareholder capital, while profitability refers to company's ability to generate profits for each period. Capital structure is an important issue for company since good or bad the company's capital structure has a direct effect on its financial position, especially large debt which affects company's performance.

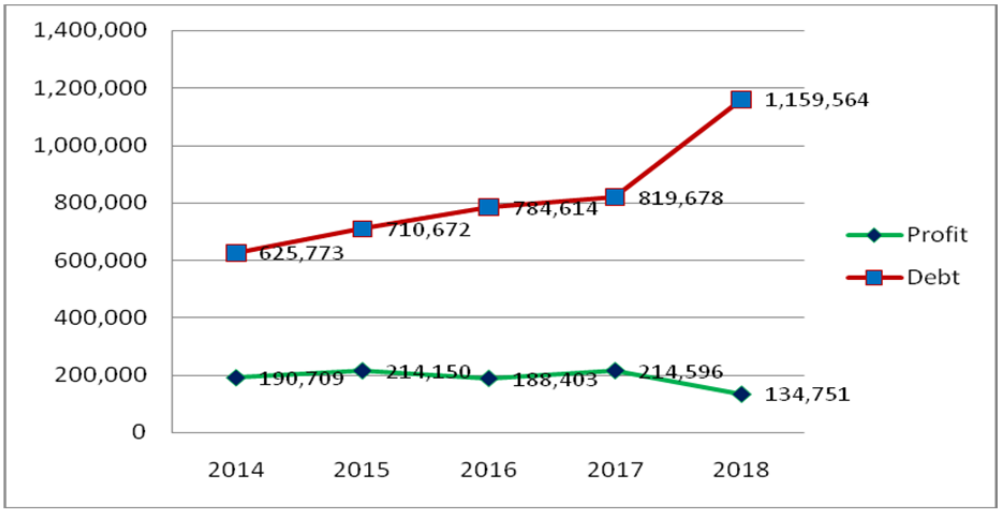
Furthermore, LQ45 index is one of stock indices in Indonesia Stock Exchange (IDX) which is obtained from calculation of 45 issuers selected using criteria for assessing liquidity and value of company's stock market capitalization. This index is updated every six months by research and development division of IDX.

Based on reference in Figure 1, profitability value of LQ45 Index fluctuates, in which company's profitability value in 2018 decreased by 29.34% than 2014. However, in terms of LQ45 Index debt value, it appears that value of debt keeps increasing every year. In fact, company's debt in 2018 increased by 85.30% than 2014. It implies that increase in company's debt has not been able to significantly increase company's profit.

2.0 LITERATURE REVIEW

Pecking order theory advocates that use of debt can only be done if company's retained earnings are not sufficient for company's operational needs. It also affirms that company prefers the safest source of funding first, namely internal sources of finance rather than external sources. A company that obtains profits will actually take advantage of profits earned to pay interest and principal debt. Thus, capital structure has a negative effect on profitability. It supports a research conducted by (Akeem, et al., 2014; Chadha & Sharma, 2015; Chandra, et al., 2019; Chen & Chen, 2011; Salim & Yadav, 2012), but it is contrary to a research by (Al Ani & Al Amri, 2015; Wijaya, et al., 2020).

H1: capital structure has a negative effect on company's profitability



Source : Indonesian Stock Exchange (2018)

Figure 1. Capital Structure and Profitability LQ45 Index

Tangibility reflects balance between fixed assets and total assets (Riyanto, 2011). A company that has fixed assets larger than current assets tends to use larger debt since these assets can be used as collateral for debt to obtain additional finance. Accordingly, The greater the fixed assets in the company, the greater the debt level of the company. This notion is in line with (Fauzi, et al., 2013; Wijaya et al., 2020; Yang, et al., 2010), but it is different from research conducted by (Chandra et al., 2019; Lemma & Negash, 2013; Titman & Wessels, 1988). A company that has great reliability can minimize agency costs which in turn can encourage increased profitability. This idea is in line with research by (Dawar, 2014; Wijaya et al., 2020), but it is different from a research by (Chandra et al., 2019; Lazăr, 2016; Quang & Xin, 2014).

H2: tangibility has a positive effect on company's capital structure

H3: tangibility has a positive effect on company's profitability

A company that has a high growth rate tend to utilize external sources of finance since company's internal sources of finance are insufficient for their operational needs. Accordingly, growth has a positive effect on capital structure. This statement is in line with research by (Chen & Chen, 2011; Sawitri & Lestari, 2015), but it is different from research by (Alipour, et al., 2015; Chandra et al., 2019). Higher growth of company basically indicates that company has good prospects, which in the end will encourage an increase in company profits. This idea is in line with research conducted by (Chadha & Sharma, 2015; Chandra et al., 2019; Indah,et al., 2011), but it is different from research conducted by (Miswanto, et al., 2017; Swastika & Isharijadi, 2017).

H4: growth has a positive effect on company's capital structure

H5: growth has a positive effect on company's profitability

Large companies generally have easier access to external sources of finance and have a greater chance of winning over industrial market competition. It supports a theory purposed by (Jensen & Meckling, 1976) that large companies tend to have ability to diversify risks so that they have lower risk of bankruptcy. Therefore, company size has a positive effect on capital structure. This statement is in line with research conducted by (Chandra et al., 2019; Sawitri & Lestari, 2015; Taghavi, et al., 2013; Wijaya et al., 2020; Yang et al., 2010), but it is different from research by (Chandra, 2015; Fauzi et al., 2013; Tse & Rodgers, 2014; Yinusa, et al., 2015). Lower risk of bankruptcy is able to encourage profitability of large companies to increase. Thus, company size has a positive effect on profitability. It is in line with research conducted by (Chadha & Sharma, 2015; Chandra et al., 2019; Dawar, 2014; Rifai, et al., 2015), but it is contrary to research conducted by (Lazăr, 2016; Wijaya et al., 2020).

H6: company size has a positive effect on company's capital structure

H7: company size has a positive effect on company's profitability

3.0 METHODOLOGY

Population of this study were all LQ45 companies listed on Indonesia Stock Exchange (IDX) during 2014-2018 period. Sampling was carried out by purposive sampling technique and obtained 38 companies under two criteria: (1) companies included in banking sector were not included due to differences in concept of debt and (2) companies that undertake IPO after 2014 were not included.

Importantly, data in this research were secondary data, which were collected indirectly from main source (company). Here, data were obtained from LQ45 company's financial statements from 2014 to 2018. Table 1 shows the operational variables used in this study.

Table 1. Operational Variable

No	Variable		Source
1	Tangibility	$TANG = \frac{FIXED\ ASSET}{TOTAL\ ASSET}$	(Yang et al., 2010; Wijaya et al., 2020)
2	Growth	$GROWTH = \frac{SALES\ t - SALES\ t-1}{SALES\ t-1}$	(Chandra et al., 2019; Sheikh & Wang, 2011)
3	Firm Size	$FS = LN\ (TOTAL\ ASSET)$	(Quang & Xin, 2014; Wijaya et al., 2020; Yang et al., 2010)
4	Capital Structure	$CS = \frac{TOTAL\ DEBT}{TOTAL\ EQUITY}$	(Chandra et al., 2019; Sheikh & Wang, 2011; Wijaya et al., 2020)
5	Profitability	$PRF = \frac{NET\ INCOME}{TOTAL\ ASSET}$	(Chandra et al., 2019; Yang et al., 2010)

Data were analyzed using path analysis with a help of Smart PLS 3.0 program. Before hypothesis testing, a preliminary test was conducted to test feasibility of research model.

4.0 RESULTS AND DISCUSSION

Preliminary Test

Ghozali (2012) pointed out that multicollinearity test aims to test whether there is a correlation between exogenous variables in the regression model. Multicollinearity test was carried out using Variance Inflation Factor (VIF). If VIF value was <10, it could be concluded that data were free of multicollinearity indicators.

Table 2. Multicollinearity Test

Variable	Capital Structure	Profitability
Tangibility	1.100	1.121
Growth	1.050	1.084
Firm Size	1.090	1.100
Profitability		1.089

Based on Table 2, all exogenous variables had Variance Inflation Factor (VIF) value < 10, indicating that there were no signs of multicollinearity between exogenous variables in this study.

Coefficient of determination (R^2) which is presented in Table 3, was used to determine how much exogenous variables affected endogenous variables. Strength of influence could be seen from value of coefficient of determination (R^2); the greater the R2 value, the greater the variation in exogenous variables that affect endogenous variables.

Furthermore, adjusted R Square value of capital structure was 0.067. It means that capital structure of LQ45 Index was influenced by tangibility, growth, and company size by 6.7%, while the remaining 93.3% was influenced by other factors outside the study.

Table 3. Coefficient of Determination Test

Variable	R Square	Adjusted R Square
Capital Structure	0.082	0.067
Profitability	0.035	0.015

Adjusted R Square value of profitability was 0.015. It means that profitability of LQ45 Index was influenced by variables of tangibility, growth, company size, and capital structure by 1.5%, while the remaining 98.5% was influenced by other factors outside the study. The full figure of conceptual framework can be seen in Figure 2.

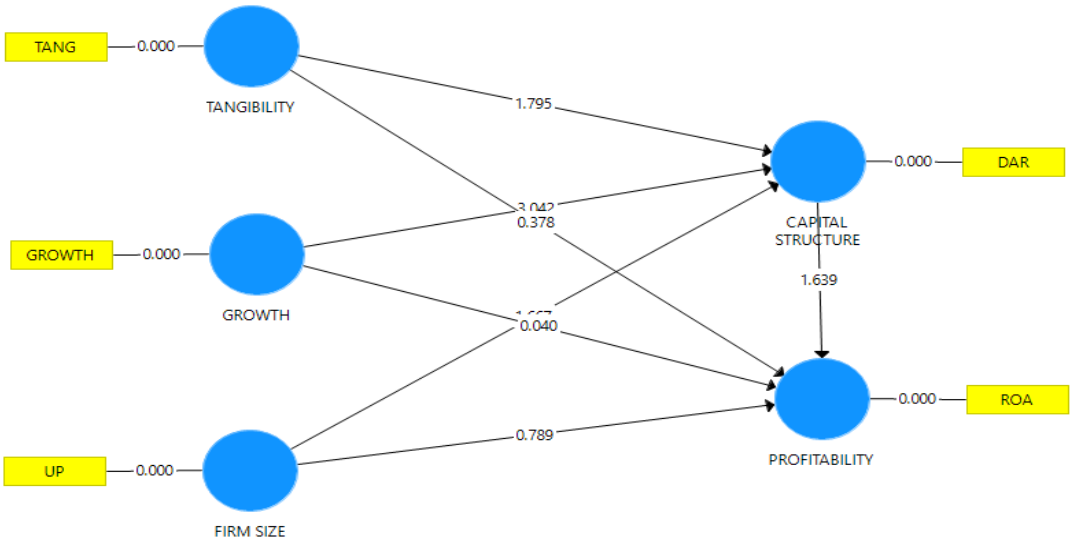


Figure 2. Conceptual Framework

Hypothesis Testing

Hypothesis test (t test) was conducted to partially test effect of each exogenous variable on endogenous variables. The following are results of hypothesis testing:

Table 4. Hypothesis Test

Variable	Original Sample	T Statistics	P Values
Tangibility >> Capital Structure	-0.139	1.795	0.073
Growth >> Capital Structure	0.178	3.042	0.002
Firm Size >> Capital Structure	0.096	1.667	0.096
Tangibility >> Profitability	0.029	0.378	0.706
Growth >> Profitability	0.002	0.040	0.968
Firm Size >> Profitability	0.045	0.789	0.430
Capital Structure >> Profitability	-0.184	1.639	0.100

Based on Table 4, it could be concluded that (1) tangibility had a significant negative effect on capital structure, but it did not have a significant effect on profitability, (2) growth had a significant positive effect on capital structure, but it did not have a significant effect on profitability, (3) company size had a significant positive effect on capital structure, but it did not have a significant effect on profitability, and (4) capital structure had a significant negative effect on profitability. Level of significance used in this study was 10%.

Tangibility is a definition of balance between current assets and fixed assets. Companies that have larger fixed assets than current assets tend to use larger debt because these assets can be used as collateral for debt to get additional funds. It indicates that there is a positive relationship between tangibility and capital structure. This statement is not in line with results of hypothesis testing which states that tangibility has a significant negative effect on capital structure. A large amount of assets that can be used as collateral by certain company reflects that

company has sufficient internal resources to meet its operational needs so that this condition will reduce value of company's debt. It is in accordance with a research conducted by (Chandra, 2015), but it is different from research conducted by (Chandra et al., 2019; Wijaya et al., 2020; Yang et al., 2010). A company that has great tangibility can minimize agency costs, which in turn can encourage increased profitability. This statement is not in line with results of hypothesis testing which reveals that tangibility has no significant effect on profitability. Size of company's tangibility has no impact on company's profitability. It supports a research by (Chandra et al., 2019), but it does not support research conducted by (Dawar, 2014; Wijaya et al., 2020).

Most importantly, growth describes company's ability to maintain its position in industry. A company with high growth tends to take advantage of funds from outside the company since funds from within the company are insufficient to support company's operations. Accordingly, there is a positive relationship between growth and capital structure. This statement is in line with results of hypothesis testing which claims that growth has a significant positive effect on capital structure. The greater the growth of company, the better the company's prospects so that management will find it easier to obtain debt. It is in line with research by (Chen & Chen, 2011; Sawitri & Lestari, 2015), but it is contrary to research by (Alipour et al., 2015; Chandra et al., 2019). High company growth indicates that the company has good prospects so that in the end it will encourage an increase in its profits. This statement is not in line with results of hypothesis testing which states that growth has no significant effect on profitability. Size of company's growth does not have an impact on increasing company profits. This is different from research conducted by(Chadha & Sharma, 2015; Chandra et al., 2019; Indah et al., 2011).

Company size describes size of a company in industrial market. Large companies generally have easier access to external sources of finance and have a greater chance of winning over industrial market competition. Thus, there is a positive relationship between company size and capital structure. This statement is in line with results of hypothesis testing which states that company size has a significant positive effect on capital structure. Larger size of a company indicates that the company has large internal sources of finance to maintain company's operational needs. This condition can reduce value of company's debt. It supports research conducted by (Chandra et al., 2019; Sawitri & Lestari, 2015; Taghavi et al., 2013; Wijaya et al., 2020; Yang et al., 2010), but it does not support research by (Chandra, 2015; Fauzi et al., 2013; Tse dan Rodgers, 2014; Yinusa et al., 2015). Large companies in general tend to be more able to generate profits than small companies. This idea is not in line with results of hypothesis testing which states that company size has no significant effect on profitability. Company size does not have an impact on value of company's profitability. It is in line with research conducted by (Wijaya et al., 2020), but it contradicts research conducted by (Chadha & Sharma, 2015; Chandra et al., 2019; Dawar, 2014; Rifai et al., 2015).

In addition, pecking order theory states that company prefers the safest source of funding first, namely internal sources of finance rather than external sources. External sources of finance will only be selected if internal sources are not sufficient for company's operational needs. Accordingly, there is a negative relationship between capital structure and profitability. This statement is in line with results of hypothesis testing which states that capital structure has a significant negative effect on profitability. Low debt indicates that company has sufficient internal sources of finance to encourage an increase in company profits. It is in line with research conducted by (Akeem et al., 2014; Chadha & Sharma, 2015; Chandra et al., 2019; Chen & Chen, 2011; Salim & Yadav, 2012), but it is contrary to research conducted by (Al Ani & Al Amri, 2015; Wijaya et al., 2020).

5.0 CONCLUSION

LQ45 companies are companies that have a large market capitalization value. They basically already have a good financial performance and large operational activities. As an attempt to meet operational needs, a company is able to utilize internal sources of finance that come from retained earnings or shareholder capital. In case internal sources of finance are inadequate, external sources of finance will be selected. This condition is able to encourage an increase in upcoming company profits.

As a final note, this study is still limited to the use of tangible factors that affect capital structure and profitability. Further research is suggested to include intangible factors that have an impact on company performance.

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