Factors Affecting Earnings Quality with Capital Structure as An Intervening Variable

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Abstract

This study aims to analyze the effect of company size and liquidity on the quality of earnings with capital structure as an intervening variable. The population of this study was all manufacturing companies listed on the Indonesia Stock Exchange (IDX) which amounted to 130 companies. Sampling was done by using purposive sampling method and obtained 23 companies. Data were analyzed using multiple linear regression and path analysis. The results of data analysis showed that the company size proxied with total assets did not have on the quality earnings, liquidity proxied with current ratio did not have an effect on the quality of earnings. Company size did not have an effect on the structure modal. Liquidity affected on the capital structure. Structure modal did not have an effect on the quality earnings. Meanwhile, the size of the company and the liquidity did not affect the quality of earnings through capital structure as an intervening variable. Future studies could use another intervening variable such as Corporate Social Responsibility and Timelines.

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INTRODUCTION

Capital market is a means to bring together users of funds and fund providers (financiers) as well as means to trade securities especially stocks (Suwardjono, 2008: 488). Investors usually tend to be careful in making decisions to invest their capital or when buying stocks. Those who have an interest in the development of a company is necessary to know the financial condition of the company, and the financial condition of a company will be known from the financial statements of the company concerned, consisting of balance sheet, income statement and other financial statements (Munawir, 2011).

Corporate earnings information is a description of management performance in managing operational activities of a company. In addition to assessing the performance of management, earning information is also used by investor as a media to estimate representative earning ability, as well as to estimate the risk in investment or credit. The information published by a company useful for decision-making must be information that has relevance. One of the indicators of relevant information is the reaction of investors at the time of the announcement of the information observed from the movement of stock prices (Zahroh and Siddharta, 2006). According to Paramita (2011) who states that strong market reaction to earnings information is reflected in the high Earnings Response Coefficient or called ERC. If reported earnings has a power of response then shows a qualified earning. ERC or earnings response coefficient is defined as a measure of the abnormal return rate of the securities in responding the unexpected earnings components reported by the companies which publishing the securities (Scott, 2003 in Dira and Astika, 2014). In other words ERC, (Earnings Response Coefficient) is a reaction to the profit announced by the company.

According to Wulansari (2013) low Earnings Response Coefficient shows that earning is less informative or in other words less qualified for investors to make economic decisions. This means that ERC is very important for investors to make decisions. If the quality of earnings is better or more persistent in the future, thus, it can be predicted the value of ERC will be higher. So, ERC can show good bad quality of earnings which depend on abnormal return of stock seen from change of stock price and market price sensitivities based on earnings announcement of company which entering to market information. In addition to earnings, stock prices offset by the value of Earnings Response Coefficient (ERC) will also have an impact on the expected return value received.

Previous study conducted by Kartina and Nikmah (2011) on 45 manufacturing companies and 6 non-manufacturing companies find empirical evidence about Earnings Response Coefficient on the result of ERC average calculation is only 0.009. Similar result is also found in a study conducted by Mulyani et al (2007) that empirical evidence of ERC averages is still relatively small at 0.03. Sandi (2013) finds similar result which in his research on manufacturing companies listed on the IDX resulted in a low ERC average of 0.01. Research of Dira and Astika (2014) find the same thing that the average ERC is still in the low criteria of 0.16. Empirical result on ERC is also examined by Setiawati et al. (2014) that the ERC average result is still relatively low at 0.17. From the results of previous studies indicate that there are still many ERC results in manufacturing companies that are still relatively low. This means that in general the earnings information published by company has not responded by the market, especially investors optimally. Based on the cases, it is feasible to re-examine the factors that influence market response, especially investors in making decisions for investment to the company.

According to Dira and Astika (2014) states that there are several factors that affect earnings quality namely: systematic or beta risk, company size, earning persistence, earning growth, capital structure, auditor quality, liquidity, and accrual quality. Warianto’s research (2013) which examines the effect of company size, capital structure, liquidity, and Investment Opportunity Set, it is found that company size affects on earnings quality. The result of this study is similar to the results of
research conducted by Dira and Astika (2014). Meanwhile, another research conducted by Risdawaty (2015) which examines the effect of capital structure, company size, information asymmetry, and profitability to earnings quality shows that company size has no effect on earnings quality. The result of this study is similar to the result of research conducted by Sukmawati (2014).

Several recent studies have found that company size has no effect on earnings quality. Research conducted by Risdawaty (2015) finds that firm size has no effect on earnings quality. It is assumed that there are other variables that can bridge company size more influence to earnings quality. Researchers argue that firm size affects the quality of earning if bridged by intervening variable that is capital structure. The result of Febrimianto's research (2011) states that firm size positively affect on capital structure. Structure of capital affects the quality of profit (Irawati, 2011). Research conducted by Irawati (2011) on the factors that affect on earning quality among others capital structure, earning growth, company size, and liquidity. The result shows that liquidity negatively affects on earnings quality. The result of this study is also supported by research of Warianto (2013) and Sukmawati (2014). But unlike the result of research conducted by Wulansari (2013) in which liquidity does not affect the quality of earnings. The difference of the research result is suspected because the influence of liquidity to the quality of earning is relatively less so that required a variable that can bridge liquidity variable has more strong effect to earnings quality. In this research, it is added an intervening variable that is capital structure between liquidity and earnings quality. So, it is expected that there will be a stronger influence from the liquidity variable to the variable of earnings quality.

The theory of efficiency market states that the market will react quickly to new information, so shortly before and after financial statement is released, information about the numbers of earnings published will affect investors' behaviour (Wulansari, 2013). In the theory of efficiency market, accounting information is in a competitive position with other sources of information such as news in the news, financial analysts, and even the market price itself. As a tool or means to convey information to investors, accounting information will be useful only if the information is relevant, reliable, timely, and cost effective as well as relative when compared to other sources of information (Jogiyanto, 2003). Signal theory explains that a good quality company will deliberately signal to the market (Paramita, 2011). An accounting earning announced with a financial statement is one of the signals from information set available in the capital market. Therefore, the market is expected to be able to distinguish companies of good and bad quality. The size of the company will give a signal on the profit earned which is also as representation of content assets owned by the company (Setiawati and Nursiam, 2014). Investors will be more interested in investing their funds to companies with large sizes and have a large stock return as well. The higher the investor's trust to the company, the higher the earning quality as measured by ERC.

H1: There is a positive effect of company size on earning quality.

Signal theory states a good quality company will deliberately signal to the market. Large companies can be seen from the amount of total assets owned is a signal for creditors to take decision to provide loans to the company. Research from Setiawati and Handayani (2011) find out the result that firm size has a positive effect on capital structure. Large company size is easier to obtain loans than small company. Large scales companies will find it easier to find investors who will invest their capital into the company. This means that the higher the size of the company the capital structure will be higher.

H2: There is a positive effect of firm size on the corporate capital structure.

Signal theory discusses the issue of information asymmetry. Management is motivated to provide information because there is information asymmetry between management and stakeholders. Therefore, when corporate capital structure changes, it can bring information to shareholders that will result in the value of the company changes along with changes in earnings.
quality. High capital structure is a negative signal for investors. Investors will assume that the company has a high debt because the company is less maximal in managing corporate finance. Thus, the higher the capital structure, the lower the corporate earning quality. Mulyani's research, et al (2007) finds that capital structure has an effect on earnings quality.

H3: There is a negative effect of capital structure on the quality of corporate earning.

Liquidity is the ability of a company to pay off its short-term debt with its assets owned. Liquidity has an effect on the quality of earning because if a company is able to pay its debt means the company has a good financial performance. When the earning is announced to the public, accordingly the investor will respond positively to the earning. Companies with a good level of liquidity will make a positive signal to investors. Thus, the Earnings Response Coefficient of the company is increasing due to strong market reaction caused by the earning published by the company. This high Earnings Response Coefficient (ERC) indicates that the corporate earnings are qualified. This means that high rate generated from the liquidity ratio that is the current ratio is higher, the more qualified the corporate earning.

H4: There is a positive effect of liquidity on the quality of corporate earnings.

Signal theory states that management will take action to provide a signal to the market about future prospects of the company. One of the signals given by management in the form of financial statements that will be analyzed by investors and creditors about the liquidity of the company. All companies have the ability to pay off their debts. The higher the liquidity of a company, the greater the company's ability to pay the debt. This will benefit creditors, where creditors consider that the company prefers its obligations rather than dividends and the capital structure of the company is increasingly proportional between the capital and the corporate debt.

H5: There is a negative effect of liquidity on the capital structure.

The theory of efficiency market states that the market will react quickly to new information, so shortly before and after the financial statement is released, information regarding the numbers of earnings published will affect investors' behaviour (Wulansari, 2013). Large companies have the ease of getting loans from creditors, because creditors have trust in large companies with large asset values compared to small companies. If the company gets a loan from the creditor then the capital structure of the capital on the debt side will rise. A good and optimal capital structure will maximize the value of the company itself and increase the stock price of the company. So that, the capital structure can be said affecting the quality of earnings.

H6: There is an effect of firm size on earnings quality through capital structure.

Companies with high liquidity have meaning that the company has the ability to fulfil its obligations. Too high liquidity will signal to investors that the company cannot manage the current assets maximally. This means that the higher the level of liquidity the lower the quality of the earnings. When capital structure low, it will make the corporate earnings become qualified. If the company has a large liquidity level with a low level of leverage then the quality of earning becomes higher. Research of Wardani (2015) states that liquidity affects on capital structure and research of Risdawaty (2015) finds that capital structure affects the quality of earnings.

H7: There is an effect of liquidity on earnings quality through capital structure.

METHODS

The population in this study was all manufacturing companies listed in Indonesia Stock Exchange (IDX) in 2012-2014 as many as 130 companies. The sampling technique was done by purposive sampling method. Sample selection criteria was as follows:
Table 1. Criteria of the Sample Selection

<table>
<thead>
<tr>
<th>No.</th>
<th>Criteria</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the period 2012-2014.</td>
<td>130</td>
</tr>
<tr>
<td>2.</td>
<td>Manufacturing companies that did not publish audited report consistently and completely throughout the period 2012-2014.</td>
<td>(9)</td>
</tr>
<tr>
<td>3.</td>
<td>Companies were in a state of non-profit successively from 2012 to 2014.</td>
<td>(29)</td>
</tr>
<tr>
<td>4.</td>
<td>The financial statements presented in rupiah and all the data required for this study are not available completely such as daily stocks, date of publication.</td>
<td>(52)</td>
</tr>
<tr>
<td>5.</td>
<td>The financial statements presented did not end at 31st December.</td>
<td>(5)</td>
</tr>
<tr>
<td></td>
<td>Total companies of sample</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Observation Year</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total units of analysis</strong></td>
<td><strong>105</strong></td>
</tr>
</tbody>
</table>

Source : Secondary data processed, 2016.

Samples was taken by using purposive sampling technique and obtained as many as 35 companies, but after it was examined by normality test with SPSS software version 21 showed that the data taken was abnormal. Thus, the researchers did outlier to research data. The researchers found 12 data outliers. Therefore, the data that could be used as research samples was as many as 23 companies with a 3 year observation year so that obtained 69 units of analysis.

RESULTS AND DISCUSSIONS

Descriptive statistical analysis was an analysis to give description, the description of data seen from mean value, standard deviation, maximum value, and minimum value. The results of descriptive analysis for earnings quality, capital structure, firm size, and liquidity could be seen from the table below.

Table 2. Descriptive Statistics of Research Variables

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lnsize</td>
<td>69</td>
<td>23.36</td>
<td>32.08</td>
<td>28.437</td>
<td>1.85398</td>
</tr>
<tr>
<td>Likuid</td>
<td>69</td>
<td>.51</td>
<td>7.73</td>
<td>2.5233</td>
<td>1.57274</td>
</tr>
<tr>
<td>Sm</td>
<td>69</td>
<td>.13</td>
<td>.86</td>
<td>.3897</td>
<td>.17320</td>
</tr>
<tr>
<td>Erc</td>
<td>69</td>
<td>-25.04</td>
<td>.24</td>
<td>-4.6241</td>
<td>6.48266</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>69</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Secondary data processed, 2016.
The result of data analysis for regression equation model 1 and model 2 was as follows:

### Table 3. The Result of Regression Equation Model 1

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.466</td>
<td>1.674</td>
<td>.876</td>
<td>.384</td>
</tr>
<tr>
<td>1</td>
<td>LNLNSIZE</td>
<td>-.614</td>
<td>.498</td>
<td>-.087</td>
</tr>
<tr>
<td></td>
<td>LNIKUID</td>
<td>-.616</td>
<td>.052</td>
<td>-.834</td>
</tr>
</tbody>
</table>

a. Dependent Variable: LNSM  
Source: Secondary data processed, 2016

### Table 4. The Result of Regression Equation Model 2

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>29.510</td>
<td>9.664</td>
<td>3.053</td>
<td>.003</td>
</tr>
<tr>
<td>1</td>
<td>LNLNSIZE</td>
<td>-8.483</td>
<td>2.888</td>
<td>-.350</td>
</tr>
<tr>
<td></td>
<td>LNIKUID</td>
<td>-.507</td>
<td>.516</td>
<td>-.203</td>
</tr>
<tr>
<td></td>
<td>LNSM</td>
<td>.167</td>
<td>.92</td>
<td>.049</td>
</tr>
</tbody>
</table>

a. Dependent Variable: LNERC  
Source: Secondary data processed, 2016

Based on Table 3, company size variable had t value of 8.483 with a negative sign with a significance of 0.005 <0.05 (significance level at 5%) which meant that firm size variable had no effect on earnings quality then the first hypothesis was rejected. The regression coefficient of firm size variable on capital structure was -0.614 with significance of 0.222 which was far above 0.05 where this indicated that firm size had no effect on capital structure. This meant the second hypothesis was rejected. The variable of capital structure to earnings quality had t value of 0.167 with significance of 0.810 which was far above 0.05. This showed that the capital structure did not affect the quality of earning, then the third hypothesis was rejected. Liquidity variable had t value of -0.507 to earnings quality with significance of 0.329. This showed that liquidity did not affect the quality of earning, then the fourth hypothesis was rejected. Liquidity variable had t value of -0.616 to the capital structure with a significance of 0.000. This showed that liquidity affected the capital structure so that the fifth hypothesis was accepted.

From the calculation of sobel test on the intervening influence of capital structure between liquidity and the quality of earnings produced t count of -0.110 which was smaller than 2.000 with a significance level of 0.05. This showed that the mediating effect of capital structure between earnings quality and liquidity was rejected. So, the sixth hypothesis was rejected. Sobel test on the intervening influence of capital structure between earnings quality and firm size produced t count equal to -0.010 smaller than t table of 2.000 with the level of significance equal to 0.05. Then, it could be concluded that the effect of firm size on earnings quality with capital structure as negative intervening was not significant. So, the seventh hypothesis was rejected.

Based on Table 4, company size had t value of -8.483 with a negative sign could be concluded that the variable of company size did not affect the quality of earnings. The result of this study supported the research of Risdawaty (2015) which stated that company size could only be used to
classify companies into large, medium, or small companies. Large companies did not become a reference by investors in making investment decisions. This was due to large companies did not necessarily provide a large return to investors so that investor trust declined to the company then the quality of earnings became lower. The firm size variable had t value of -0.614 where it indicated that firm size had no effect on capital structure. This was due to not all big companies have big debts too. Average companies preferred internal financing compared to external financing (debt). This could be seen from the descriptive statistics table where the mean of capital structure was 0.38 or about 38% of companies listed on the IDX had a debt of no more than 50% which meant that the corporate debt has not been too large or has not exceeded the proportion of capital. So that companies listed on the Stock Exchange were still solvable. The variable of capital structure had t value of 0.167 to earnings quality. This showed that the capital structure did not affect the quality of earnings. Meaning with this result that not all assets owned by the company financed by debt. So, the greater the value of the corporate debt would not make the quality of earnings to be low for management was considered capable of managing assets and capital of the company well.

Liquidity variable to earnings quality had a coefficient of -0.507 which meant that the fourth hypothesis was rejected that liquidity had no effect on earnings quality. This was for if the liquidity of the company was too large, then the company was not able to manage the current assets as maximal as possible so that the financial performance became less good and there might be earnings management that occurred to manipulate the earnings information. Liquidity variable to the capital structure had a coefficient of -0.616 with a significance of 0.000 then it could be concluded that liquidity had an effect on capital structure. This showed that the higher the liquidity of a company meant the greater the corporate ability to pay its debts. This would benefit the creditor, where the creditor assumed that the company preferred its obligations rather than dividends and the capital structure of the company was increasingly proportional between capital and corporate debt.

The intervening effect of capital structure between the quality of earning and liquidity resulted in t count of -0.110 which was smaller than 2.000 with a significance level of 0.05. This showed that the mediating effect of capital structure between earnings quality and liquidity was rejected. Companies with a high level of leverage meant having high debt compared to their own capital. Therefore, if there was an increase in earnings then the beneficiary was debt holder, because the creditor believed that the company would be able to make debt payments. But, this would be responded negatively by investors because investors would assume that the company preferred the payment of debt. The intervening effect of capital structure between earnings quality and company size produced t count of -0.010 was smaller than t table of 2.000 with a significance level of 0.05. Then, it could be concluded that the effect of firm size on earnings quality with capital structure as negative intervening was insignificant. This was caused although the company had a large asset, it might not necessarily generate a qualified earning and got a response from investors and debtors. There were times when companies should increase sales and improve the grade and quality of their production. The existence of these conditions would make the manager must provide the right signals for investors to be interested in investing in the company.

CONCLUSIONS

The conclusions of this study are firm size, liquidity, and capital structure have no effect on earnings quality. Liquidity affects the capital structure. Firm size and liquidity do not affect earnings quality through capital structure as intervening variable. Further research can use intervening variables such as CSR (Corporate Social Responsibility) and Timelines.
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