The Effect Of Liquidity, Institutional Ownership, Managerial Ownership And Profitability On Capital Structure

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KEYWORDS  
Debt Policy; Institutional Ownership; Liquidity; Managerial Ownership; Profitability.

ABSTRACT  
This research aims to obtain empirical evidence regarding the influence of liquidity as measured by the Current Ratio, institutional ownership, managerial ownership, and profitability as measured by Return on Assets on capital structure. Firms increase leverage to support growth or to offset poor performance. The population of this study is companies listed as consumers of the non-cyclical sector on the IDX in 2018-2022, with as many as 113 companies. The method used is quantitative with statistical analysis of panel data regression. Capital structure is the dependent variable, and profitability, liquidity, institutional ownership, and managerial ownership are independent variables. The method used is quantitative, with statistical analysis of panel data regression using the SPSS Analysis tool. Capital structure is a framework that describes how equity and debt are used to finance company operations to generate optimal returns for shareholders and maximise company returns by considering the level of risk. The results showed that the Probability (ROA) and Liquidity (CR) were partially significant to the Capital Structure. Institutional and managerial ownership have no significant effect on the Capital Structure.

1. Introduction  
The non-cyclical consumer sector or primary consumer goods is one of the sectors that has a high growth rate because the products produced by this sector are what people need every day, so the amount of demand for goods and services offered is not significantly influenced by external factors such as political, economic, social, technological, environmental and regulatory changes (Dewi & Fachrurrozie, 2021).

This primary consumer goods sector company comprises several sub-sectors, such as food and beverage, food and staples retailing, tobacco, and non-durable household products. The food and beverage industry is one of the main drivers of growth in the non-oil and gas processing industry, supported by abundant natural resources and increasing domestic demand. The food and beverage subsector still contributes to the
Indonesian manufacturing sector at 6.59%. The growth rate of this subsector in Quarter III-2023 grew positively by 3.28% (yoy). (Siaran Pers Kementerian Koordinator Bidang Perekonomian RI, 14 Desember 2023).

In 2022, the food and beverage industry grew by 4.90%, contributing 38.35% or the largest, to the GDP of the non-oil and gas processing industry. In addition, in 2022, the food and beverage industry will be included in the top five industries with the highest export contribution, valued at USD 48.61 billion. (Ministry of Industry, March 2023).

The capital adequacy aspect is the company's weapon to carry out the company's operational activities, and I will schedule some time for us to connect. Or investment. Companies that lack capital can experience difficulties maintaining their activities and take advantage of various investment opportunities that may arise at any time. (Wackowski et al., 2022); (Dyduch et al., 2021). Regarding capital adequacy, capital cost arises from the Company's funding. Capital obtained by incurring expensive costs will burden company management (Margono et al., 2020).

The capital structure is a mixture (proportion), permanent long-term financing of the company represented by debt, preferred stock, and common stock equity. (Onyebuchi, O. M. (2022). Funding decisions determine the amount of funds needed, sources of funds, amounts, composition and risks attached to funding decisions. Become the foundation of financial management. The disadvantages of using debt as a company's operational funds are debt costs, collateralised assets, and relative risk of default. (Mirza et al., 2023); (Al-Hunnayan, 2020); (Camisón et al., 2022).

Because there are potential benefits and risks from using debt, companies must have the right debt policy by considering the resources owned, the business environment, and potential business success.

Manufacturing companies have a high level of business process complexity compared to types of businesses such as services and trade. Manufacturing companies have more types of inventory and relatively long cash cycles.

Generally, companies choose funding in the form of debt (Saona et al., 2020). With the company's high growth, the use of debt is also increasing. The high increase in debt is due to the company using more funds from debt for its operational activities than its capital. A DER value above 1 indicates that the company has a more significant amount of debt than the amount of its capital and this is not by the theory of optimal debt policy, where the amount of company debt should not be greater than its capital, because if the DER is more than one it means that the risk to be borne by the company increases (Bolton, P., & Scharfstein, D. S. (1996); (Kučera et al., 2021).

Observation data from non-cyclical consumer sector manufacturing companies which have an average Debt to Equity Ratio value from 2018 to 2022 informs that in 2018, the DER value was 1.1, then decreased in 2019 to a DER value of 0.98, in 2020 to 2022, the DER value was above 1 This shows that it has a higher level of debt compared to its capital. Garcia, CJ, & Herrero, B. (2021); (Gozali et al., 2023). With high debt, the company has a high interest burden, which can decrease company profits. On the other hand, debt can be effective if it is used appropriately by the company for company
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expansion at the right time. In 2019, the sample company had a DER value below 1, which indicates that debt is smaller than the capital (equity) owned by the company.

This research focuses on external funding through bank debt in non-cyclical consumer companies listed on the IDX. The researcher considers that when a company uses bank debt with clear considerations and utilises loans from banks for company purposes properly, the company will achieve rapid growth so that the company's value will increase compared to internal funds. The decision to use bank debt incurs interest charges on the loan. Interest expenses will add to the company's operational burden. Suppose the company cannot manage its external funds properly. In that case, its operational activities will lead to the risk of defaulting on loan interest expenses and delays or failure to pay the principal.

Company management can use capital from both internal and external sources to finance operations by implementing debt policies. The company's ability to pay off its obligations will also affect the debt policy to be taken. The debt-equity ratio was used in this study to measure capital structure. Some aspects that must be considered when assessing a capital structure strategy are company growth, asset structure, and profitability. The change in total assets owned by the company is a sign of the company's growth. The ability of a corporation to establish itself in the business world is used to measure growth.

Theoretical Review and Hypothesis Development

Agency Theory, according to (Jensen & Meckling, 2019), states that an agency relationship is a contract between a manager (agent) and an investor (principal). (Jensen & Meckling, 2019). The general principal–agent problem is formulated, in which agents have private information and decisions that are unobservable to the principal. It is shown that the principal can restrict himself to incentive-compatible direct coordination mechanisms, in which agents report their information to the principal, who then recommends decisions forming a correlated equilibrium to them. (Myerson, R. B. (1982).

Modigliani-Miller (MM) Theory In conditions with no taxes, Modigliani-Miller (MM) believes that using debt or capital will have the same impact on the company's prosperity. MM explained that the funding policy with debt or capital would not make a difference for the company. MM theory considers tax elements. With the existence of taxes, MM concludes that using taxes will increase company value because interest costs can be deducted from taxable income. Tax is a company's cash outflow that will be paid to the state. Cash outflow means it can reduce the income received. Debt is considered to save the taxes paid by the company. This is because interest costs can reduce Taxable Income (PKP).

The capital structure theory introduced by Modigliani-Miller is the first and most controversial modern capital structure theory in 1958. The controversy surrounding the MM theory gave rise to a new capital structure theory known as the trade-off and pecking order theory. (Modigliani F., Miller M.,1958). Trade-Off Theory Companies balance the tax savings from debt versus bankruptcy costs. Companies use large debts as an alternative to save taxes. Trade-off theory determines the optimal capital structure, which
includes taxes, agency, and financial distress costs. However, it still maintains the assumptions of market efficiency and symmetric information as considerations and benefits of using debt. The most favourable debt level is achieved when the tax savings are at their maximum against the costs of financial distress. Companies with a high level of profitability will undoubtedly try to reduce their taxes by increasing their debt ratio so that additional debt will reduce taxes. (Khoa & Thai, 2021).

Capital structure is a description of the financial proportion of the company, that is, between capital owned and sourced from long-term debt and own capital (equity). (Kyissima, K. H., et al., 2020). Capital structure is the proportion between foreign capital (external) and own capital (internal). (Kenourgios et al., 2020).

**The relationship between liquidity and capital structure**

Liquidity ratios provide essential information for a company's growth and development in the short term. If you cannot manage the company in the short term, the company's situation will become increasingly difficult in the long term. Liquidity refers to a business's ability to convert assets into cash to meet short-term cash needs (Dirman, 2020). The greater the company's liquidity ratio, the greater its ability to fulfil its obligations, so its debt will be lower (Hussein et al., 2023). Companies that use external funding in debt must have CR with a higher proportion of cash than other current assets in the form of receivables and inventories. Liquidity has a negative effect and is significant (Saputro et al., S., 2022).

**The relationship between institutional ownership and capital structure**

A firm reduces its debt level as institutional investors substitute for the monitoring role of debt. Institutions effectively monitor a firm's capital structure and passively sell their shares when dissatisfied. When institutional ownership increases, leverage will decrease. Institutional ownership significantly negatively affects DER (Puspita & Suherman, 2018). Agency theory explained that institutional ownership was expected to replace debt and reduce agency costs. Ha2: Institutional ownership hurts capital structure (DER).

**The relationship between managerial ownership and capital structure**

Managerial ownership is shared ownership by management, namely commissioners and directors. Companies with a high level of managerial ownership will use low debt levels. This is due to management's proportion of share ownership; the position is divided into two parts: manager and shareholder. Managerial ownership will tend to improve management performance for the benefit of themselves and shareholders.

Research shows that managerial ownership significantly negatively influences debt policy as proxied by the debt-equity ratio (Marantika et al., R., 2020). Research shows that managerial ownership does not affect the Debt to Equity Ratio (Windy, W., & Lukman, H. (2023).

Ha3: Managerial ownership hurts capital structure (DER).

**The relationship between profitability (ROA) and capital structure**

Companies with a high rate of return tend to use a relatively small proportion of debt because the company carries out business development and investments obtained
from retained earnings. So, the more significant the profitability, the lower the company's debt.

Some research results show that profitability has a negative effect and is significant (Saputro et al., 2022). Brailsford et al. (2002) and Qiang (2007) showed different results, a positive and significant relationship. Gomez et al. (2014) found that profitability negatively and significantly affected capital structure. Wellalage Locke (2015) found a positive and significant effect between profitability and capital structure.

Ha4: Profitability (ROA) hurts capital structure (DER).

**Conceptual Framework**

![Conceptual Framework Diagram]

**Figure 1 Conceptual Framework**

2. Research Methods

This type of research is quantitative research with secondary annual report data and is accessed via the BEI website. The population of this study is companies listed as consumers of the non-cyclical sector on the IDX in 2018-2022, with as many as 113 companies. The sample selection was based on this sector being one of the sectors with a relatively high capital structure value above two and, in 2019, experienced a sharp decline below 1.

In this study, we want to examine the causal relationship between independent variables, liquidity proxied with Current Ratio (CR), institutional ownership, managerial ownership and profitability proxied with Return on Assets (ROA) of the dependent variable Capital Structure (DER). All variables in this study were measured using a ratio scale.

The type of data used in this study is secondary data. In the form of financial data, financial statements of manufacturing companies listed on the Indonesia Stock Exchange.
(IDX) in the 2018-2022 period. The data can be obtained through the official website of the Indonesia Stock Exchange: [www.idx.co.id](http://www.idx.co.id). In sample selection, this study used the purposive sampling method.

### Table 1
**Operational definitions of research variables**

<table>
<thead>
<tr>
<th>No.</th>
<th>Variables</th>
<th>Definitions</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Capital Structure</td>
<td>Comparison between the amount of long-term debt with company equity</td>
<td>DER: ( \frac{\text{total debt}}{\text{total equity}} ) (Hirdinis, 2019)</td>
</tr>
<tr>
<td></td>
<td>(DER)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Current Ratio</td>
<td>The current ratio (CR) is a ratio that measures a company’s ability to pay its short-term debt using the company’s current assets.</td>
<td>CR: ( \frac{\text{Current Assets}}{\text{Current Liabilities}} ) (Franklin et al. (2019))</td>
</tr>
<tr>
<td>3</td>
<td>Institutional Ownership (IO)</td>
<td>Ownership of shares by institutional investors (financial institutions, legal entity institutions, and other institutions)</td>
<td>IO: ( \frac{\text{Number of institutional shares}}{\text{Total shares outstanding}} ) (Cinko &amp; Kasaboglu, 2017)</td>
</tr>
<tr>
<td>4</td>
<td>Managerial Ownership (MO)</td>
<td>The proportion of company owners owned by management who act actively in the company</td>
<td>MO: ( \frac{\text{number of insider shares}}{\text{Total shares outstanding}} ) (Chou, 2015)</td>
</tr>
<tr>
<td>5</td>
<td>Profitability (ROA)</td>
<td>The ability of the company to generate profits in a certain period</td>
<td>ROA: ( \frac{\text{Net Income}}{\text{Average Total Assets}} ) (Tailab, 2014)</td>
</tr>
</tbody>
</table>

The multiple linear regression equation in this study is stated as follows:

\[
\text{DER} = \alpha - \beta_1 \text{CR} - \beta_2 \text{IO} - \beta_3 \text{MO} - \beta_4 \text{ROA} + e
\]

### 3. Results and Discussions

Descriptive statistics describe individual variables, including the maximum, minimum, mean, and standard deviation values. The results of the descriptive analysis are presented in Table 2. The following is a table of descriptive statistical results:

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Range</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>DER</td>
<td>55</td>
<td>3.4711</td>
<td>.1181</td>
<td>3.5892</td>
<td>1.258318</td>
<td>.9114229</td>
</tr>
<tr>
<td>CR</td>
<td>55</td>
<td>8.1505</td>
<td>.6495</td>
<td>8.8000</td>
<td>2.160409</td>
<td>1.6469121</td>
</tr>
<tr>
<td>IO</td>
<td>55</td>
<td>.4784</td>
<td>.5007</td>
<td>.9791</td>
<td>.656213</td>
<td>.1572746</td>
</tr>
<tr>
<td>MO</td>
<td>55</td>
<td>.2522</td>
<td>.0002</td>
<td>.2524</td>
<td>.039669</td>
<td>.0728427</td>
</tr>
<tr>
<td>ROA</td>
<td>55</td>
<td>.1981</td>
<td>.0005</td>
<td>.1986</td>
<td>.078780</td>
<td>.0489812</td>
</tr>
</tbody>
</table>
Non-cyclical consumer Sector Companies in 2018-2022 show an average capital structure of 1.25. Capital structure is the proportion of funding with the company's debt (debt financing). Debt is an element of the company's capital structure. Capital structure is the primary tool for improving company productivity and strategy to improve company performance. Capital structure theory explains that a company's financial policy in determining its capital structure (the mix of debt and equity) aims to optimise company value. Debt to Equity Ratio (DER) can provide an overview of the company's capital structure so that you can know the level of risk of non-payment of a debt. Debt to Equity Ratio (DER) also informs you about the level of debt and the high cost of debt. Investors and suppliers consider this indicator an essential factor in business processes. (Hertina, 2021).

The observation object produces an average liquidity of 2.16, indicating the company can pay off short-term liabilities with its current assets. It also shows how much of the company's current assets it uses. For parties who have an interest in the company, this liquidity information is essential. The lowest liquidity value is 0.64, indicating that the amount of current assets is smaller than the company's current liabilities. The liquidity ratio determines the company's ability to pay in the short term and is the fastest source of information for raw material suppliers. The average value of Institutional ownership is 0.65, meaning that the average company sampled in this study has an average of 65.62% of the total outstanding shares owned by the institution. The average managerial ownership is still relatively low, namely 0.039. Then, the average institutional ownership is relatively high and higher than managerial ownership, namely 0.039.

Based on Table 2, the profitability variable proxied with Return on Asset (ROA) has a mean of 0.78, which means that the average company sampled in this study can generate a net income of 19.8% of the assets owned by the company.

The normality test results with the Kolmogorov-Smirnov statistical test produced a Monte Carlo Significant (2-tailed). The Kolmogorov-Smirnov (K-S) results show a significance of 0.948 > 0.05, so the residual data is usually distributed. The following are the results of the multicollinearity test:

| Table 3 |
| Hasil Uji Multikolonieritas |

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1</td>
<td>CR</td>
</tr>
<tr>
<td></td>
<td>KI</td>
</tr>
<tr>
<td></td>
<td>KM</td>
</tr>
<tr>
<td></td>
<td>ROA</td>
</tr>
</tbody>
</table>

Based on Table 3, all independent variables, Return on Assets (ROA), liquidity proxied by Current Ratio (CR), managerial ownership (KM), and institutional ownership (IO), have a tolerance value of more than 0.1 and a VIF value of less than 10, so it can be concluded that there is no correlation between independent variables in this study. The following are the results of the autocorrelation test using the Run Test:
Based on Table 4, the results of the autocorrelation test using the Run Test test have a significance of 0.342. The significance level is more significant than 0.05, so it can be concluded that the null hypothesis is accepted, that is, residual random. Thus, the autocorrelation test results show that in this study's regression model, there is no correlation between confounding errors in period t and period t-1 (previous).

The following are the results of the heteroscedasticity test using scatterplot graphs:

Based on Figure 2, the scatterplot graph shows points spread randomly, do not have a clear pattern, and spread above and below the number 0 for the axis. From the graph, there is also no regular pattern such as wavy, widening, and then narrowing, so it can be concluded that heteroscedasticity does not occur in the regression model studied.

The following are the results of the correlation and determination coefficient test:
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Test Results of Multiple Determination Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.570&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.448</td>
<td>.404</td>
<td>.7034082</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), ROA, KI, KM, CR  
b. Dependent Variable: DER

The results of the multiple determination coefficient test in Table 5, R square (R2) is 0.448 or 44.8%, which shows the contribution of the variables liquidity (CR), profitability (ROA), institutional ownership, and managerial ownership can explain debt policy variables (DER) by 44.8%. Factors outside the model contributed to the remaining 55.2%. The multiple correlation coefficient is shown by (R) of 0.670 or 67%, which indicates that the correlation or relationship between the variables liquidity (CR), institutional ownership, managerial ownership and profitability (ROA) can explain debt policy variables (DER) is substantial.

The results of the F statistical test show an F value of 10.165 with a significance value of 0.000. So, it can be concluded that company size, capital structure, and ownership can be considered models suitable for further research.

The table below shows the results of statistical test F:

### Table 6

<table>
<thead>
<tr>
<th>Model</th>
<th>Regression</th>
<th>Residual</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum of Squares</td>
<td>20.118</td>
<td>24.739</td>
<td>44.857</td>
</tr>
<tr>
<td>df</td>
<td>4</td>
<td>59</td>
<td>54</td>
</tr>
<tr>
<td>Mean Square</td>
<td>5.030</td>
<td>.495</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>10.165</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig.</td>
<td>.000&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: DER  
b. Predictors: (Constant), ROA, KI, KM, CR

The results of the F statistical test show an F value of 10.165 with a significance value of 0.000. So, it can be concluded that company size, capital structure, and ownership can be considered models suitable for further research. Based on testing the hypothesis, the regression equation could be written as follows:

\[ \text{DER} = 1.993 - 0.229 \text{CR} - 0.367 \text{IO} - 1.045 \text{MO} - 5.581 \text{ROA} \]

Individual Significance Test (Statistical Test t)

Below are the results of the statistical test t in this study:

### Table 7

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>( \beta )</th>
<th>Sig</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ha1: Liquidity, as proxied by the current ratio (CR), hurts capital structure (DER)</td>
<td>-0.229</td>
<td>0.005</td>
<td>H1 Accepted</td>
</tr>
<tr>
<td>Ha2: Institutional ownership hurts capital structure (DER)</td>
<td>0.367</td>
<td>0.575</td>
<td>H2 Rejected</td>
</tr>
<tr>
<td>Ha3: Managerial ownership hurts capital structure (DER)</td>
<td>-1.045</td>
<td>0.441</td>
<td>H3 Rejected</td>
</tr>
</tbody>
</table>
The Effect of Liquidity on Capital Structure (DER)

The first hypothesis states that liquidity hurts capital structure. The t-test results show that the significance value of 0.005 is smaller than 0.05; it can be concluded that liquidity affects capital structure, so H1 is accepted. The liquidity variable proxied by the current ratio provides an overview of the company's ability to fulfil the company's short-term obligations. Liquidity has a significant negative effect (Saputro et al., 2022).

The effect of Institutional ownership on capital structure (DER)

The second hypothesis states that Institutional ownership hurts capital structure. There is no influence of institutional ownership on capital structure. The independent variable does not affect the dependent variable, as seen in Table 3. The average institutional ownership is relatively high, namely 65.62%. High institutional ownership cannot replace debt as a supervisory manager. Managers do not consider High institutional ownership when determining capital structure. This finding is not in line with Agency Theory, which states that the power of institutional ownership is expected to replace the role of debt in supervising management so that agency issues and problems will be reduced.

The effect of managerial ownership on capital structure (DER)

The third hypothesis is rejected because the significance level is 0.441, more significant than the actual level of 0.05. There is no influence from managerial ownership on DER.

Managerial ownership is a situation where management, namely the directors or board of commissioners, owns company shares or is a company shareholder. Managerial ownership will tend to improve management performance for the benefit of themselves and shareholders. The average managerial ownership of 0.039 is relatively small and cannot encourage using an appropriate capital structure. This research aligns with Windy, W., & Lukman, H. (2023).

The effect of profitability (ROA) on capital structure (DER)

The fourth alternative hypothesis is accepted with a significance value of 0.032, more diminutive than 0.05. ROA has a significant negative effect on DER. Investors assume that a company that can produce high profitability means that the company can manage the company's capital appropriately. This study's results align with the research of Saputro, A. E., Setiawan, A., & Usuli, S. (2022).

4. Conclusion

Based on the results and discussion, it can be concluded that the research model determining the appropriate capital structure can be used as a framework for future research. The higher the company's profitability, the lower its capital structure will be. Then, company size can negatively influence institutional ownership and capital structure. The company's high profitability is expected to attract investors to invest in their shares, so its debt ratio tends to remain low. The higher the company's liquidity, the more operational activities it carries out. The company maximises its assets to meet operational funding. Therefore, liquidity can hurt capital structure.
Suggestions for further research are to consider the company's institutional ownership calculation, whether it includes non-financial institution ownership or only financial institution ownership, as an anticipatory measure when non-financial institution shareholders become company suppliers. Suppliers here are not included in the institutional ownership category because it is said to be institutional ownership if a company helps fund another company through ownership of shares.
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