

# Profitability and Liquidity Analysis of Capital Structure in Mining Companies

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## ABSTRACT

This study aims to analyze the profitability and liquidity of the capital structure of mining companies listed on the Indonesia Stock Exchange in 2018-2020. The sample in this study is a mining company listed on the Indonesia Stock Exchange with complete financial reports for 2018-2020. The data in this study was collected by documentation obtained through [www.idx.co.id](http://www.idx.co.id). The results of the survey will be analyzed using multiple regression analysis. This study's results show that profitability, as measured using Return on Equity (ROE) and Return on Asset (ROA), partially influences the capital structure. However, liquidity measured using Current Ratio (CR) and Quick Ratio (QR) partly does not affect the capital structure.

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## 1. INTRODUCTION

Indonesia is a country rich in natural resources, including coal, petroleum, tin, and natural gas mining products. As one of the abundant energy sources, coal contributes significantly to moving the wheels of the economy in the country, as well as one of the pillars of state development (1).

The mining sector is one of the pillars of a country's economic development because it provides energy resources that are indispensable for a country's economic growth. The rich potential of natural resources will grow companies' openness to explore these resource mines. Public companies use the capital market to obtain sources of funds or alternative financing. Investors will invest in the company if the investment can generate profits. The existence of the capital market gives the company a tool for self-reflection on the company's performance and financial condition (2).

The need for capital can be met from various sources and has different types. Capital consists of own money and debt, both short-term and long-term. The comparison of debt and own capital in the enterprise's financial structure is called the capital structure. The company's capital structure depends on the large number of resources obtained from the company's internal and external parties in the form of its capital and debt (3).

The capital structure is the balance of long-term debt with own capital. There are several measuring instruments measuring capital structure, which can be used in calculating capital structure that compares total debt and equity. This is in line with the statement that the capital structure is needed for the company to evaluate risks in the long term and the prospect of the level of income that a company will get during the company's operations. The capital structure of the company needs to be identified by a company manager with optimal capital structure expected to minimize costs and must be able to maximize profits (4).

The policy of the capital structure is the wisdom of the company in selecting sources of funds, both internal and external. The company's internal sources of funds come from retained earnings, while external resources come from debt and share issuance. What is meant by an optimal capital structure is a capital structure that optimizes the balance between risk and returns to maximize the stock price. The issue of capital structure is an important problem for every company because the good and bad of the company's capital structure will significantly affect the development of the company itself (5).

The determination of the company's capital structure will be influenced by several factors such as profitability, sales, company size, dividend distribution, liquidity, taxes, and management attitudes. In this study, only two factors will be studied and reviewed in detail: profitability and liquidity (6).

Profitability is the ability of a company to make a profit (profit) at a certain level of sales, assets, and share capital. The company's high profitability results in using more funding from within the company because if profitability is taller, the company can provide a more significant amount of retained earnings so that the use of debt can be reduced. Retained earnings will be used as the leading choice in company financing so that in the capital structure, the use of debt will be lower as the company's profitability increases (7).

Liquidity is the second factor in this study that can affect capital structure. Liquidity indicates the ability of an enterprise to meet its financial obligations that must be fulfilled immediately or the company's ability to meet financial burdens at the time of being billed. Companies that have high liquidity will tend to refrain from using financing from debt because companies tend to prefer internal funding to use external funds. After all, internal sources of funds are considered safe rather than external funds. In addition, by using internal funding sources, it will be able to reduce capital costs for the company (7).

## 2. LITERATURE REVIEW

### Profitability

Profitability is the ability of an enterprise to make a profit to influence the decision of dividend distribution. If the company's profitability level is high, the profit generated by the company will be distributed in the form of dividends to shareholders. The management will try to obtain the maximum profit to improve the ability to pay dividends. Profitability is the ability of a company to get a net profit from its operational activities. The profitability ratio indicates how effectively the entire enterprise is managed (8).

Profitability is the income from the enterprise generated from income after deducting all expenses incurred during a specific period. The company will use relatively lower debt if it has a high return on investment rate, allowing it to finance most of its funding needs with internal company funds. Every company will look for ways to increase its profits (9).

Profitability is one of the factors that influence the capital structure, which is seen through how the company can make a profit from the activities it carries out with decisions and policies which the company takes in a certain period after the primary goal of the company to make a profit (profit) so that the company can carry out its activities and maintain the sustainability of the company in the future (10).

### Liquidity

Liquidity is the company's ability to meet its short-term obligations using all current assets owned before maturity. Liquidity is essential to consider before determining the number of dividends to distribute to shareholders. For companies, dividends are cash outflows, affecting the position of the company's cash. The more liquid a company is, the greater the probability of dividend payments made by the company (11).

Liquidity is the working capital ratio used to measure the liquidity or not of an enterprise. Liquidity is also used for the company's ability to finance and meet debt at maturity. The current Ratio is a way to measure a company's ability to pay its short-term obligations. If short-term liabilities are high, dividends will be low because the company chooses to pay off the short-term penalties earned instead of paying dividends to investors (12).

Liquidity indicates the company's ability to meet its financial obligations that must be completed immediately or its ability to meet financial burdens at the time of billing. The means of payment required to pay off such short-term liabilities must be of more excellent value than the current liabilities held by the company (13).

### Capital Structure

Capital structure is one of the areas of financial decisions because there is a relationship with the variables of capital structure, where a sound capital structure is with a low cost of capital and vice versa, and a lousy capital structure is a very high cost of capital. A capital structure is a collection of funds consisting of debt and own money to increase the company's intrinsic value (14).

An optimal capital structure capable of producing the lowest cost of capital will maximize the company's value. The Debt measures the capital structure to Equity Ratio (DER) ratio scale. This ratio shows the total debt composition to equity (15).

Capital structure balances or compares foreign (long-term) capital and own capital. In meeting the needs of funds, the company must look for efficient funding alternatives. Efficient funding will occur if the company has an optimal capital structure, which can minimize the cost of using the overall capital or the average money price to maximize the company (16).

## 3. RESEARCH METHODS

### Types of Research

The type of research in this thesis is quantitative research. The quantitative analysis aims to develop hypothesis theories related to natural phenomena. The results of measurements in quantitative research help to see the relationship between empirical observations and the data results. Quantitative research also aims to help find relationships between variables in a population.

### Research Data

The data that will be studied in this study are financial statements from mining companies listed on the Indonesia Stock Exchange from 2018 to 2020.

### Population and Research Samples

The population in this study is mining companies listed on the Indonesia Stock Exchange. The samples in this study were selected by the purposive sampling method, namely the determination of samples from existing populations based on specific criteria, namely: 1) Listed on the Indonesia Stock Exchange before 2018. 2) Have complete financial statements for 2018-2020

### Data Collection Techniques

The data collection technique in this study is documentation. Data was obtained by collecting financial statements of mining companies listed on the Indonesia Stock Exchange through the [www.idx.co.id](http://www.idx.co.id) website from 2018 to 2020.

### Data Analysis Techniques

The data analysis method used in this study is multiple regression analysis to determine the effect of profitability and liquidity on the capital structure, which the following equation can show:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Information:

Y = capital structure (dependent variable)

$\beta_0$  = constant

$\beta_1, \beta_2, \beta_3, \beta_4$  = regression coefficients

$X_1$  = profitability – ROE (independent variable)

$X_2$  = profitability – ROA (independent variable)

$X_3$  = liquidity – CR (independent variable)

$X_4$  = liquidity – QR (independent variable)

$\varepsilon$  = error

## 4. RESULTS AND DISCUSSION

The population in this study is mining companies listed on the Indonesia Stock Exchange of 75 companies. Still, based on the purposive sampling method, the unqualified mining companies are 19 companies. Hence, the sample of this study is 56 companies looking at financial statements for three years starting from 2018-2020.

**Table 1.** Results of Multiple Regression Analysis

Variable	Regression Coefficiencies	Sig	Information
Constant	0,712	0,008	
ROE	-0,281	0,039	Significant

ROA	2,847	0,005	Significant
CR	0,340	0,236	Insignificant
QR	-0,217	0,444	Insignificant

Source: Processed Data 2022

From the table above, a multiple regression equation can be made as follows:

$$Y = 0,712 - 0,281ROE + 2,847ROA + 0,340CR - 0,217QR + \varepsilon$$

The table above also shows that the reliability measured by ROE and ROA is significantly smaller than 0.05 ( $0.039 < 0.05$  and  $0.005 < 0.05$ ), so it is concluded that profitability, as measured by ROE and ROA, affects the capital structure. The results of this study indicate that the company's ability to generate net profit by relying on its capital has contributed to the company planning funding sources for its company both internally and externally.

The table above also shows that the liquidity measured by CR and QR has a significance greater than 0.05 ( $0.236 > 0.05$  and  $0.444 > 0.05$ ), so it is concluded that liquidity, as measured by CR and QR, does not influence the capital structure. The results of this study indicate that companies with a high level of liquidity cannot contribute to the company taking into account whether to make loans or use capital that comes from within the company.

## 5. CONCLUSION

Partially, profitability combined with Return on Equity (ROE) and Return on Asset (ROA) influences the capital structure. Likewise, liquidity, as measured by Current Ratio (CR) and Quick Ratio (QR), partially does not affect the capital structure.

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