

The Influence of Profitability, Liquidity, Firm Size, Business Risk, Growth, and Asset Tangibility On Capital Structure

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Abstract

Capital structure can provide an overview of the company's financial ratio between its own capital and long-term debt. Capital structure is the ratio between debt and equity. This research aims to determine the influence of profitability, liquidity, firm size, business risk, growth and asset tangibility on the capital structure of basic industrial and chemical sector companies listed on the Indonesia Stock Exchange for the 2016-2023 period. The research method used is a quantitative method. The regression model used is dynamic panel data regression with the Generalized Method of Moment (GMM) estimator using Eviews 12 software. The research results show that profitability, firm size, business risk and asset tangibility partially have a significant positive and negative effect on capital structure. Meanwhile, the liquidity and growth variables partially have no effect on capital structure.

Keywords: Profitability, Liquidity, Firm Size, Business Risk, Growth, Asset Tangibility, Capital Structure, Generalized Method of Moment (GMM).

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Introduction

Capital structure is one of the most complex parts of financial decision-making, and the cause of its complexity is that its decisions are interrelated with other economic variables. (Sarianti, 2023). The capital structure can provide an overview of the company's financial ratio between its capital and long-term debt (Harahap, 2009). (Harahap, 2009). Meanwhile, according to Fahmi (2018), capital structure is the ratio between debt and equity. The ratio between long-term debt and capital can measure the capital structure associated with long-term financing of a company. Companies The essential industry and chemicals sector is a sector engaged in manufacturing. The Basic Industry and Chemical sector is divided into nine sub-sectors: Cement, Ceramics, Porcelain and Glass, Metals and the like, Chemicals, Plastics and Packaging, Animal Feed and Processing, Pulp and Paper. The industrial elemental and chemical sector requires reliable skills, sophisticated technology, and enormous capital so that everything can be run optimally.

Phenomena related to companies in the primary and chemical industry sector as reported by the kontan.co.id news page (<https://investasi.kontan.co.id/>), the Indonesia Stock Exchange (IDX) noted that the primary and chemical industry sector index grew 8.72% year to date (YTD) or became the sector

with the most significant increase. The primary and chemical industry sector was still able to increase when the Composite Stock Price Index (JCI) corrected 2.95% ytd. The increase in the primary and chemical industry sector was driven by the rise in several stocks, such as PT Barito Pacific Tbk (BRPT), which increased 184.52% YTD, PT Chandra Asri Petrochemical Tbk (TPIA) grew 57.81 YTD, besides the increase also helped the elemental and chemical industry sectors in shares of PT Indocement Tungal Prakarsa Tbk (INTP), and PT Pelangi Indah Canindo Tbk (PICO). TPIA's plan to conduct an internal merger with PT Petrokimia Butadiene Indonesia to improve operational efficiency, management, and capital structure is a positive sentiment. This may improve access to equity financing. The increase in share price can increase the company's value so that the company can quickly get equity funding through the issuance of shares and investor confidence to invest in the company to reduce the company's financial burden. On the other hand, an increase in share price on the capital structure can have a negative effect, namely increasing the cost of capital, because this can make the company experience an increase in the cost of equity capital of the company; this is due to the rise in investor demand for company shares.

Literature Review

Pecking Order Theory

The pecking order theory is a policy taken by a company to obtain additional funds through the sale of its assets. The company reduces asset ownership in this policy because the assets are sold. As a result, the company may need more assets to finance current and future company activities. According to the philosophy of Pecking Order Theory (Myers & Majluf, 1984) in Ratri and Christianti (2018) According to the philosophy of Pecking Order Theory (Myers & Majluf, 1984) in Ratri and Christianti (2018), this is a funding structure model in financial management where company funding follows a particular order, starting from the cheapest source, namely internal funds, to issuing shares as the last source.

Capital Structure

Capital structure is one of the most complex parts of financial decision-making, and the cause of its complexity is that its decisions are interrelated with other economic variables. (Sarianti, 2023). The capital structure can provide an overview of the company's financial ratio between its capital and long-term debt (Harahap, 2009). (Harahap, 2009). Meanwhile, according to Fahmi (2018), Capital structure is the ratio between debt and equity. The ratio between long-term debt and capital can measure the capital structure associated with long-term financing of a company.

Profitability

Profitability is the ability of a company to achieve profits through various sources such as sales, cash flow, working capital, number of employees, number of branches, and other factors. Using profitability ratios is one way to assess whether a company can generate positive or negative income. (Destari, 2019). Profitability indicates the extent to which a company can generate net income from its operations during a specific period. This indicator is also used to measure how efficient the company is in creating profits from its activities, which is crucial to ensure business continuity and growth (Sari, 2022). (Sari, 2022).

Liquidity

Liquidity refers to a company's capacity to fulfill its short-term obligations or debts. The liquidity ratio measures the company's ability to settle its imminent short-term liabilities. A company is considered liquid if it can pay off its short-term obligations on time; otherwise, it is deemed illiquid. To meet its short-term obligations, a company must maintain an adequate level of cash or other current assets that can be quickly converted into cash (Hery, 2019).

Company Size

Firm size is a scale that categorizes companies as large or small based on various indicators such as total assets, market value of shares, average sales level, and total sales. A company with substantial total assets indicates that it has reached a mature stage (Widajatun, 2020). At this stage, the company's cash flow is positive and has a favorable long-term outlook. Additionally, it reflects a relatively more stable company with a more remarkable ability to generate profits than a company with smaller total assets (Alicia, 2020).

Business Risk

Business risk refers to the risk that a company may fail to cover its operational costs. Generally, the more significant the impact of operations on using fixed costs, the higher the business risk (Nasution, 2017). According to Fahmi (2018), business risk is a form of uncertainty a company faces regarding future conditions based on current decisions made after various considerations. Business risk is the inherent level of risk a company may face if it does not manage its debt effectively in its operations.

Company Growth

Growth is a financial indicator that estimates a company's ability to cope with its overall economic balance and industry. Growth refers to the increase or decrease in the total assets owned by a company (Rubiyana & Kristanti, 2020). *Company growth* is a positive indicator anticipated by both internal and external stakeholders.

Asset Tangibility

According to Beitavia(2019), in conducting its operational activities, a company provides various assets in the resources it owns. Company assets are generally divided into two categories: fixed assets and current assets. These two types of assets form the capital structure. Companies with a capital structure with a higher proportion of long-term fixed assets tend to use long-term debt. However, it is likely that the existing fixed assets cannot be used as collateral for debt (Brigham & Houston, 2019).

Effect of Profitability on Capital Structure

Profitability is a company's ability to generate profit through sales, total assets, or equity. The primary goal of a business-oriented company is to achieve as much profit as possible in the short or long term. Profitability is crucial for long-term sustainability, providing promising performance prospects for the company's future success. In this study, profitability is represented using the DER variable, which indicates the ratio between total debt and total equity of a company. A higher DER value suggests that the company has a higher proportion of debt than equity.

H1: Profitability has a negative and significant impact on capital structure.

Effect of Liquidity on Capital Structure

Liquidity is a company's ability to meet its short-term obligations. The ratio between current assets and liabilities can illustrate a company's liquidity level. A higher liquidity ratio indicates a higher ability to finance its debt. This suggests the company will use internal funds before external funds or debt to run its business. This policy aligns with the pecking order theory, where companies with high liquidity tend to limit the use of debt.

H2: Liquidity is negative and significant on capital structure.

The Effect of Firm Size on Capital Structure

Firm size describes a company's scale, such as the number of products produced, the number of employees, market share, outstanding shares, and total assets and sales over a specific period. The trade-

off theory explains that there is a positive relationship between firm size and capital structure. Firm size indicates a company's operational activities. A more prominent firm signifies excellent operational activities, implying significant company wealth.

H3: Firm size has a positive and significant impact on capital structure.

Effect of Business Risk on Capital Structure

Business risk is associated with current decision-making processes that will impact the future. The level of business risk can elicit different perspectives from investors. High-risk companies need to manage less debt to avoid potential bankruptcy. High business risk tends to affect the debt ratio in the capital structure positively. Companies with high business risk generally have a less impactful capital structure than those with low business risk. The pecking order theory explains that companies prefer equity over debt, and high business risk companies will have a higher percentage of equity in their capital structure to avoid bankruptcy risk.

H4: Business Risk has a negative and significant impact on capital structure.

Effect of Growth on Capital Structure

Company growth can be observed through the balance of total assets from the previous year to the current year, whether there is an increase or decrease. Increased company growth requires substantial funding, aside from internal funds, with external capital. The larger the company's balance, the more significant its resource utilization. According to the pecking order theory, companies experiencing growth have a positive relationship with debt usage, as internal funding may not meet business needs. Therefore, companies will increase their debt in the capital structure.

H5: Growth has a positive and significant impact on capital structure.

Effect of Asset Tangibility on Capital Structure

Asset tangibility is the ratio between fixed assets and total assets of a company, indicating the allocation of funds for each element of the asset. Companies with substantial fixed assets can sell these assets when facing a capital shortage. This policy aligns with the trade-off theory, as asset tangibility is expected to impact capital structure positively. The higher the asset tangibility value, the greater the ability to obtain secured debt and the less information disclosed about future company profits. The higher the asset tangibility level, the higher the company's capital structure debt ratio.

H6: Tangibility has a positive and significant impact on capital structure.

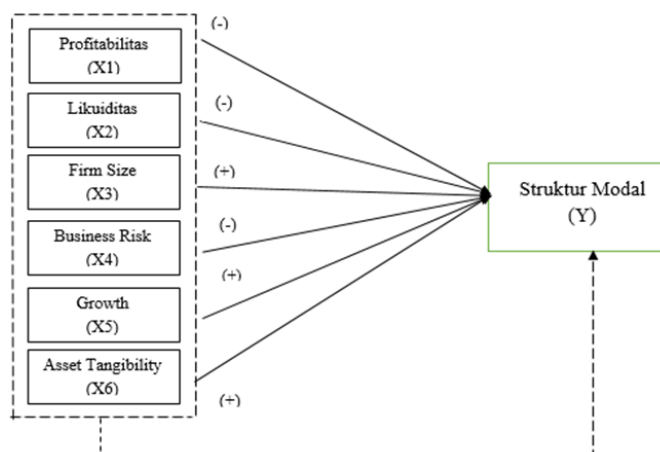


Figure 1. Framework of Thought

Research Method

Population refers to a group of people or areas that are generalized and possess specific characteristics and qualities established by the researcher for study, leading to conclusions. Population encompasses not only the number of objects or subjects but also all the characteristics and attributes inherent to the research objects (Sugiyono, 2019). The population in this study includes all basic industry and chemical companies listed on the Indonesia Stock Exchange (IDX) from 2016 to 2023.

Table 1. Sample Selection Criteria

No.	Sampling Criteria	Total
1.	Basic industry and chemical sector companies listed on IDX (2016-2023)	76
2.	Basic industry and chemical sector companies listed on IDX (2016-2023) that did not consistently submit annual financial reports	(33)
	Number of companies sampled in the study	43
	Number of Observational Data (2016-2023) (43x8)	344

Data processed by the author (2024)

Based on the sample criteria processed by the author, the number of samples that meet the criteria for this study is 344 samples, consisting of 43 basic industry and chemical sector companies listed on IDX for the 2016-2023 period.

According to Hantono (2018), the dependent variable is the variable that can be influenced by the presence of the independent variable. In this study, the primary focus is on the capital structure, which can be measured using the Debt to Equity Ratio (DER):

$$DER : \frac{\text{Total Liabilities}}{\text{Total Equity}}$$

The independent variable is the variable that can influence or cause the dependent variable to change or arise (Sugiyono, 2019). The independent variables in this study are profitability, liquidity, firm size, business risk, company growth, and asset tangibility.

a) Profitability

Profitability is the ability of a company to generate profits in relation to borrowing, total assets and capital (Sartono, 2010). Profitability is the ability of a company to generate profit or profit during the specified period (Jogiyanto, 2011). Profitability can be estimated by using the Return on Asset (ROA) ratio as an example:

$$ROA : \frac{\text{Net Profit after Tax (EAT)}}{\text{Total Assets}} \times 100\%$$

b) Liquidity

According to (Jogiyanto, 2011) Liquidity is the ability of a company to meet financial obligations that must be met. The number of means of payment owned by a company represents the payment authority of the company that is in debt. Liquidity can be estimated by increasing the formula:

$$\text{Current Ratio} : \frac{\text{current assets}}{\text{current debt}}$$

c) *Firm size*

Firm size represents the scale of a company and can be expressed in terms of total assets or net sales (Ernawati, 2016). Firm size can be measured using the following formula:

$$\text{Size} : \ln (\text{Assets})$$

d) *Business Risk*

Business risk is the risk of a company being unable to cover its operational costs. Generally, the greater the operational impact on the company using fixed costs, the higher the business risk (Krismelina & Kristanti, 2023). EBIT calculation can be performed using the following formula:

$$BEPR : \frac{\text{EBIT}}{\text{Total Assets}}$$

e) *Company Growth*

According to Fahmi (2018), growth is a financial ratio that estimates a company's ability to maintain its position amidst overall economic balance and industry conditions. Growth can be measured using the following formula:

$$\text{Growth} : \frac{\text{Total Assets } t - \text{Total Assets } t - 1}{\text{Total Assets } t - 1}$$

f) *Asset Tangibility*

According to Khaw (2019), asset tangibility is the ratio between current assets and fixed assets. Asset tangibility represents assets that have a lasting impact on the company. It can be measured by comparing fixed assets with total assets, using the following formula:

$$\text{Asset Tangibility} : \frac{\text{Fixed Assets}}{\text{Total Assets}}$$

Result and Discussion

In this study, the dependent variable used is capital structure. The independent variables used in this research are six: profitability, liquidity, firm size, business risk, growth, and asset tangibility. The population for this study includes essential industry and chemical sector companies listed on the Indonesia Stock Exchange (IDX) from 2016 to 2023. The sample consists of 344 observations. Descriptive statistical results were obtained using EViews version 12 software.

Table 2. Descriptive Statistics

Variable	Mean	Maximum	Minimum	Std. Dev
Struktur Modal (Y)	1.334	39.486	-7.732	3.068
Profitability (X1)	0.042	2.588	-11.040	0.691
Liquidity (X2)	2.503	33.484	0.036	3.041
Firm Size (X3)	28.497	32.050	25.550	1.480
Business Risks (X4)	0.068	1.699	-1.014	0.191
Growth (X5)	0.391	80.278	-0.946	4.434
Asset Tangibility (X6)	0.422	0.969	0.001	0.222

Source: Processed Data by the Author (2024)

The maximum value of the capital structure is 39.486, recorded by PT Central Proteina Prima Tbk in 2016. This condition is due to the company's total liabilities amounting to IDR 7,142,388,000,000, while the total equity is IDR 180,885,000,000. The minimum value is -7.732, recorded by PT Waskita Beton Precast Tbk in 2023. This condition is due to the company's total liabilities amounting to IDR 5,137,639,812,056, while the total equity deficiency is -IDR 664,494,091,554. The variable's standard deviation is 3.068, which is higher than the mean (1.334), indicating that the capital structure variable has heterogeneous or varied data.

The second variable, profitability, has a maximum value of 2.588, recorded by PT Central Proteina Prima Tbk in 2018. This condition is due to the company's net profit amounting to IDR 1,745,536,000,000, while the total equity is IDR 674,343,000,000. The minimum value is -11.040, recorded by PT Central Proteina Prima Tbk in 2016. This condition is due to the company's net loss amounting to -IDR 1,997,038,000,000, while the total equity is IDR 180,885,000,000. The variable's standard deviation is 0.691, higher than the mean (0.042), indicating that the profitability variable has heterogeneous or varied data. The third variable, liquidity, has a maximum value of 33.484, recorded by PT Duta Pertiwi Nusantara Tbk in 2023. This is due to the company's current assets amounting to IDR 253,121,718,797, while the total current liabilities are IDR 7,559,550,483. The minimum value of 0.036 was recorded by PT Trita Mahakam Resources Tbk in 2023. This condition is due to the company's current assets amounting to IDR 31,004,193,347, while the total current liabilities are IDR 851,766,927,047. The variable's standard deviation is 3.041, higher than the mean (2.503), indicating that the liquidity variable has heterogeneous or varied data.

The fourth variable, firm size, has a maximum value of 32.050, recorded by PT Semen Indonesia (Persero) Tbk in 2022. This condition is due to the company's total assets amounting to IDR 82,960,012,000,000. The minimum value is 25.550, recorded by PT Lionmesh Prima Tbk in 2023. This condition is due to the company's total assets amounting to IDR 125,154,742,796. The variable's standard deviation is 1.480, lower than the mean (28.497), indicating that the firm size variable has homogeneous or grouped data. The fifth variable, business risk, has a maximum value of 1.699, recorded by PT Japfa Comfeed Indonesia Tbk in 2017. This condition is due to the company's profit before income tax amounting to IDR 1,740,595,000,000, while the total assets are IDR 1,043,104,000,000. The minimum value is -1.014, recorded by PT Trita Mahakam Resources Tbk in 2020. This condition is due to the company's loss before income tax amounting to -IDR 400,263,966,463, while the total assets are IDR 394,725,543,723. The variable's standard deviation is 0.191, higher than the mean (0.068), indicating that the business risk variable has heterogeneous or varied data.

The sixth variable, growth, has a maximum value of 80.278, recorded by PT Alam Karya Unggul Tbk in 2016. This condition is due to the company's total assets in 2016 amounting to IDR 621,627,117,594; in 2015, it was IDR 7,648,193,813. The minimum value is -0.946, recorded by PT Japfa Comfeed Indonesia Tbk in 2017, with total assets amounting to IDR 1,043,104,000,000 in 2016 and IDR 19,251,026,000,000 in 2017. The variable's standard deviation is 4.434, higher than the mean (0.391), indicating that the growth variable has heterogeneous or varied data. The seventh variable, asset tangibility, has a maximum value of 0.969, recorded by PT Aneka Gas Industri Tbk in 2017. This condition is due to the company's fixed assets amounting to IDR 4,671,372,000,000, while the total assets are IDR 4,818,896,000,000. The minimum value is 0.001, recorded by PT Alam Karya Unggul Tbk in 2017, with fixed assets amounting to IDR 912,222,355, while the total assets are IDR 1,117,019,087,847. The variable's standard deviation is 0.222, lower than the mean (0.422), indicating that the asset tangibility variable has homogeneous or grouped data.

Variable Instrumental Test (IV)

Table 3. Variable Instrumental Test

Cross-section fixed (first differences)			
Mean dependent var	-0.037992	S.D. dependent var	2.511104
S.E. of regression	2.491530	Sum squared resid	1558.138
J-statistic	19.92261	Instrument rank	27
Prob(J-statistic)	0.462780		

Source: EViews 12 Output (2024)

Based on the instrumental variable (IV) test results, the probability value is 0.462780, higher than 0.05. This indicates the presence of conditions of moments, meaning the instruments used are valid

Autocorrelation Test

Table 4. Autocorrelation Test

Test order	m-Statistic	rho	SE(rho)	Prob.
AR(1)	0.392766	36.949516	94.075066	0.6945
AR(2)	-1.764528	-416.4566	236.015837	0.0776

Source: EViews 12 Output (2024)

The autocorrelation test results show that AR(1) and AR(2) are insignificant. The probability values for AR(1) (0.6945) and AR(2) (0.0776) are higher than 0.05, indicating no autocorrelation (second-order correlated) in the research sample, and the GMM estimation is consistent.

Multicollinearity Test

Table 5. Autocorrelation Test

	DER	PROF	LIQ	SIZE	RISK	GROWTH	TANG
DER	1.000000	-0.710589	-0.172660	0.045963	0.046738	-0.021641	-0.065260
PROF	-0.710589	1.000000	0.036830	-0.021146	0.133066	0.004522	-0.027763
LIQ	-0.172660	0.036830	1.000000	-0.304971	0.072506	0.123786	-0.292174
SIZE	0.045963	-0.021146	-0.304971	1.000000	0.057997	-0.028950	0.391578
RISK	0.046738	0.133066	0.072506	0.057997	1.000000	-0.020116	-0.098005
GROW	-0.021641	0.004522	0.123786	-0.028950	-0.020116	1.000000	-0.103040
TANG	-0.065260	-0.027763	-0.292174	0.391578	-0.098005	-0.103040	1.000000

Source: EViews 12 Output (2024)

Based on the coefficient values of each independent variable, the probability values are below 0.85, indicating no multicollinearity among the independent variables. Therefore, the data meets classical assumptions and is suitable for further analysis.

Dynamic Panel Data Regression Test

Table 6. Dynamic Panel Data Regression Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DER(-1)	0.006843	0.005101	1.341651	0.1869
PROF	-2.125878	0.015902	-133.6882	0.0000
LIQ	-0.172751	0.114974	-1.502523	0.1404
SIZE	0.091774	0.424545	21.41532	0.0000
RISK	7.039666	0.109982	64.00768	0.0000
GROWTH	0.207587	0.208898	0.993721	0.3260
TANG	9.469717	1.832337	5.168109	0.0000

Effects specification

Cross-section fixed (first differences)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Mean dependent var	-0.037992	S.D. dependent var		2.511104
S.E. of regression	2.491530	Sum squared resid		1558.138
J-statistic	19.92261	Instrument rank		27
Prob(J-statistic)	0.462780			

Source: EViews 12 Output (2024)

Based on the dynamic panel data regression test using the generalized method of moments (GMM) estimation, the equation is as follows:

$$\text{Levi}_i = 0.006843 - 2.125878\text{PROF}_i - 0.17251\text{LIQ}_i + 9.091774\text{SIZE}_i + 7.039666\text{RISK}_i + 0.207587\text{GROWTH}_i + 9.469717\text{TANG}_i + \mu_{it}$$

The explanation of the regression equation is as follows:

1. The DEiR(-1) value of 0.006843 indicates that if all independent variables (Profitability (PROF), Liquidity (LIQ), Firm size (SIZE_i), Business Risk (RISK), Growth (GROWTH), and Asset Tangibility (TANG)) are zero, then the value of the dependent variable, capital structure or DEiR, is 0.006843 units.
2. The profitability coefficient value is -2.125878. This indicates that if the profitability value increases by one unit while other variables remain constant, the value of the dependent variable, capital structure, will decrease by 2.125878 units.
3. The coefficient value of liquidity is -0.172751. This indicates that if the liquidity value increases by one unit while other variables remain constant, the value of the dependent variable, capital structure, will decrease by 0.172751 units.
4. The coefficient value of firm size is 9.091774. This indicates that if the company size value increases by one unit while other variables remain constant, the value of the dependent variable, capital structure, will increase by 9.091774 units.
5. The coefficient value of business risk is 7.039666. This indicates that if the business risk value increases by one unit while other variables remain constant, the value of the dependent variable, capital structure, will increase by 7.039666 units.
6. The coefficient value of growth is 0.207587. This indicates that if the growth value increases by one unit while other variables remain constant, the value of the dependent variable, capital structure, will increase by 0.207587 units.
7. The coefficient value of asset tangibility is 9.469717. This indicates that if the asset tangibility value increases by one unit while other variables remain constant, the value of the dependent variable, capital structure, will increase by 9.469717 units.

Wald Test (Simultaneous)

Table 7. Wald Test

Test Statistic	Value	df	Probability
F-statistic	12730.94	(6, 251)	0.0000
Chi-square	76385.62	6	0.0000

Source: EViews 12 Output (2024)

Based on the Chi-square value of 76385.62 and the probability value of 0.0000, the p-value is less than 0.05, thus rejecting H₀. This implies that the independent variables, namely profitability, liquidity, firm size, business risk, growth, and asset tangibility, simultaneously influence the dependent variable, and the GMM estimation model is appropriate with the research data.

Partial Test (T-Test)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DER(-1)	0.006843	0.005101	1.341651	0.1869
PROF	-2.125878	0.015902	-133.6882	0.0000
LIQ	-0.172751	0.114974	-1.502523	0.1404
SIZE	9.091774	0.424545	21.41532	0.0000
RISK	7.039666	0.109982	64.00768	0.0000
GROWTH	0.207587	0.208898	0.993721	0.3260
TANG	9.469717	1.832337	5.168109	0.0000

Source: EViews 12 Output (2024)

Based on the partial test results in Table 4.14, the findings are as follows:

1. The relationship between profitability and capital structure has a profitability value of 0.0000, which is less than the significance level of 0.05. This result indicates that H01 is accepted, meaning profitability negatively affects capital structure.
2. The relationship between liquidity and capital structure has a liquidity value of 0.1404, more significant than the significance level of 0.05. This result shows that liquidity does not affect capital structure.
3. The relationship between firm size and capital structure has a firm size value of 0.0000, which is less than the significance level of 0.05. This result indicates that H03 is accepted, meaning firm size positively affects capital structure.
4. The relationship between business risk and capital structure has a business risk value of 0.0000, which is less than the significance level of 0.05. This result indicates that H04 is accepted, meaning business risk positively affects capital structure.
5. The relationship between growth and capital structure has a growth value of 0.3260, more significant than the significance level of 0.05. This result shows that growth does not affect capital structure.
6. The relationship between asset tangibility and capital structure has an asset tangibility value of 0.0000, which is less than the significance level of 0.05. This result indicates that H06 is accepted, meaning asset tangibility positively affects capital structure.

Discussion

The effect of profitability on capital structure

The effect of profitability on capital structure shows a probability value of 0.3020 with a coefficient value of 0.0000 and a coefficient of -2.125878. This probability value is higher than the significance level of 0.05. This indicates that profitability affects the capital structure in the basic and chemical industry sectors listed on the IDX for the period 2016-2023. This finding aligns with the hypothesis set by the researcher, that profitability has a significant negative impact on capital structure. Based on the test results, it indicates that profitability negatively correlates with capital structure; as profitability increases, capital structure decreases, and vice versa. This is consistent with previous studies showing a negative effect between profitability and capital structure, including those by Akbar (2023) and Tsou (2021).

The Effect of Liquidity on Capital Structure

The effect of liquidity on capital structure shows a probability value of 0.1404 and a coefficient of -0.172751. This probability value is higher than the significance level of 0.05, indicating that liquidity does not affect the capital structure in the basic and chemical industry sectors listed on the IDX for the period 2016-2023. This finding contradicts the researcher's hypothesis that liquidity significantly

negatively impacts capital structure. Companies with high liquidity tend to fund their needs with internal funds (retained earnings) before seeking external funding such as loans. This aligns with the Pecking Order Theory, as companies with high liquidity are better able to meet their short-term obligations and have sufficient funds for investment and operations. By minimizing debt, these companies can also reduce the risk of future default. The descriptive analysis results contradict the research hypothesis and previous studies showing a negative effect between liquidity and capital structure, including Haron (2021), Akbar (2023), and Sihombing & Kristanti (2023).

The Effect of Firm Size on Capital Structure

The effect of firm size on capital structure shows a probability value of 0.0000 and a coefficient of 9.091774. This probability value is lower than the significance level of 0.05, indicating that firm size affects the capital structure in the basic and chemical industry sectors listed on the IDX for the period 2016-2023. This finding aligns with the researcher's hypothesis that firm size significantly positively affects capital structure. Firm size can be measured by total assets, as the confidence of internal and external parties in providing funding can be influenced by the scale of the company. Larger companies generally have more stable cash flows and better reputations, making it easier for them to obtain funding from internal and external sources. This supports the theory that creditors are more inclined to lend to larger companies, believing they are more capable of repaying their debts. This finding is consistent with previous studies by Prakash (2023), Akbar (2023), Tsoy (2021), and Sihombing & Kristanti (2023), which found a significant positive relationship between firm size and capital structure.

The Effect of Business Risk on Capital Structure

The effect of business risk on capital structure shows a probability value of 0.0000 and a coefficient of 7.039666. This probability value is lower than the significance level of 0.05, indicating that business risk affects the capital structure in the basic and chemical industry sectors listed on the IDX for the period 2016-2023. This finding contradicts the researcher's hypothesis that business risk significantly negatively affects capital structure. Companies with high business risk tend to avoid debt to minimize the risk of bankruptcy. This aligns with the theory that companies with high business risk have higher debt ratios and capital structures. This study found a relationship between business risk and capital structure, differing from previous studies that showed a negative relationship between the two. This study's results are consistent with previous studies by Zahro & Hidayati (2022) and Setyani (2022), which explain that business risk significantly positively affects capital structure.

The Effect of Company Growth on Capital Structure

The effect of growth on capital structure shows a probability value of 0.3260 and a coefficient of 0.207587. This probability value is higher than the significance level of 0.05, indicating that growth does not affect the capital structure in the basic and chemical industry sectors listed on the IDX for the period 2016-2023. This finding contradicts the researcher's hypothesis that growth significantly positively affects capital structure. As company growth increases, the need for financing to support the balance also increases. Growth is a factor that must be considered in capital structure decision-making, as companies with high growth rates will rely on external capital to meet their production capacity needs, which can affect sales growth. The descriptive analysis results contradict the research hypothesis and are consistent with previous studies that show a positive effect between growth and capital structure, including studies by Prakash (2023), Tsoy (2021), Oghoye (2022), and Aini (2022).

The Effect of Asset Tangibility on Capital Structure

The effect of asset tangibility on capital structure shows a probability value of 0.0000 and a coefficient of 9.469717. This probability value is lower than the significance level of 0.05, indicating that asset tangibility affects the capital structure in the basic and chemical industry sectors listed on the

IDX for the period 2016-2023. This finding aligns with the researcher's hypothesis that asset tangibility significantly positively affects capital structure. Companies with a high proportion of long-term fixed assets, such as property, plants, and equipment, tend to use more long-term debt to finance these assets. This is because fixed assets can be used as collateral for debt. The trade-off theory states that companies with more tangible assets, such as property, plants, and equipment, have a higher likelihood of obtaining secure loans with lower interest rates. This is because tangible assets can be used as collateral for debt, providing higher credibility for the company to lenders. The descriptive analysis results align with the research hypothesis and are consistent with previous studies that show a positive effect between asset tangibility and capital structure, including studies by Prakash (2023), Haron (2021), Tsoy (2021), Sihombing & Kristanti (2023), and Oghoye (2022).

Conclusion

This research aims to determine the impact of profitability, liquidity, firm size, business risk, company growth, and asset tangibility on the capital structure of companies in the primary and chemical industry sectors listed on the Indonesia Stock Exchange (IDX) from 2016 to 2023. The study concludes that profitability has a significant negative impact on capital structure, while liquidity does not significantly affect it. Firm size and business risk considerably positively impact capital structure, whereas growth does not affect it. Additionally, asset tangibility significantly positively influences capital structure. Based on these findings, several recommendations are provided for future research and practical applications. Future studies should consider balancing the study period and including other variables such as leverage and non-deferred tax liability. Academic researchers are advised to focus on diverse objectives, encompassing the industrial, economic, logistics, property, and real estate sectors. Optimizing assets is recommended for companies to enhance performance, as a broad range of assets can maximize operational activities and increase overall benefits.

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