

The Role of Capital Structure in Mediating the Effect of Liquidity on Profitability

Astina Tinus¹, Bambang Mahmudi², Enok Nurhayati³

¹²³ManajemenDepartment, Sultan Ageng Tirtayasa University
e-mail: tinusastina@gmail.com

Abstrak

Tujuan dari penelitian ini adalah untuk menilai dampak current ratio terhadap net profit margin dengan variabel intervening debt to equity ratio dan debt to asset ratio. Penelitian dilaksanakan karena adanya fenomena bisnis tertentu yang menjadi fokus penelitian, ketidaksesuaian data empiris dengan teori, serta kekurangan dalam penelitian sebelumnya yang menimbulkan kesenjangan penelitian. Penelitian ini adalah tipe penelitian kuantitatif yang menggunakan teknik pengumpulan data dari laporan keuangan perusahaan melalui teknik dokumentasi. Seluruh perusahaan yang terdaftar dan bertahan dalam Indeks Bisnis-27 di BEI selama tahun 2013-2022 menjadi populasi dalam penelitian ini. Ada 6 perusahaan yang diambil sebagai sampel dalam penelitian ini dari 27 perusahaan yang ada dengan menggunakan metode purposive sampling. Path analysis and sobel test are the data analysis techniques employed in this research. Penelitian ini menunjukkan bahwa CR tidak memiliki pengaruh pada NPM, CR memiliki pengaruh negatif dan signifikan pada DER, CR juga memiliki pengaruh negatif dan signifikan pada DAR, namun DER dan DAR tidak memiliki pengaruh pada NPM. DER tidak dapat memediasi hubungan antara CR dan NPM, sementara DAR dapat memediasi hubungan tersebut.

Kata kunci: *Likuiditas, Struktur modal, Profitabilitas*

Abstract

The objective of this study is to assess the impact of the Current Ratio (CR) on the Net Profit Margin (NPM), with the Debt-to-Equity Ratio (DER) and Debt-to-Asset Ratio (DAR) serving as intervening variables. This research was conducted due to certain business phenomena that became the focal point of investigation, discrepancies between empirical data and existing theories, and gaps in previous studies that prompted the need for further exploration. This study employs a quantitative research approach, utilizing data collection techniques based on company financial reports through documentation methods. The population of this study comprises all companies listed and consistently included in the Business-27 Index on the Indonesia Stock Exchange (IDX) from 2013 to 2022. A total of 6 companies were selected as samples from the 27 companies available, using purposive sampling methods. Path analysis and the Sobel test were utilized as data analysis techniques in this research. The findings of this study indicate that the CR does not have a significant impact on NPM. However, CR has a negative and significant effect on both DER and DAR. Furthermore, DER and DAR do not

have a significant influence on NPM. While DER cannot mediate the relationship between CR and NPM, DAR can mediate this relationship.

Keywords: *Liquidity, Capital structure, Profitability*

INTRODUCTION

Evaluating a business's condition and potential typically involves analyzing the financial performance of the company. Enhancements in financial performance can indicate positively to stakeholders, such as investors, leading to a boost in capital and investment (Alfiyah, 2019). A critical factor in assessing financial performance is profitability, showing the company's skill in generating profit using resources efficiently (Hery, 2016).

The main focus is on profitability because it reflects how well the company's management is performing. In this situation, Net Profit Margin (NPM) is frequently utilized to gauge the proportion of net profit earned from each unit of the company's net sales (Hery, 2015). The higher the NPM, the better the company's ability to generate profits from sales, which is seen as a positive signal for investors and other stakeholders. This research examines the NPM of companies in the Bisnis-27 Index on the Indonesia Stock Exchange (IDX) from 2013 to 2022. The Bisnis-27 Index consists of top-performing stocks chosen by market players for their strong fundamentals, technical indicators, and high liquidity, as well as excellent corporate governance and transparency. Nevertheless, the examination of NPM trends in these firms reveals noteworthy fluctuations over the studied time frame. The decrease in NPM seen in some years was caused by a range of factors, such as lower global commodity prices, reduced revenue, and the effects of the COVID-19 pandemic. On the other hand, the rise in NPM in specific years was due to reasons like improved operational efficiency and higher prices of products sold. The fluctuation of NPM suggests that profitability is impacted by various internal and external factors. Thus, the purpose of this research is to recognize and examine the elements that impact the profitability of businesses, specifically those included in the Bisnis-27 Index. The results of this study are anticipated to offer more in-depth understanding of the workings of corporate profitability and ways in which companies can enhance their financial outcomes going forward. Several factors, such as firm size, liquidity, debt levels, and working capital, are recognized to impact profitability (Sianturi & Anjelina, 2021). Furthermore, the company's profitability can be significantly affected by capital structure and liquidity (Zega & Wahyudi, 2023). Liquidity is essential as it shows the company's capacity to fulfill short-term obligations, which in turn influences profits. (Olaleye et al., 2021); (Fitroh et al., 2020)

Liquidity ratios (CR), are utilized to assess a company's capacity to settle immediate debts with its existing assets. This proportion serves as a crucial measure in evaluating a company's liquidity status and its correlation with profitability (Kasmir, 2008). Signalling Theory suggests that fluctuations in the Current Ratio can communicate the financial status of the company to investors and the market. A decrease in the Current Ratio could indicate liquidity issues, potentially affecting the company's profitability in a negative way (Brigham & Houston, 2006). Significant fluctuations are observed in the Current Ratio trends from 2013 to 2022 in companies listed in the Bisnis-27 Index. While the average Current Ratio has seen a yearly

decrease, there were instances of growth in 2015 and 2020. The decrease was a result of several factors, including dropping prices of goods and rising short-term debts, impacting the liquidity of the companies. This occurrence goes against the Signalling Theory, which suggests that a rise in the Current Ratio should lead to higher profitability, however, the link between them seems to be adverse.

Prior research on the correlation between liquidity and profitability has demonstrated inconsistent findings. Gusrina et al. (2023), Olaleye et al. (2021), and Sulistyo & Arif, (2022) have all found evidence in their research to support the idea that liquidity ratios have a positive impact on profitability, thus aligning with the Signalling Theory. Nevertheless, differing research suggests conflicting findings, as evidenced in studies conducted by Sulistiono & Nur, (2023) and Safrani & Alwi, (2021), which indicate a negative impact of the Current Ratio on profitability. These contradictory findings indicate a need for more research. In order to tackle this discrepancy, this research will examine how capital structure affects the relationship between liquidity and profitability. The Debt to equity ratio (DER) and Debt to Asset Ratio (DAR) are seen as factors that can impact a company's profitability. A company can increase its profitability by utilizing an ideal capital structure to reduce the cost of capital and mitigate financial risks Van Horne & Wachowicz, (2007). Hence, the focus of this research is to investigate how capital structure can impact the link between liquidity and profitability, offering fresh perspectives on corporate financial operations under the title **"The Role of Capital Structure in Mediating the Impact of Liquidity on Profitability."**

METHODOLOGY

Types of Research

This study uses a causal research design based on the type of research as per the explanatory nature of science. Causal research aims to offer explanations by identifying cause-and-effect connections among different concepts, variables, or strategies that have been created. This study uses a causal research design based on the type of research as per the explanatory nature of science. Causal research aims to offer explanations by identifying cause-and-effect connections among different concepts, variables, or strategies that have been created (Prof. Augusty Ferdinand, 2014). The purpose of this study is to demonstrate how independent variables impact dependent variables, with the inclusion of mediating variables, allowing for a broad conclusion to be drawn from the results. This study utilizes a quantitative approach in its research methodology to test hypotheses. The study uses quantitative data from financial statements of companies in the Bisnis-27 Index on the Indonesia Stock Exchange (IDX) from 2017 to 2021.

Population and Sample

The population includes all 27 companies listed on the Bisnis-27 Index from 2013 to 2022. The sample was chosen using purposive sampling methods. The study will include companies that meet the following criteria: (1) being listed on the Bisnis-27 Index on the Indonesia Stock Exchange (IDX) between 2013-2022, (2) being continuously included in the Bisnis-27 Index from 2013-2022, and (3) providing data on Current Ratio (CR), Net Profit

Margin (NPM), and Debt to Equity Ratio (DER) from 2013-2022. According to these criteria, a total of 6 companies were chosen for the study.

Analysis Method

The quantitative data analysis methods utilized in this study are analytical techniques. Quantitative data analysis consists of handling, displaying, and conducting computations to characterize the data (Siregar, 2015:125). The methods for analyzing the data to solve the research issues consist of descriptive statistics, Path Analysis, panel data regression analysis, classical assumption tests, and are also expanded with Sobel Test analysis. Eviews 12 is the data analysis tool used in this study.

RESULTS AND DISCUSSION

Descriptive Statistical Test

The descriptive statistics output was processed using Eviews version 12, yielding the following results and analysis:

Table 1. Descriptive Analysis

	CR	NPM	DER	DAR
Mean	1.708667	0.118633	0.735967	0.410583
Median	1.619500	0.111000	0.726500	0.412500
Maximum	3.792000	0.349000	1296000	0.550000
Minimum	0.673000	0.051000	0.334000	0.251000
Std. Dev.	0.587363	0.054916	0.214018	0.070844
Skewness	0.709235	1.504373	0.122724	-0.307173
Kurtosis	4.103800	6.835189	2.474923	2.429724
Jarque-Bera	8.076073	5.942225	0.839877	1.756586
Probability	0.017632	0.000000	0.657087	0.415492
Sum	1.025200	7.118000	4.415800	2.463500
Sum Sq. Dev.	2.035474	0.177930	2.702412	0.298113
Observations	60	60	60	60

According to Table 1, the lowest liquidity variable value among firms in the Bisnis-27 Index from 2013 to 2022 is 0.637, documented by PT Telekomunikasi Indonesia Tbk. (TLKM) during the year 2020. This suggests that TLKM had lower liquidity compared to other companies, with a Current Ratio (CR) below average. Simply put, only 63.7% of TLKM's current liabilities were backed by current assets. In 2020, TLKM saw a growth of 18.40% in its current liabilities compared to the previous year, going up from IDR 58,369 million to IDR 69,093 million. This was because the company's current assets grew at a slower rate than the rise in current liabilities in that year. The COVID-19 pandemic heightened the company's challenges, putting pressure on its performance and requiring

it to sustain and grow in a sluggish economy. PT Charoen Pokphand Indonesia Tbk reached the highest liquidity value of 3.792. CPIN was established in 2013. This suggests that CPIN was very capable of fulfilling its immediate debts, with IDR 3.792 in current assets for every IDR 1.00 of current liabilities.

PT Charoen Pokphand Indonesia Tbk recorded the lowest profitability value of 0.051 among companies in the Bisnis-27 Index from 2013 to 2022. CPIN was reported in 2017. This shows that CPIN's sales contribution to net profit was relatively less strong when compared to other companies in the Bisnis-27 Index. As per Bisnis (<https://market.bisnis.com>), CPIN's sales in 2017 were IDR 49.37 trillion, a jump from IDR 38.26 trillion the year before, with a rise in cost of goods sold to IDR 43.11 trillion from IDR 31.74 trillion. Meanwhile, PT Adaro Energy Indonesia Tbk reached a profitability variable of 0.349 or 34.49%. In the year 2022, ADRO will be operational. This indicates that ADRO achieved a net profit of 34.49% from its overall revenue. During that year, ADRO announced a full net profit of US\$2.83 billion, equal to IDR 43.23 trillion, showing a 175% growth compared to the previous year, according to Bisnis (<https://market.bisnis.com>). ADRO's revenue increase was fueled by a rise in sales volume and ASP, backed by elevated coal prices. Weather conditions, supply constraints, and geopolitical events led to prices remaining high, which in turn drove up the annual growth in ASP. ADRO's revenue saw a significant increase as a result of effective operations and the positive effect of increased selling prices for their products, leading to more than a doubling in revenue.

The average liquidity variable is 1.708, higher than its standard deviation of 0.588, while the average profitability variable is 0.118633, higher than its standard deviation of 0.0549. This suggests that the liquidity variable has a well-balanced data distribution with low data deviation, indicating that the data is homogeneous or less varied. With less deviation, the variability of the data is also reduced.

Model Analysis

1. Substructure 1

Table 2. Chow test of Susstructure 1

Effects Test	Statistic	d.f.	Prob.
Cross-section F	1.513249	-5,53	1.3986111
Cross-section Chi-square	8.006747	5	1.0826389

Having a probability value of $0.1559 > 0.05$, H_0 is accepted, demonstrating that the suitable model for substructural 1 is the Common Effect Model (CEM).

Table 3. Langrange Multiplier Test of Susstructure 1

Test Hypothesis			
	Cross-section	Time	Both
Breusch-Pagan	0.166411 (0.6833)	0.726650 (0.3940)	0.893061 (0.3446)
Honda	0.407935 (0.3417)	-0.852437 (0.8030)	-0.314311 (0.6234)
King-Wu	0.407935 (0.3417)	-0.852437 (0.8030)	-0.182353 (0.5723)
Standardized Honda	1.019133 (0.1541)	-0.695135 (0.7565)	-3.371938 (0.9996)
Standardized King-Wu	1.019133 (0.1541)	-0.695135 (0.7565)	-3.133863 (0.9991)
Gourieroux, et al.	--	--	0.166411 (0.5717)

H0 is accepted for substructural 1 with a probability value of 0.6833 > 0.05, suggesting that the Common Effect Model (CEM) is the most suitable model.

2. Substructure 2

Table 4. Chow test of Susstructure 2

Effects Test	Statistic	d.f.	Prob.
Cross-section F	2.798608	-5,53	0.17847
Cross-section Chi-square	14.057808	5	0.10556

H1 is accepted for substructural 2 with a probability value of 0,0152 < 0,05, suggesting that the Fixed Effect Model (FEM) is the most suitable model.

Table 5. Hausmen test of Susstructure 2

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.529660	1	0.4667

H0 is accepted for substructural 2 with a probability value of $0,4667 > 0,05$, suggesting that the Random Effect Model (REM) is the most suitable model.

Table 6. Langrange Multiplier Test of Susstructure 2

Test	Cross-section	Time	Both
Breusch-Pagan	3.308817 (0.0689)	2.391460 (0.1220)	5.700278 (0.0170)
Honda	1.819015 (0.0345)	-1.546435 (0.9390)	0.192744 (0.4236)
King-Wu	1.819015 (0.0345)	-1.546435 (0.9390)	0.534266 (0.2966)
Standardized Honda	2.675273 (0.0037)	-1.412993 (0.9212)	-2.779145 (0.0973)
Standardized King-Wu	2.675273 (0.0037)	-1.412993 (0.9212)	-2.280393 (0.9887)
Gourieroux, et al.	--	--	3.308817 (0.0823)

H0 is accepted for substructural 2 with a probability value of $0,0689 > 0,05$, suggesting that the Commom Effect Model (CEM) is the most suitable model.

3. Substructure 3

Table 7. Chow test of Susstructure 3

Effects Test	Statistic	d.f.	Prob.
Cross-section F	5.335436	(5, 51)	0.0005
Cross-section Chi-square	25.244154	5	0.0001

H1 is accepted for substructural 2 with a probability value of $0,0001 < 0,05$, suggesting that the Fixed Effect Model (FEM) is the most suitable model.

Table 8. Hausmen test of Susstructure 3

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	6.302572	3	0.0978

H0 is accepted for substructural 2 with a probability value of $0,0978 > 0,05$, suggesting that the Fixed Effect Model (FEM) is the most suitable model.

Table 9. Langrange Multiplier Test of Susstructure 3

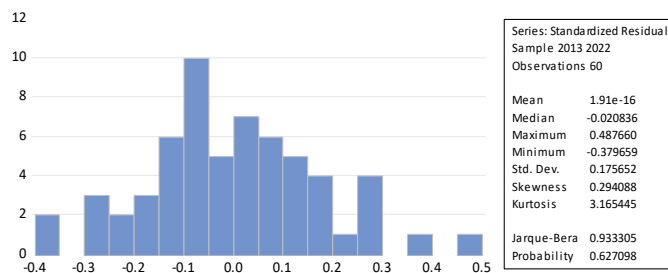
Test Hypothesis			
	Cross -section	Time	Both
Breusch - Pagan	5.970612 (0.0145)	1.954534 (0.1621)	7.925146 (0.0049)
Honda	2.443484 (0.0073)	-1.398047 (0.9190)	0.739236 (0.2299)
King -Wu	2.443484 (0.0073)	-1.398047 (0.9190)	1.123653 (0.1306)
Standardized Honda	3.675221 (0.0001)	-1.268875 (0.8978)	-2.125112 (0.9832)
Standardized King -Wu	3.675221 (0.0001)	-1.268875 (0.8978)	-1.558031 (0.9404)
Gourieroux ,et al .	--		5.970612 (0.0199)

H1 is accepted for substructural 2 with a probability value of $0,0145 < 0,05$, suggesting that the Random Effect Model (REM) is the most suitable model.

Classical Assumptions Testing

1. Normality Test

Once the Common Effect Model (CEM) is identified as suitable for substructures 1 and 2, and the Random Effect Model (REM) for substructure 3, the subsequent task is to conduct a normality assessment. This assessment is conducted to determine if the residuals of the regression model adhere to a normal distribution. If the Jarque-Bera probability value exceeds 0.05, it suggests that the model follows a normal distribution. Yet, when the Jarque-Bera probability value is below 0.05, the data in the model is not distributed normally. The normality test results for each substructure are provided below:

**Figure 1. Normality Test of Substructure 1**

According to the normality test results for substructural 1, the Jarque-Bera value is 0.933305, exceeding 0.05. Hence, we can infer that the data in substructure 1 follows a normal distribution.

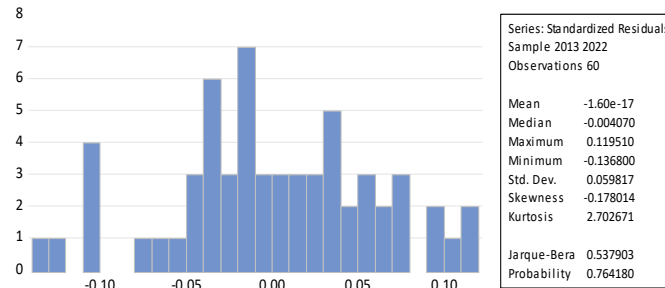


Figure 2. Normality Test of Substructure 2

The Jarque-Bera value for substructural 2 is 0.537913, indicating non-normal distribution as it exceeds 0.05. This shows that the data in subset 2 follows a normal distribution. Based on the outcomes of both examinations, it can be inferred that the data in substructural 1 and substructural 2 follow the normal distribution. Nevertheless, there is no need for normality testing in substructural 3 because the chosen model estimation is the Random Effect Model (REM).

2. Multicollinearity Test

The study included a multicollinearity test to check if the regression model's independent variables are uncorrelated. The multicollinearity test is exclusively conducted on models with multiple independent variables. Hence, there is no need for multicollinearity testing for substructures 1 and 2. In the case of substructural 3, the multicollinearity test can be skipped as the chosen model estimation is the Random Effect Model.

3. Heteroscedasticity Test

The reason for performing a heteroscedasticity test is to assess if there is a variation in variance among the residuals of different observations in the regression model. This study utilized the Glejser test, which involves regressing AbsUi against the independent variables through a regression equation. If the probability value exceeds 0.05, it can be inferred that there is no evidence of heteroscedasticity present in the regression model. The outcomes of the test for heteroscedasticity for substructural models 1 and 2 are as listed below:

Table 10. Heteroscedasticity Test of Substructure 1

Tables Variable	Tables Coefficient	Tables Std. Error	Tables t-Statistic	Tables Prob.
c	0.083947	0.042448	1.977614	0.0527
CR	0.031789	0.023514	1.351911	0.1817

Having a probability value of 0.1817 greater than 0.05 indicates that there is no evidence of heteroscedasticity in the regression model for substructural 1.

Table 11. Heteroscedasticity Test of Substructure 1

Tables Variable	Tables Coefficient	Tables Std. Error	Tables t-Statistic	Tables Prob.
c	0.021586	0.013936	1.548943	0.1268
CR	0.015233	0.007720	1.973260	0.0532

A probability value of 0.0532, higher than 0.05, indicates that the regression model for substructural 2 does not exhibit heteroscedasticity. Moreover, the heteroscedasticity test is not needed for substructural 3 as the Random Effects Model (REM) is the chosen model.

Hypothesis Testing Results

Table 12. Results of structural regression test 1

Tables Variable	Tables Coefficient	Tables Std. Error	Tables t-Statistic	Tables Prob.
c	1.091656	0.070886	15.40018	0.0000
CR	-0.208168	0.039267	-5.301295	0.0000
R-squared	0.326394	Mean dependent Var		0.735967

Table 13. Results of structural regression test 2

Tables Variable	Tables Coefficient	Tables Std. Error	Tables t-Statistic	Tables Prob.
C	0.521005	0.024140	21.58299	0.0000
CR	-0.064624	0.013372	-4.832751	0.0000
R-squared	0.287079	Mean dependent var		0.410583

Table 14. Results of structural regression test 3

Tables Variable	Tables Coefficient	Tables Std. Error	Tables t-Statistic	Tables Prob.
C	0.236444	0.088729	2.664804	0.0100
CR	-0.002913	0.016890	-0.172465	0.8637
DER	-0.003931	0.131235	-0.029951	0.9762
DAR	-0.267768	0.399914	-0.669565	0.5059

1. The Influence of Current Ratio on Net Profit Margin.

Findings for Hypothesis 1 are outlined in Table 14. The t-value for the influence of the CR variable on NPM is -0.172465, compared to the critical t-value of 2.00247 for a probability of 0.05 and degrees of freedom of 57. Given that the t-value is lower than the t-table value, with a significance level of 0.8637 which exceeds 0.05, it can be inferred that CR's influence on NPM is both negative and statistically insignificant. As a result, Hypothesis 1 stating that CR positively and significantly influences NPM is not supported, or **"H1 is rejected."**

2. The Influence of Current Ratio on Debt to Equity Ratio.

The calculated t-value for the impact of the Current Ratio (CR) on the Debt-to-Equity Ratio (DER) is -5.301295, as indicated in Table 12 from the results of hypothesis test 2. Comparatively, the critical t-value for a 0.05 significance level and 59 degrees of freedom (60-1) is 2.00100. As the t-value (-5.301295) is lower than the critical t-table value (-2.00100) and the significance level is 0.0000 (lower than 0.05), we can infer that CR negatively and significantly impacts DER. Thus, hypothesis 2, which contends that CR has a negative and significant impact on DER, is confirmed, or **"H2 is accepted."**

3. The Influence of Current Ratio on Debt to Asset Ratio.

The results of the hypothesis test for Hypothesis 3, presented in Table 13, reveal that the t-value for the impact of the CR variable on DAR is -4.832751. The t-table value is 2.00100, given a probability of 0.05 and degrees of freedom (60-1=59). The negative t-value being lower than the negative t-table value ($-4.832751 < -2.00100$) with a significance level of 0.0000, smaller than 0.05, leads to the conclusion that CR negatively and significantly influences DAR. As a result, Hypothesis 3, which claims that CR negatively and significantly impacts DAR, is supported, or **"H3 is accepted."**

4. The Influence of Debt to Equity Ratio on Net Profit Margin.

The findings of Hypothesis Test 4, displayed in Table 14, indicate that the computed t-value for the impact of DER on NPM is -0.029951. The t-value needed for a significance level of 0.05 and 57 degrees of freedom is 2.00247. Because the computed t-value (-0.029951) surpasses the negative critical t-value (-2.00247) and the significance level (0.9762) is above 0.05, it is inferred that the DER does not have a significant impact on NPM. As a result, the claim in Hypothesis 3 stating that DER positively and significantly impacts NPM has been disapproved, or **"H4 is rejected."**

5. The Influence of Debt to Asset Ratio on Net Profit Margin .

The data from Hypothesis Test 5, displayed in Table 14, suggest that the t-value for the impact of DAR on NPM is -0.669565. The t-value required for a significance level of 0.05 and 57 degrees of freedom is 2.00247. The t-value calculated (-0.669565) exceeds the negative critical t-value (-2.00247) and with a significance level of 0.5059 > 0.05, it can be concluded that DAR has a negligible and negative impact on NPM. Hypothesis 5, which claims that DAR negatively and significantly impacts NPM, is not supported and therefore rejected as **"H5 is rejected."**

Sobel Test

The Sobel Test evaluates how an intervening variable affects the connection between independent and dependent variables. The Sobel Test is computed using this formula:

$$S_{ab} = \sqrt{b^2 S_{a^2} + a^2 S_{b^2} + S_{a^2} S_{b^2}}$$

- S_a is the standard error of the coefficient a ,
- S_b is the standard error of the coefficient b ,
- a is the regression coefficient of the independent variable (X) on the mediator variable (Z),
- b is the regression coefficient of the mediator variable (Z) on the dependent variable (Y).

1. Impact of Liquidity on Profitability Through Debt to Equity Ratio (DER)

$$S_{ab} = \sqrt{b^2 S_{a^2} + a^2 S_{b^2} + S_{a^2} S_{b^2}}$$

$$S_{ab} =$$

$$\sqrt{(-0.003931^2)0.039267^2 + (-0.208168)^2 0.131235^2 + (0.039267^2)0.131235^2}$$

$$S_{ab}$$

$$= \sqrt{(0.000016)0.001542 + (0.043334)0.017223 + (0.001542)0.017223}$$

$$S_{ab} = \sqrt{0.002383 + 0.000746 + 0.000027}$$

$$S_{ab} = \sqrt{0.003156}$$

$$S_{ab} = 0.056$$

The Sobel Test formula is utilized to examine the importance of the partial indirect effect. The calculation of the indirect effect's importance is done using the formula provided below:

$$t1 = \frac{ab}{S_{ab}}$$

$$t1 = \frac{(-0.208168)(-0.003931)}{0.056}$$

$$t1 = \frac{0.000818}{0.056}$$

$$t1 = 0.15$$

According to the findings, the calculated t value of 0.15 is lower than the t table value of 1.66 ($0.15 < 1.66$). Thus, it can be inferred that the Debt to Equity Ratio (DER) is not a significant mediator of the impact of liquidity on profitability within the capital structure. **“H5 Rejected”**

2. Impact of Liquidity on Profitability Through Debt to Asset Ratio (DAR)

$$S_{ab} = \sqrt{b^2Sa^2 + a^2Sb^2 + Sa^2Sb^2}$$

$$S_{ab} =$$

$$\sqrt{(-0.267768^2)0.013372^2 + (-0.064624)^20.399914^2 + (0.013372^2)0.399914^2}$$

$$S_{ab} = \sqrt{(0.071700)0.000179 + (0.004178)0.159931 + (0.000179)0.159931}$$

$$S_{ab} = \sqrt{0.000013 + 0.000668 + 0.000028}$$

$$S_{ab} = \sqrt{0.000710}$$

$$S_{ab} = 0.027$$

$$t1 = \frac{ab}{S_{ab}}$$

$$t1 = \frac{(-0.064624)(-0.267768)}{0.027}$$

$$t1 = \frac{0.017304}{0.027}$$

$$t1 = 6.49$$

According to the findings, with a t-table of 1.66, the calculated t-value is 6.49, exceeding the t-table ($6.49 > 1.66$), indicating that the Debt to Asset Ratio (DAR) effectively mediates the impact of liquidity on profitability. **“H6 Accepted”**

DISCUSSION

Having a lot of cash available in a company doesn't always mean it will be profitable; instead, it could result in funds not being utilized that could have been invested to make money for the company (Fransisca & Widjaja, 2019). Indeed, companies with lower liquidity levels may actually experience higher profitability than those with higher liquidity. The company's assets are better used to fund obligations rather than to improve profits, as shown by research by various authors (Anggarsari & Aji, 2018). This finding is supported by previous research, including studies by Maharani et al. (2022), Sulistiono & Nur, (2023), Safrani & Alwi (2021), and Ramadhan Ersyafdi et al. (2022) This research

suggests that liquidity, measured by the Current Ratio (CR), does not significantly affect profitability, indicated by the Net Profit Margin.

Any rise in the Current Ratio of a company will notably lower its Debt to Equity Ratio and Debt to Asset Ratio. This is in line with the Pecking Order Theory, which states that firms tend to prioritize internal funding over external funding because it is less risky, while external financing is more risky and could lead to higher interest expenses. Hence, an increased level of liquidity within a company typically leads to a decrease in its capital structure. Simply put, a company with strong liquidity can easily pay off its short-term debts, showing a significant amount of internal funds and reducing the need for borrowing (Afa & Hazmi, 2021). Having high liquidity also gives the company financial freedom, enabling it to utilize existing cash for investments or strategic initiatives without taking on extra debt. Furthermore, it allows the company to more effectively handle crises or economic uncertainties without encountering major financial hardships. This conclusion is backed up by prior research, such as studies conducted by Zalukhu et al. (2020), Dewi & Fachrurrozie, (2021)), Lukman & Nurani Hartikayanti (2022), Geraldine & Lestari (2022), and Arindhita & Sutrisno (2022), which indicate that liquidity, as proxied by CR, significantly impacts capital structure.

The study suggests that the impact of liquidity on profitability is more significant when mediated by capital structure than when considered directly. Furthermore, the Sobel test outcomes indicate that the capital structure plays a significant and complete mediating role in this connection. As stated by Subagyo (2018), full mediation occurs when the independent variable affects the dependent variable solely through the mediator variable, with this study's results demonstrating that the Current Ratio (CR) does not directly impact Net Profit Margin (NPM). A small Debt to Asset Ratio (DAR) may indicate a safer financial strategy. Moreover, maintaining a high level of liquidity to decrease the Debt Asset Ratio can lead to a decrease in interest costs and have a favorable effect on Net Profit Margin. Reduced interest costs increase the net income generated from the company's activities.

The way in which a company chooses to fund its activities greatly affects its risk, income, and overall performance (Ichwanudin et al., 2023). If a company fails to make proper decisions about its capital structure, it could experience various detrimental outcomes. This can involve higher capital expenses, since relying too much on debt can result in increased interest payments that reduce net income, disturb profit margins, and raise the likelihood of bankruptcy in case of economic downturn.

Liquidity pertains to a firm's capacity to fulfill its immediate liabilities. A company that has ideal liquidity is expected to efficiently use its own funds, like retained earnings, for capital requirements and investment funding without depending on outside sources. This is in line with the Pecking Order Theory, as firms with high liquidity often choose a cautious capital structure with a low Debt-to-Asset Ratio (DAR) due to their capacity to cover short-term debts without taking on more debt. While high liquidity may not have a direct impact on profitability, it can affect profitability indirectly through the use of capital structure.

Previous research by (Mudjijah & Hikmanto, 2018), supports the findings of this study, showing that the influence of liquidity on profitability can be moderated by capital structure.

CONCLUSION

The results of this research indicate that profitability is not significantly affected by liquidity. Whether liquidity levels rise or fall, there is no substantial impact on profitability. This is largely because higher liquidity levels lead to holding more cash, rather than investing in productive assets, which can result in less optimal company performance. Furthermore, liquidity has a significant negative impact on the capital structure, particularly on the Debt-to-Equity Ratio (DER). As liquidity increases, companies tend to reduce their DER, opting to fund investments internally and reduce dependence on external borrowing. Similarly, liquidity significantly negatively affects the Debt-to-Assets Ratio (DAR). Companies with high liquidity often use their internal funds for operations and investments, thus decreasing their reliance on external debt and improving financial stability. The study also finds that the capital structure, as measured by DER, does not mediate the relationship between liquidity and profitability. This suggests that changes in DER do not significantly alter the effect of liquidity on profitability. However, the relationship is mediated by DAR, indicating that DAR plays a role in how liquidity influences profitability. High levels of liquidity decrease the need for borrowing, whereas low liquidity increases reliance on debt. The DAR demonstrates how high liquidity encourages the use of internal capital, which enhances operational efficiency and financial health, thereby impacting profitability. These findings align with previous studies, highlighting the indirect importance of liquidity management in influencing capital structure and profitability. Effective liquidity management is crucial for enhancing financial performance and ensuring long-term stability.

REFERENCES

- Alfiyah, N. (2019). Pengaruh Struktur Aktiva, Ukuran Perusahaan (Size), Dan Total Asset Turnover Terhadap Profitabilitas Dengan Struktur Modal Sebagai Variabel Intervening (Studi Pada Perusahaan Yang Masuk Di JII Periode 2014-2018). *Universitas Islam Indonesia*, 3. <http://hdl.handle.net/123456789/17984>
- Arindhita, A. A., & Sutrisno. (2022). The Effect of Profitability, Asset Structure, Business Risk, and Liquidity on Capital Structure in Health Sector Companies Listed on the Indonesia Stock Exchange. *International Journal of Economics, Business and Management Research*, 06(06), 191–206. <https://doi.org/10.51505/ijebmr.2022.6615>
- Brigham, E. F., & Houston, J. F. (2006). *Dasar-dasar Manajemen Keuangan*. Salemba Empat.
- Dewi, C. R., & Fachrurrozie, F. (2021). The Effect of Profitability, Liquidity, and Asset Structure on Capital Structure with Firm Size as Moderating Variable. *Accounting Analysis Journal*, 10(1), 32–38. <https://doi.org/10.15294/aaj.v10i1.44516>

- Fitroh, Fatonah, S., & Meilisa, R. (2020). Pengaruh Cash Ratio dan Current Ratio Terhadap Net Profit Margin (Studi Kasus Pada perusahaan Manufaktur Subsektor Semen dan Keramik yang Terdaftar di Bursa Efek Indonesia). *Jurnal Bina Bangsa Ekonomi* , 13(1), 184–193. www.idnfinancial.co.id
- Gusrina, D. H., Fitria, B. T., Tinggi, S., & Pasundan, I. E. (2023). The Effect of Liquidity and Return on Capital on Profitability (Study of Cigarette Sector Companies Listed on the Indonesia Stock Exchange for the 2016-2020 Period). *Jurnal Computech & Bisnis*, 17(1), 1–8.
- Hery. (2016). *Analisis Laporan Keuangan: Integrated And Comprehensive*. Gramedia Widiasarana Indonesia.
- Ichwanudi, W., Nurhayati, E., & Anwar, C. J. (2023). Modeling the Relationship between Capital Structure and Company Value in the Perspective of Agency and Trade-Off Theory . *WSEAS Transaction on Computer Research*, 11, 429–439.
- Kasmir. (2008). *Analisis Laporan Keuangan*. Raja Grafindo Persada.
- Lukman, D., & Nurani Hartikayanti, H. (2022). Pengaruh Pertumbuhan Aset, Likuiditas dan Profitabilitas Terhadap Struktur Modal. *JIMEA*, 6(2), 118–137. www.idntimes.com
- Maharani, E., Hasibuan, D. R., & Nainggolan, R. P. (2022). Effect of Current Ratio and Debt to Equity Ratio on Net Profit Margin in The Company PT Adhi Karya (Persero) Tbk. Which is Listed on Indonesia Stock Exchange In 2017-2021. *Jurnal Akuntansi & Perpajakan*, 4(1), 1–15.
- Mudjijah, S., & Hikmanto, A. (2018). Pengaruh Likuiditas, Struktur Aktiva, dan Pertumbuhan Penjualan Terhadap Profitabilitas yang di Mediasi oleh Struktur Modal pada perusahaan Subsektor Perkebunan yang terdaftar di BEI. *Jurnal Ekonomika Dan Manajemen*, 7(2), 113–129.
- Olaleye, O. I., Adesina, M. A., & Yusuf, S. A. (2021). Effect of Liquidity Management on Profitability of Commercial Banks in Nigeria. *American Journal Of Finance* , 6(2), 25–34. www.ajpojournals.org
- Prof. Augusty Ferdinand. (2014). *Metode Penelitian Manajemen* (5th ed.). Badan Penerbit Universitas Diponegoro.
- Ramadhan Ersyafdi, I., Fitriah, D., & Aryani, H. F. (2022). Pengaruh Likuiditas, Solvabilitas, Perputaran Aktiva dan Hutang terhadap Profitabilitas pada Perusahaan Sektor Consumer Non Cyclical. *MONETER Jurnal Akuntansi Dan Keuangan*, 9(2), 129–136. <http://ejournal.bsi.ac.id/ejurnal/index.php/moneter>
- Safrani, & Alwi. (2021). Pengaruh Current Ratio dan Debt to Total Asset Ratio terhadap Net Profit Margin pada PT. Unilever Indonesia TBK. Publishing Institution. *MOTIVASI: Jurnal Manajemen Dan Bisnis*, 6(2), 126–133. <http://jurnal.um-palembang.ac.id/motivasi>
- Siregar, S. (2015). *Statistik Parametrik untuk Penelitian Kuantitatif*. Bumi Aksara.

- Sulistiono, & Nur, B. (2023). Pengaruh Current Ratio (CR) Debt To Equity Ratio (DER) dan Inventory Turnover (ITO) terhadap Net Profit Margin (NPM) pada Perusahaan Makanan dan Minuman yang terdaftar di BEI Periode. *Jurnal Ekonomi Dan Bisnis*, 25(2), 181–192.
- Sulistyo, B., & Arif, M. M. S. (2022). Pengaruh Rasio Likuiditas dan Rasio Solvabilitas Terhadap Rasio Profitabilitas pada PT Kimia Farma TBK Periode 2011-2020. *Jurnal Riset Akuntansi Aksioma*, 21(2), 141–154. <https://doi.org/10.29303/aksioma.v21i2.182>
- Van Horne, J. C., & Wachowicz, J. M. (2007). *Prinsip prinsip Manajemen Keuangan* (12th ed., Vol. 2). Penerbit Salemba.
- Zalukhu, E. P., Simarmata, P. K., Sinambela, R. E., Purba, N. O., & Br. Sinaga, J. B. L. A. (2020). Pengaruh Likuiditas, Pajak, Profitabilitas terhadap Struktur Modal pada Sektor Aneka Industri yang terdaftar di BEI. *Owner (Riset Dan Jurnal Akuntansi)*, 4(2), 576–584. <https://doi.org/10.33395/owner.v4i2.292>
- Zega, E. H., & Wahyudi, I. (2023). Pengungkapan Corporate Social Responsibility, Struktur Modal, Likuiditas Terhadap Profitabilitas. *Jurnal Ilmiah Ilmu Pendidikan*, 6(11), 9160–9166.