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The Influence of Liquidity and Solvability on Company Value with Profitability as a Mediation Variable

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Abstract: ***This study aims to examine and analyze the effect of the Current Ratio and Debt-to-Equity Ratio on Price to Book Value with Return On Equity as a mediating variable for listed crude palm oil companies listed on the Indonesia Stock Exchange. The sample used 13 companies during the 2017-2021 period. While the data analysis method used in this research is Path Analysis with data processing software using Eviews 10. The results showed that the current ratio has no significant effect on return on equity, debt-to-equity ratio has a significant negative effect on return on equity, partially current ratio and debt-to-equity ratio have a significant positive effect on the price-to-book value, return on equity has no significant effect on the price-to-book value. And that return on equity is not able to mediate the effect of the current ratio and debt-to-equity ratio to price-to-book value.***

Keywords: Liquidity, Solvency, Profitability, and Firm Value.

1. Introduction

Since the COVID-19 pandemic entered Indonesia, it has caused a decline in national economic growth. Nonetheless, economic growth in 2021 gives a positive signal for economic prospects in 2022. The Central Statistics Agency reports that the Indonesian economy in the first quarter of 2022 grew 5.01% when compared to the first quarter of 2021. The palm oil processing industry contributed 17.6% of total non-oil and gas exports in the first quarter of 2022.

The scarcity and high price of cooking oil that occurred from late 2021 to early 2022 has become a problem that is being discussed in society. According to Andriessa (2022) the scarcity of cooking oil is caused by: (1) There has been a spike in Crude Palm Oil (CPO) prices on a global scale. (2) The Indonesian government's policy of implementing B30, namely mixing 70% diesel fuel with 30% biodiesel as fuel, has led to high demand for CPO. (3) The COVID-19 pandemic has had an impact on disrupting logistics flows which have hampered the distribution of CPO. It is known that in recent years the price of CPO has increased dramatically as shown in the following figure:

Figure 1: CPO's World Price

(Source: tradingeconomic.com)

Crude palm oil is oil that is reddish and is obtained from the extraction or the pressing process of the flesh of the palm fruit. Domestic CPO consumption shows a trend that continues to increase every year, the momentum of rising CPO prices brightens the prospects for the palm oil industry, giving rise to opportunities and competition that makes every

company must be able to face business competition (Putri & Ukhriyawati, 2016). According to Tyas (2020) various financial ratios are usually used to assess the financial condition of a company's performance, including liquidity ratios, solvency ratios, activity ratios, and profitability ratios.

In this study, researchers used liquidity ratios through the current ratio, solvency ratios through the debt-to-equity ratio, profitability ratios through return on equity, and firm value through price-to-book value. Several previous studies obtained different research results as follows:

Table 1: Research Gap

Variables	Authors	Results	
		Significant effect	Mediate
CR → ROE	Chabachib *et al*. (2020), Alpi (2018)	+ ✓	
	Jufrizen & Sari (2019), Rehman *et al*. (2015)	x	
DER→ ROE	Zaini *et al*. (2022), Suzulia *et al*. (2020)	+ ✓	
	Chabachib *et al*. (2020), Jufrizen & Sari (2019)	x	
	Colline (2022), Sari *et al*. (2017)	- ✓	
CR → PBV	Mardianti & Sunandar (2022), Putra & Lestari (2016)	+ ✓	
	Sari & Sedana (2020), Lumoly *et al*. (2018)	x	
DER→ PBV	Suraya & Dona (2020)	+ ✓	
	Chabachib *et. al*. (2020), Mardianti & Sunandar (2022)	x	
	Listyawati & Kristiana (2021), Furniawan (2019)	- ✓	
ROE→ PBV	Sutalaksana & Kurniawati (2021), Lumoly *et al*. (2018)	+ ✓	
	Suraya & Dona (2020), Hirdinis (2019)	x	
CR→ROE→ PBV	Puspita & Siswanti (2021), Chabachib *et al*. (2020), Zaini *et al*. (2022)		✓
	Yuliani *et al*. (2020)		x
DER→ROE→ PBV	Suzulia *et al*. (2020), Yuliani *et al*. (2020)		✓
	Chabachib *et al*. (2020), Hirdinis (2019)		x

Source: Researcher (2022)

Based on the background that has been described, the formulation of the problem in this writing is as follows:

1) Does the Current Ratio has a significant effect on Return on Equity?
2) Does the Debt to Equity Ratio has a significant effect on Return on Equity?
3) Does the Current Ratio has a significant effect on the Price to Book Value?
4) Does the Debt to Equity ratio has a significant effect on the Price to Book Value?
5) Does Return on Equity has a significant effect on Price to Book Value?
6) Is Return on Equity able to mediate the effect of the Current Ratio on Price to Book Value?
7) Return on Equity mediate the effect of the Debt to Equity Ratio on Price to Book Value?

2. Literature Review and Hypotheses

2.1 Signaling Theory

Signaling theory first appeared in 1973 by Spence through research entitled Job Market Signaling. According to Bae *et al*. (2018) Signaling theory is divided into 4 elements, namely signalers, signals, receivers, and feedback. Management insiders (executives, directors, or managers) act as signalers, while signals are information flows (news on stock prices, dividends, environmental financing, CSR investments, etc.). Meanwhile, receivers are outsiders who do not know insider information (individuals, investors, employees), then feedback is the interaction between signalers and receivers. For investors, the signal is information about the company's condition in the past, in the present, related to the assessment of risks and returns as well as the prospects of the company which will be analyzed from the company's financial statements, which will then be taken into consideration by investors in making investment decisions. effect on corporate life depression (Chabachib *et al*., 2020).

2.2 Firm Value

Firm value according to (Toni & Silvia, 2021) is the company's perception that investors have of the level of success through the resources that have been managed by the company, the firm value reflects the stock price if it experiences a stable price increase, the company is considered to have good growth in the future continuously. According to Fauziah (2017) there are several indicators to measure company value through stock valuation, such as Price Earning Ratio (PER), Tobins'Q, and Price to Book Value (PBV). According to Mulyana *et al*. (2018) firm value can be seen through Price to Book Value (PBV). Price to Book Value according to Firmialy *et al*. (2022) is the result of a comparison between the market price of shares owned by issuers and the book value per share. The book value per share is calculated by dividing the entire company's capital by all issued and fully paid shares. The PBV value describes the value of a company's shares that are valued by the market for investors. Firm value is a positive signal, if the company value is higher, it shows that the company's performance is getting better in the eyes of investors (Hera & Pinem, 2017).

2.3 Liquidity

According to Rist *et al*. (2014) liquidity is the ratio used when assessing a company's ability to pay off short-term debt. Ratios commonly used in liquidity ratios include Current Ratio, Cash Ratio, Operating Cashflow, Quick Ratio, Working Capital, Cash Conversion Cycle, and Acid test.

Liquidity according to (Jufrizen & Sari, 2019) is measured using the current ratio. CR is a ratio that shows a company's ability to pay a current debt, which is used to analyze a company's capital position (Sa'adah & Nur'ainui, 2020). According to Effendi *et al*. (2022) the industry-standard liquidity ratio is the current ratio of 2 times. The standard for a good current ratio is 200% or 2:1. In (Lumoly *et al*., 2018) according to Sawir (2009) a CR that is too high indicates that there are many idle funds in the company, thereby reducing the company's ability to earn profits, while a low CR indicates a problem in company liquidation.

2.4 Solvability

According to Septiana (2019) solvency is the company's ability to pay off the total liabilities (debt) that the company has, both short-term liabilities and long-term liabilities, especially if the company is liquidated. According to Hutabarat (2020) various ratios can be used in calculating solvency, including Total Debt-to-Equity Ratio, Total Debt to Asset Ratio, Long Term Debt-to-Equity Ratio, Tangible Assets Debt Coverage, Times Interest Earned Ratio. According to (Jufrizen & Sari, 2019) one of the solvency ratios or leverage is measured using the Debt-to-Equity ratio. DER is the ratio used to calculate how far creditors can finance the company, which illustrates the better the company's ability to meet its long-term obligations if the company's DER is lower (Sa'adah & Nur'ainui, 2020). According to Abrori & Suwitho (2019) it is said that if a company has a low solvency ratio it will reduce the risk of loss, but if the company has a high solvency ratio it will cause a large risk of loss but does not rule out the opportunity to earn large profits. According to Effendi *et al*. (2022) the industry standard solvency ratio, namely the ratio of total debt to total equity of 90%. DER should be <100% (Suzulia et al., 2020).

2.5 Profitability

According to (Rist *et al*., 2014) the profitability ratio is a more specific ratio showing a more complex picture related to the company's ability to gain profit or profit. According to Abrori (2019) a company is said to be good when the company can meet the set target of profit, where the profit comes from the capital the company has. According to Rist *et al*. (2014) which is the king of profitability ratios is Return On Equity, apart from that there are several indicators in assessing profitability ratios, such as Return On Assets (ROA), Return On Net Assets (RONA), Return On Equity (ROE), Return On Investment (ROI), Current Yield, and Profit Margin. According to Alpi (2018) to measure the effectiveness or rate of return from ordinary shareholder investments is measured using the ROE ratio. ROE is a ratio that can show how far a company can manage its capital effectively, how much profit is obtained from the investments made, and how much profit investors get (Sa'adah & Nur'ainui, 2020). According to Effendi *et al*. (2022) the industry standard for the profitability ratio, namely the ROE ratio, is 40%.

2.6 Framework

Based on the theoretical studies described, the conceptual framework is shown in the following figure:

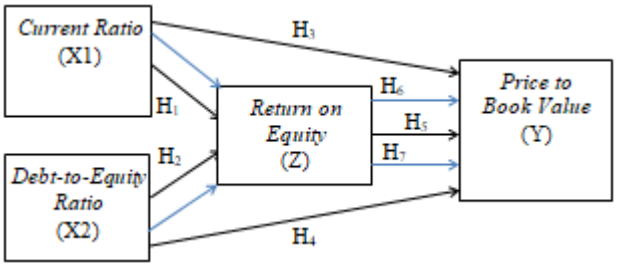


Figure 2: Conceptualizing Research
Source: Researcher (2022)

2.7 Hypothesis Development

H_1: Current Ratio has a significant positive effect on Return on Equity
H_2: Debt-to-Equity Ratio has a negative effect significant to Return on Equity
H_3: Current Ratio has a significant positive effect on Price to Book Value
H_4: Debt-to-Equity Ratio has a significant negative effect on Price to Book Value
H_5: Return on Equity has a significant positive effect on Price to Book Value
H_6: Return on Equity can mediate the effect of the Current Ratio on Price to Book Value
H_7: Return on Equity can mediate the effect of the Debt-to-Equity Ratio on Price to Book Value

3. Research Methods

3.1 Population and Research Sample

The population used in this study were all listed palm oil companies (CPO) on the Indonesia Stock Exchange (IDX), totaling 24 issuers. While the sample in the study is 13 companies with 5 years research period. The sampling technique used in this study was purposive sampling with sample criteria namely: (1) Issuers of crude palm oil companies listed on the Indonesia Stock Exchange. (2) Issuers of palm oil companies (CPO) who provide complete data from annual financial reports for the period 2017 – 2021. Issuers taken as samples include:

Table 2: Sample List

No	Issuers	Stock Code
1	PT Astra Agro Lestari Tbk	AALI
2	PT Austindo Nusantara Jaya Tbk	ANJT
3	PT Eagle High Plantations Tbk	BWPT
4	PT Dharma Satya Nusantara Tbk	DSNG
5	PT Jaya Agra Wattie Tbk	JAWA
6	PT PP London Sumatra Indonesia Tbk	LSIP
7	PT Provident Agro Tbk	PALM
8	PT Sampoerna Agro Tbk	SGRO
9	PT Salim Ivomas Pratama Tbk	SIMP
10	PT Sinar Mas Agro Resource & Tech Tbk	SMAR
11	PT Sawit Sumbermas Sarana Tbk	SSMS
12	PT Tunas Baru Lampung Tbk	TBLA
13	PT Bakrie Sumatera Plantations Tbk	UNSP

Source: Researcher (2022)

3.2 Operational Variables

The variables used in this study consisted of two independent variables, namely Current Ratio and Debt-to-Equity Ratio, one dependent variable, namely Price to Book Value, and one mediating variable, namely Return on Equity.

4. Results and Discussion

4.1 Data Analysis

The data analysis method used in this study is the panel data regression method and path analysis using the help of E-views 10 software. Several tests were performed such as descriptive statistical analysis, panel data regression analysis as well as model selection, classical assumption test, hypothesis testing, and path analysis.

4.2 Descriptive Statistical Analysis

The following results of descriptive statistical calculations are presented in table 3 as follows:

Table 3: Descriptive Statistics

Date: 11/30/22 Time: 10:10
Sample: 2017 2021

	Y_PBV	X1_CR	X2_DER	Z_ROE
Mean	1.045454	1.598425	1.142888	0.141729
Median	0.965991	1.202000	0.900000	0.070000
Maximum	4.561962	6.180000	14.96310	3.502000
Minimum	-0.032446	0.060100	-10.31440	-1.260700
Std. Dev.	0.749569	1.408348	3.367956	0.688675
Skewness	2.213422	1.655529	0.762519	3.471208
Kurtosis	10.54938	5.149828	11.56199	18.46935
Jarque-Bera	207.4317	42.20901	204.8405	778.6404
Probability	0.000000	0.000000	0.000000	0.000000
Sum	67.95452	103.8976	74.28770	9.212360
Sum Sq. Dev.	35.95864	126.9404	725.9602	30.35347
Observations	65	65	65	65

Source: Eviews 10 data processing (2022)

Based on the results of the descriptive statistical test in table 3, shows that the average value of the PBV variable is 1.045454 with a standard deviation of 0.749569. The average value of the Current Ratio variable is 1.598425 with a standard deviation of 1.408348. The average value of the Debt-to-equity Ratio variable is 1.142888 with a standard deviation of 3.367956. The average return on equity variable is 0.141729 with a standard deviation of 0.688675.

4.3 Regression Model Selection Test Results on Structural Equations I and Structural II

Several tests were carried out to determine the most appropriate model to use, namely through the F statistical test (Chow test), the Lagrange Multiplier (LM) test, and the Hausman test. Based on the results of the tests, the model used in the structural equation I follows the Common Effect Model, and the model used in structural equation II follows the Random Effect Model.

4.4 Classic Assumption Test

The classic assumption test shows whether a regression model that exists in the study meets the assumptions that indicate the feasibility of a regression model. In this study, the normality test, multicollinearity test, and heteroscedasticity test were carried out. Both structural models have fulfilled all the classical assumption test requirements. So that it is said to be feasible to use.

4.5 Results of Regression Model Equation Analysis

The following are the panel data regression results from each structural equation.

Table 4: Structural Model I Common Effect Regression Results

Dependent Variable: Z_ROE
Method: Panel Least Squares
Date: 11/30/22 Time: 10:14
Sample: 2017 2021
Periods included: 5
Cross-sections included: 13
Total panel (balanced) observations: 65

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1_CR	-0.043613	0.048347	-0.902083	0.3705
X2_DER	-0.128346	0.020217	-6.348498	0.0000
C	0.358125	0.106081	3.375954	0.0013

R-squared	0.395771	Mean dependent var	0.141729
Adjusted R-squared	0.376280	S.D. dependent var	0.688675
S.E. of regression	0.543888	Akaike info criterion	1.664906
Sum squared resid	18.34045	Schwarz criterion	1.765263
Log likelihood	-51.10946	Hannan-Quinn criter.	1.704503
F-statistic	20.30506	Durbin-Watson stat	1.465594
Prob(F-statistic)	0.000000		

Source: Eviews 10 data processing (2022)

Based on table 4 it can be explained that the regression equation in the structural model I is as follows:

ROE = 0.358125 – 0.043613 CR – 0.128346 DER + e

Based on the equation above it can be explained that:

1) The constant is 0.358125, this shows that if the independent variables, namely Current Ratio and Debt-to-Equity Ratio, do not exist or are equal to zero, then the dependent variable, namely Return On Equity, is a constant of 0.358125.
2) Current Ratio has a coefficient value with a negative direction of 0.043613. Shows that if the DER variable has a fixed value while the CR variable increases by one unit, it will cause an increase in the ROE variable by 0.043613.
3) The Debt-to-Equity Ratio has a coefficient value with a negative direction of 0.128346. It shows that if the CR variable has a fixed value while the DER variable increases by one unit, it will cause an increase in the ROE variable by 0.128346.

Table 5: Structural Model II Random Effect Regression Results

Dependent Variable: Y_PBV
Method: Panel EGLS (Cross-section random effects)
Date: 11/30/22 Time: 10:11
Sample: 2017 2021
Periods included: 5
Cross-sections included: 13
Total panel (balanced) observations: 65
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1_CR	0.186658	0.073898	2.525894	0.0142
X2_DER	0.153304	0.029511	5.194881	0.0000
Z_ROE	0.151686	0.109934	1.379787	0.1727
C	0.550387	0.178969	3.075316	0.0031

Effects Specification	S.D.	Rho
Cross-section random	0.407645	0.4571
Idiosyncratic random	0.444252	0.5429

Weighted Statistics

R-squared	0.370591	Mean dependent var	0.458024
Adjusted R-squared	0.339636	S.D. dependent var	0.535631
S.E. of regression	0.435269	Sum squared resid	11.55699
F-statistic	11.97210	Durbin-Watson stat	1.464826
Prob(F-statistic)	0.000003		

Unweighted Statistics

R-squared	0.458262	Mean dependent var	1.045454
Sum squared resid	19.48015	Durbin-Watson stat	0.869038

Source: Eviews 10 data processing (2022)

Based on table 5 it can be explained that the regression equation in the structural model II is as follows:

PBV = 0.550387 + 0.186658 CR + 0.153304 DER + 0.151686 ROE

Based on the equation above it can be explained that:

1) A constant of 0.550387, indicates that if the independent variables namely Current Ratio, Debt-to-Equity Ratio, and Return On Equity do not exist or are equal to zero, then the dependent variable, namely Price to Book Value, has a constant value (0.550387).
2) Current Ratio has a coefficient value with a positive direction of 0.186658. Shows that if the DER and ROE variables have a fixed value while the CR variable increases by one unit, it will cause an increase in the PBV variable by 0.186658.
3) The Debt-to-Equity Ratio has a coefficient value with a positive direction of 0.153304. It shows that if the CR and ROE variables have a fixed value while the DER variable increases by one unit, it will cause an increase in the PBV variable by 0.153304.
4) Return On Equity has a coefficient value with a positive direction of 0.151686. It shows that if the CR and DER variables have a fixed value while the ROE variable increases by one unit, it will cause an increase in the PBV variable by 0.151686.

4.6 Hypothesis Test

Hypothesis testing in this study was carried out by carrying out the F test, the coefficient of determination test, the t-test, and the mediation test.

4.7 F Statistic Test

Following are the results of the F test on each structural equation.

Table 6: F Test Results Structural Model I

R-squared	0.395771	Mean dependent var	0.141729
Adjusted R-squared	0.376280	S.D. dependent var	0.688675
S.E. of regression	0.543888	Akaike info criterion	1.664906
Sum squared resid	18.34045	Schwarz criterion	1.765263
Log likelihood	-51.10946	Hannan-Quinn criter.	1.704503
F-statistic	20.30506	Durbin-Watson stat	1.465594
Prob(F-statistic)	0.000000		

Source: Eviews 10 data processing (2022)

Table 7: F Test Results Structural Model II

R-squared	0.370591	Mean dependent var	0.458024
Adjusted R-squared	0.339636	S.D. dependent var	0.535631
S.E. of regression	0.435269	Sum squared resid	11.55699
F-statistic	11.97210	Durbin-Watson stat	1.464826
Prob(F-statistic)	0.000003		

Source: Eviews 10 data processing (2022)

Based on the results of the F test in Table 6, shows that the Prob(F-statistic) value is 0.000000 <0.05. It can be concluded that the independent variables, namely the Current Ratio and the Debt-to-Equity Ratio, together have a significant effect on the dependent variable, namely Return On Equity.

Based on the results of F in table 7, it shows that the Prob(F-statistic) value is 0.000003 <0.05. It can be concluded that the independent variables, namely Current Ratio, Debt-to-Equity Ratio, and Return On Equity, together have a significant effect on the dependent variable, namely Price to Book Values.

4.8 Determination Coefficient Test

If the value of the coefficient of determination is large, the greater the ability of the independent variable to explain all information or the greater the ability of the independent variable to influence the dependent variable. Following are the results of the determination efficiency test for each structural equation.

Table 8: Test Results for the Coefficient of Determination of Structural Model I

R-squared	0.395771	Mean dependent var	0.141729
Adjusted R-squared	0.376280	S.D. dependent var	0.688675
S.E. of regression	0.543888	Akaike info criterion	1.664906
Sum squared resid	18.34045	Schwarz criterion	1.765263
Log likelihood	-51.10946	Hannan-Quinn criter.	1.704503
F-statistic	20.30506	Durbin-Watson stat	1.465594
Prob(F-statistic)	0.000000		

Source: Eviews 10 data processing (2022)

Table 9: Test Results for the Coefficient of Determination of Structural Model II

R-squared	0.370591	Mean dependent var	0.458024
Adjusted R-squared	0.339636	S.D. dependent var	0.535631
S.E. of regression	0.435269	Sum squared resid	11.55699
F-statistic	11.97210	Durbin-Watson stat	1.464826
Prob(F-statistic)	0.000003		

Source: Eviews 10 data processing (2022)

Based on the test results for the coefficient of determination in table 8, it shows that the Adjusted R-square value is 0.376280 or 37.63%. This means that the independent variables, namely Current Ratio and Debt-to-Equity Ratio, can explain the dependent variable, namely the Return On Equity of 37.63%, while the remaining 62.37% is influenced

by other variables not explained in this study.

Based on the test results for the coefficient of determination in table 9, it shows that the Adjusted R-square value is 0.339636 or 33.96%. This means that the independent variables namely Current Ratio, Debt-to-Equity Ratio, and Return On Equity can explain the dependent variable, namely Price to Book Value of 33.96%, while the remaining 66.04% is influenced by other variables not explained in this study.

4.9 t Test Results

Decision making through t-test based on statistical probability t or p-value. An independent variable on the dependent variable will be said to have a significant influence if the statistical probability value t or p-value is smaller (<) than the value α (5%). Following are the results of the t-test of each structural model:

Table 10: t-Test Results Structural Model I

Dependent Variable: Z_ROE
Method: Panel Least Squares
Date: 11/30/22 Time: 10:14
Sample: 2017 2021
Periods included: 5
Cross-sections included: 13
Total panel (balanced) observations: 65

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1_CR	-0.043613	0.048347	-0.902083	0.3705
X2_DER	-0.128346	0.020217	-6.348498	0.0000
C	0.358125	0.106081	3.375954	0.0013

Source: Eviews 10 data processing (2022)

Table 11: t-Test Results in Structural Model II

Dependent Variable: Y_PBV
Method: Panel EGLS (Cross-section random effects)
Date: 11/30/22 Time: 10:11
Sample: 2017 2021
Periods included: 5
Cross-sections included: 13
Total panel (balanced) observations: 65
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1_CR	0.186658	0.073898	2.525894	0.0142
X2_DER	0.153304	0.029511	5.194881	0.0000
Z_ROE	0.151686	0.109934	1.379787	0.1727
C	0.550387	0.178969	3.075316	0.0031

Source: Eviews 10 data processing (2022)

Based on the results of the t-test structural model I in table 10 it can be explained as follows:

1) Liquidity as measured by the current ratio has a coefficient of -0.043613 with a probability value of 0.3705. This shows that the probability value is greater than α (5%). This means that if H1 is rejected, then liquidity (current ratio) has no significant effect on profitability (return on equity).
2) Solvability as measured by the debt-to-equity ratio has a coefficient of -0.128346 with a probability value of 0.0000. This shows that the probability value is smaller than α (5%). This means that H2 is accepted, so solvency (debt-to-equity ratio) has a significant negative effect on profitability (return on equity).

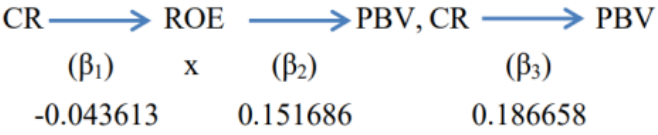
Based on the results of the t-test structural model II in table 11 it can be explained as follows:

1) Liquidity as measured by the current ratio has a coefficient of 0.186658 with a probability value of 0.0142. This shows that the probability value is smaller than α (5%). This means that if H3 is accepted, then liquidity (current ratio) has a significant positive effect on firm value (price to book value).
2) Solvability as measured by the debt-to-equity ratio has a coefficient of 0.153304 with a probability value of 0.0000. This shows that the probability value is smaller than α (5%). This means that H4 is accepted, so solvency (Debt-to-Equity Ratio) has a significant positive effect on firm value (price to book value).
3) Profitability as measured by return on equity has a coefficient of 0.151686 with a probability value of 0.1727. This shows that the probability value is greater than α (5%). This means that H5 is rejected, so profitability (return on equity) has no significant effect on firm value (price to book value).

4.10 Mediation Test Results

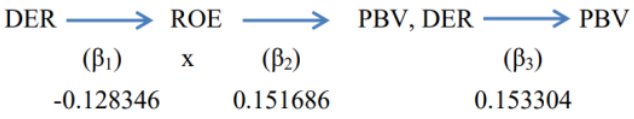
Based on the regression coefficients that have been obtained in the regression analysis of the two structural equation models, the following are the results of the mediation test.

1) Calculation of Mediation Test I



	$\beta_1 \times \beta_2$	β_3	Keterangan	Kesimpulan
CR	-0.006615	0.186658	$\beta_1 \times \beta_2 < \beta_3$	Tidak mampu memediasi

2) Calculation of Mediation Test II



	$\beta_1 \times \beta_2$	β_3	Ket	Kesimpulan
DER	-0.019468	0.153304	$\beta_1 \times \beta_2 < \beta_3$	Tidak mampu memediasi

Based on the calculation of the first mediation test, it shows that the results of β1 x β2 (regression coefficient of indirect effect) are smaller (<) β3 (regression coefficient of direct effect), this indicates that return on equity is not able to mediate the effect of the current ratio on price to book value, meaning H6 rejected.

Based on the calculation of the second mediation test, it shows that the results of β1 x β2 (regression coefficient of indirect effect) are smaller (<) β3 (regression coefficient of direct effect). This indicates that return on equity is not able to mediate the effect of the debt-to-equity ratio on price-to-book value. This means that H6 is rejected.

4.11 Path Analysis Results

Based on the selection of the model that was tested in the previous stage, the regression results in the path analysis are presented in the form of a path diagram as follows.

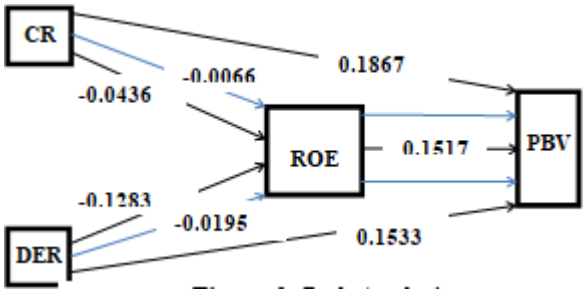


Figure 3: Path Analysis
Source: Researcher (2022)

4.12 Discussion of Research Results

From several previous tests on the variables studied, namely the current ratio, debt-to-equity ratio, return on equity, and price-to-book value, several results were obtained which will be described in the discussion below.

Table 12: Recapitulation of Calculation Results

No	Variable	β	Prob.	Result
1	CR → ROE	-0.0436	0.3705	Not Significant
2	DER → ROE	-0.1283	0.0000	Not Significant
3	CR → PBV	0.1867	0.0142	Positif Significant
4	DER → PBV	0.1533	0.0000	Positif Significant
5	ROE → PBV	0.1517	0.1727	Not Significant
		$\beta_1 \times \beta_2$	β_3	
6	CR → ROE → PBV	-0.0066	0.1867	Not Mediating
7	DER → ROE → PBV	-0.0195	0.1533	Tidak Mediating

Source: Data processed by researchers (2022)

1) Effect of Current Ratio on Return On Equity
The results of the study show that the current ratio has no significant effect on return on equity. The current ratio is the ratio used to measure a company's ability to meet short-term liabilities through current assets owned by the company, while return on equity is a ratio that reflects profitability through the company's total equity. When the CR increases, the increased current assets should be utilized by the company to generate profits, but if the company is unable to manage current assets properly, the company will not receive income or profits. Meanwhile, when the current ratio is too high with current assets that are too large, it indicates that there are funds that are idle and are not used to earn profits. ROE is influenced by other variables besides the current ratio, such as government policies regarding restrictions on CPO exports, exchange rate fluctuations, and increases or decreases in CPO prices. The results of this study are in line with the results of previous studies by Yuliani *et al.* (2020), Jufrizen & Sari (2019), and Rehman *et al.* (2015). But different from the results of research by Zaini *et al*. (2022), Puspita & Siswanti (2021), Chabachib *et al*. (2020), and Alpi (2018).

2) Effect of Debt-to-Equity Ratio on Return On Equity
The results showed that the debt-to-equity ratio has a significant negative effect on return on equity. The debt-to-equity ratio is the ratio of all the company's liabilities to the total equity, while the return on equity is the ratio of the company's net profit to the company's total equity. When the DER is high, it indicates that the total debt of a large company is greater than the total equity, so interest expenses and principal loan costs will appear which can reduce profits. Vice versa, when the DER is low, it shows that the company has a small amount of debt so that it does not add to large costs or expenses which will reduce net profit. The results of this study are in line with the results of previous studies by Puspita & Siswanti (2021), Colline (2022), and Sari *et al.* (2017). But different from the results of research by Suzulia *et al.* (2020), Jufrizen & Sari (2019), and Chabachib *et al*. (2020).

3) Effect of Current Ratio on Price to Book Value
The results showed that the current ratio has a significant positive effect on the price-to-book value. The current ratio is the company's ability to meet short-term obligations through current assets owned by the company, while the price-to-book value is a ratio that describes the company's value through the book value of shares appreciated by the market. When CR increases, it will signal to investors that the company's ability to pay its obligations has increased. Companies that have a CR above 1 show that the company has greater current assets than current liabilities, meaning that the company's current liabilities can be covered by current assets, so the company is considered to have good performance due to good liquidity. Then investors are interested in buying CPO shares so that they can increase the share price and then increase the company's PBV. The results of this study are in line with the results of previous studies by Mardianti & Sunandar (2022), Putra & Lestari (2016), Listyawati & Kristiana (2021), and Yuliani *et al.* (2020). But different from the results of research by Sari & Sedana (2020), Sutalaksana & Kurniawati (2021), and Puspita & Siswanti (2021).

4) Effect of Debt-to-Equity Ratio on Price to Book Value
The results showed that the debt-to-equity ratio has a significant positive effect on price-to-book value. The debt-to-equity ratio is the company's ability to fulfill all of the company's obligations, while the price-to-book value is the ratio that describes the company's value through the book value of shares valued by the market. When DER increases, the company's total debt also increases, this is risky because it is feared that the company will experience difficulties in paying its debts. However, for large companies that need large funds from both internal and external companies, this will cause companies to have large debts to have funds in managing their business activities. thus the public will be interested in buying CPO shares because the company is considered capable of covering its debts even though the debt is greater than the total equity. The results of this study are in line with the results of previous studies by Mardianti & Sunandar (2022), Suraya & Dona (2020), Suzulia *et al.* (2020), and Yuliani *et al.* (2020). But different from the results of research by Listyawati & Kristiana (2021), Puspita & Siswanti (2021), Zaini *et al*. (2022), and Chabachib *et al*. (2020).

5) Effect of Return On Equity on Price to Book Value
The results of the study show that return on equity has no significant effect on the price-to-book value. Return on equity is a ratio that reflects profitability through the

company's total equity, while price to book value is a ratio that describes a company's value through the book value of shares appreciated by the market. When ROE increases, it indicates that the company's profitability is increasing, it should provide a positive signal for investors that influences investment and increases PBV. However, the results of this study indicate that ROE has no significant effect on PBV. This is due to the fluctuating ROE value and tends to be low due to abnormal conditions during the Covid-19 pandemic and various policies afterward. The increase or decrease in PBV is influenced by other variables, such as information related to the development of the CPO industry, issues of increasing or decreasing world CPO prices, market conditions, and prospects for CPO shares so that people pay more attention to sustainability benefits and are interested in buying CPO shares, as a result, the share price rises and PBV goes up. The results of this study are in line with the results of previous studies by Suraya & Dona (2020), Hirdinis (2019), Akbar (2021), and Gultom & Tartila (2022). But different from the results of research by Listyawati & Kristiana (2021), Yuliani *et al*. (2020), Suzulia *et al*. (2020), and Lumoly *et al*. (2018).

6) The ability of Return On Equity mediates the effect of the Current Ratio on Price-to-Book Value

The results of the study show that return on equity is not able to mediate the effect of the current ratio on price-to-book value. The previous test showed that CR had no significant effect on ROE, and ROE had no significant effect on PBV. Then CR has a significant effect on PBV. The condition of the company's liquidity or the company's ability to fulfill short-term obligations can influence the market regarding the public's assessment of the company, but liquidity does not affect the company's ability to generate profits, and the profitability of the company's capital does not determine the rise and fall of share prices and PBV. PBV is influenced by CR and other factors. The results of this study are in line with the results of previous studies by Yuliani *et al.* (2020), Putra (2020), and Sari et al. (2017). But different from the results of research by Puspita & Siswanti (2021), Zaini *et al*. (2022), and Chabachib *et al*. (2020)

7) The ability of Return On Equity mediates the effect of Debt-to-Equity Ratio on Price-to-Book Value

The results of the study show that return on equity is not able to mediate the effect of the debt-to-equity ratio on price-to-book value. Whereas in the previous test, DER had a significant negative effect on ROE. But ROE has no significant effect on PBV. Then DER has a significant positive effect on PBV. The condition of the company's solvency or the company's ability to fulfill all obligations can influence the market regarding the public's assessment of the company and can influence the company's ability to generate profits on its capital, but the profitability of the company's capital is not the cause of fluctuations in share prices and PBV. PBV is influenced by DER and other factors. The results of this study are in line with the results of previous studies by Puspita & Siswanti (2021), Chabachib *et al*. (2020), Sari *et al.* (2017) dan Hirdinis (2019). But different from the results of research by Zaini *et al*. (2022), Yuliani *et al.* (2020), Suzulia *et al*. (2020).

5. Conclusions and Recommendations

5.1 Conclusion

Based on the results of the analysis that has been carried out, the following conclusions can be obtained:

1) Current Ratio has no significant effect on Return On Equity.
2) Debt-to-Equity Ratio has a significant negative effect on Return On Equity.
3) Current Ratio has a significant positive effect on Price to Book Value.
4) Debt-to-Equity Ratio has a significant positive effect on Price to Book Value.
5) Return On Equity has no significant effect on Price to Book Value.
6) Return On Equity is unable to mediate the effect of the Current Ratio on Price to Book Value.
7) Return On Equity is unable to mediate the effect of Debt-to-Equity Ratio on Price to Book Value.

5.2 Recommendation

Based on the conclusions obtained, the authors provide the following recommendations:

1) The next researcher is expected to increase the number of research samples to better represent the corporate sector as the object of research.
2) The next researcher is expected to increase the research period to obtain more accurate research results.
3) The next researcher is expected to add other ratios that can proxies the company's liquidity, solvency, and profitability to be able to explain the factors that affect the company's value effectively.

References

[1] R. Andriessa, "Minyak Goreng Langka, Ternyata Inilah Penyebabnya," *Pusat Studi Perdagangan Dunia, Universitas Gadjah Mada*, 2022.
[2] R. W. Putri and C. F. Ukhriyawati, "Pengaruh Likuiditas, Leverage dan Profitabilitas terhadap Nilai Perusahaan pada Perusahaan Telekomunikasi yang Terdaftar di Bursa Efek Indonesia Tahun 2012-2014," *J. Bening*, vol. 3, no. 1, pp. 52–73, 2016.
[3] Y. I. W. Tyas, "Analisis Rasio Keuangan Untuk Menilai Kinerja Keuangan Pada Elzatta Probolinggo," *J. Ilm. Ilmu Ekon. dan Bisnis*, vol. 8, no. 1, pp. 28–39, 2020.
[4] M. Chabachib, H. Hersugondo, E. Ardiana, and I. D. Pamungkas, "Analysis of Company Characteristics of Firm Values: Profitability as Intervening Variables," *Int. J. Financ. Res.*, vol. 11, no. 1, pp. 60–70, 2020, doi: 10.5430/ijfr.v11n1p60.
[5] M. F. Alpi, "Pengaruh Debt to Equity Ratio, Inventory Turn Over, dan Current Ratio terhadap Return On Equity pada Perusahaan Sektor Farmasi yang terdaftar di Bursa Efek Indonesia," *Natl. Conf. Manag. Bus.*, pp. 158–175, 2018.
[6] Jufrizen and M. Sari, "Pengaruh Current Ratio dan Debt to Equity Ratio terhadap Return On Equity,"

Compet. J. Akunt. dan Keuang., vol. 18, no. 1, pp. 156–191, 2019, doi: 10.31000/competitive.v5i2.4225.

[7] M. Z. Rehman, M. N. Khan, and I. Khokhar, "Investigating Liquidity-Profitability Relationship : Evidence from Companies Listed in Saudi Stock Exchange (Tadawul)," *J. Appl. Financ. Bank.*, vol. 5, no. 3, pp. 159–173, 2015.

[8] Zaini, E. S. Silitonga, and Guswandi, "The Influence of Debt to Equity Ratio and Current Ratio to Return on Equity and Price to Book Value: Subsector Food and Baverages Industry of Company Listedat Indonesian Stock Exchange Period 2014-2019," *J. Econ. Financ. Manag. Stud.*, vol. 05, no. 03, pp. 519–534, 2022, doi: 10.47191/jefms/v5-i3-09.

[9] M. T. Suzulia, Sudjono, and A. B. Saluy, "The Effect of Capital Structure, Company Growth, and Inflation On Firm Value with Profitability as Intervening Variable (Study on Manufacturing Companies Listed on BEI Period 2014 - 2018)," *Dinasti Int. J. Econ. Financ. Account.*, vol. 1, no. 2, pp. 95–109, 2020, doi: 10.38035/DIJEFA.

[10] F. Colline, "The Mediating Effect of Debt Equity Ratio on The Effect of Current Ratio, Return on Equity and Total Asset Turnover on Price to Book Value," *J. Keuang. dan Perbank.*, vol. 26, no. 1, pp. 2443–2687, 2022, doi: 10.26905/jkdp.v26i1.6882.

[11] D. N. Sari, Miyasto, and W. Mawardi, "Determinan of Profitability and its Impact on Firm Value: Evidence From Indonesia Stock Exchange," in *Masters Thesis, Diponegoro University*, 2017.

[12] A. Mardianti and N. Sunandar, "Influence of Liquidity , Profitability , and Leverage on Company Value (Case Study on Retail Sub-Sector Trading Companies Listed on," *Proc. Int. Conf. Econ. Manag. Account. (ICEMAC 2021)*, vol. 207, pp. 35–43, 2022.

[13] A. N. D. A. Putra and P. V. Lestari, "Pengaruh Kebijakan Dividen, Likuiditas, Profitabilitas dan Ukuran Perusahaan terhadap Nilai Perusahaan," *E-Jurnal Manaj. Unud*, vol. 5, no. 7, pp. 4044–4070, 2016.

[14] I. A. G. D. M. Sari and I. B. P. Sedana, "Profitability and liquidity on firm value and capital structure as intervening variable," *Int. Res. J. Manag. IT Soc. Sci.*, vol. 7, no. 1, pp. 116–127, 2020, doi: 10.21744/irjmis.v7n1.828.

[15] S. Lumoly, S. Murni, and V. N. Untu, "Pengaruh Likuiditas, Ukuran Perusahaan dan Profitabilitas terhadap Nilai Perusahaan (Studi pada Perusahaan Logam dan Sejenisnya yang terdaftar di Bursa Efek Indonesia)," *J. EMBA*, vol. 6, no. 3, pp. 1108–1117, 2018, doi: 10.31000/competitive.v5i2.4313.

[16] A. Suraya and T. M. Dona, "Pengaruh Debt to Equity Ratio dan Return On Equity terhadap Price to Book Value Ratio pada PT Ciputra Development Tbk," *J. SEKURITAS (Saham, Ekon. Keuang. dan Investasi)*, vol. 3, no. 2, p. 166, 2020, doi: 10.32493/skt.v3i2.4302.

[17] I. Listyawati and I. Kristiana, "Pengaruh Return on Equity, Current Ratio, Size Company dan Debt to Equity Ratio terhadap Nilai Perusahaan," *Maksimum*, vol. 10, no. 2, p. 47, 2021, doi: 10.26714/mki.10.2.2020.47-57.

[18] Furniawan, "Pengaruh Earning Per Share, Debt to Asset Ratio, Debt to Equity Ratio dan Return On Equity terhadap Price to Book Value," *J. Manag. Stud.*, vol. 06, no. 03, pp. 189–196, 2019.

[19] E. dan Sutalaksana and E. Kurniawati, "Pengaruh Profitabilitas, Likuiditas, dan Solvabilitas terhadap Nilai Perusahaan pada Perusahaan Farmasi yang terdaftar di Bursa Efek Indonesia 2015-2019," *Konf. Ris. Nas. Ekon. Manajemen, dan Akunt.*, vol. 11, no. 3, pp. 40–67.

[20] M. Hirdinis, "Capital Structure and Firm Size on Firm Value Moderated by Profitability," *Int. J. Econ. Bus. Adm.*, vol. 7, no. 1, pp. 174–191, 2019, doi: 10.35808/ijeba/204.

[21] E. A. Puspita and I. Siswanti, "Effect Of Capital Structure And Liquidation On Firms Value With Profitability As Intervening Variables (Case Study On Property And Real Estate Companies Registered In Indonesia Stock," *Manag. Res. Stud. J. P-ISSN 9772745616006*, vol. II, no. I, pp. 11–27, 2021.

[22] Yuliani, Y. R. Edward, and E. N. Simorangkir, "Effect of Current Ratio and Debt to Equity on Price to Book Value with Return on Equity as an Intervening Variable in the Consumer Goods Industry Sector in Companies Listed on the IDX in the Period 2016-2018," *J. Res. Business, Econ. Educ.*, vol. 2, no. 5, pp. 1121–1131, 2020.

[23] S. M. Bae, M. A. K. Masud, and J. D. Kim, "A cross-Country Investigation of Corporate Governance and Corporate Sustainability Disclosure: A Signaling Theory Perspective," *Sustain.*, vol. 10, no. 8, 2018, doi: 10.3390/su10082611.

[24] N. Toni and Silvia, *Determinan Nilai Perusahaan*. Surabaya: CV. Jakad Media Publishing, 2021.

[25] F. Fauziah, *Kesehatan Bank, Kebijakan Dividen, dan Nilai Perusahaan (Teori dan Kajian Empiris)*. Samarinda: RV Pustaka Horizon, 2017.

[26] A. Mulyana, Zuraida, and M. Saputra, "The Influence of Liquidity, Profitability and Leverage on Profit Management and Its Impact on Company Value in Manufacturing Company Listed on Indonesia Stock Exchange Year 2011-2015," *Int. J. Manag. Stud. Res.*, vol. 6, no. 1, pp. 8–14, 2018, doi: 10.20431/2349-0349.0601002.

[27] S. D. Firmialy *et al.*, *Manajemen Keuangan*. Bandung: Media Sains Indonesia, 2022.

[28] M. D. E. Hera and D. Pinem, "Pengaruh Likuiditas dan Struktur Modal terhadap Nilai Perusahaan dengan Profitabilitas Sebagai Variabel Intervening pada Perusahaan yang Terdaftar di Bursa Efek Indonesia.," *Equity J. Ekon. Manajemen, Akunt.*, vol. 20, no. 1, pp. 35–50, 2017.

[29] M. Rist, A. J. Pizzica, and P. LLC, *Financial Ratios for Executives (How to Assess Company Strength, Fix Problems, and Make Better Decisions)*. New York: Apress, 2014.

[30] L. Sa'adah and T. Nur'ainui, *Implementasi Pengukuran Current Ratio, Debt to Equity Ratio, dan Return On Equity serta Pengaruhnya terhadap Return*. Jombang: LPPM Universitas KH. A. Wahab Hasbullah, 2020.

[31] N. I. Effendi *et al.*, *Manajemen Keuangan*. Padang: PT

Global Eksekutif Teknologi, 2022.
[32] A. Septiana, *Analisis Laporan Kuangan (Konsep Dasar dan Deskripsi Laporan Keuangan)*. Jawa Timur: Duta Media Publishing, 2019.
[33] F. Hutabarat, *Analisis Kinerja Keuangan Perusahaan*. Banten: Penerbit Desanta Muliavisitama, 2020.
[34] A. Abrori and Suwitho, "Pengaruh Profitabilitas, Likuiditas, dan Solvabilitas terhadap Nilai Perusahaan," *J. Ilmu dan Ris. Manaj.*, vol. 8, no. 2, pp. 2461–0593, 2019, [Online].
[35] J. S. Akbar, "The Effect of Return On Assets and Return On Equity on Price to Book Value on Banking Companies Listed on the Indonesia Stock Exchange," *Int. J. Econ. Bus. Account. Res.*, vol. 5, no. 2, pp. 2614–1280, 2021.
[36] D. K. Gultom and M. Tartila, "Pengaruh Debt to Equity Ratio terhadap Price to Book Value dengan Return On Equity sebagai Variabel Intervening pada Perusahaan Sub Sektor Otomotif dan Komponen yang terdaftar di BEI Periode 2016-2020," *Semin. Nas. Multidisiplin Ilmu*, vol. 3, no. 1, pp. 171–185, 2022.
[37] H. S. Putra, "Pengaruh Current Ratio dan Total Assets Turnover terhadap Price to Book Value dengan dimediasi oleh Return On Equity pada Perusahaan Sub Sektor Farmasi yang terdaftar di Bursa Efek Indonesia," *Maneggio J. Ilm. Magistes Manaj.*, vol. 3, no. 1, pp. 92–106, 2020.

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