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The Effect of Rentability, Profitability, Leverage, and Liquidity on Stock Prices with Firm Size as a Moderating Variable in Energy Companies Listed on the Indonesia Stock Exchange 2019-2024

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ABSTRACT

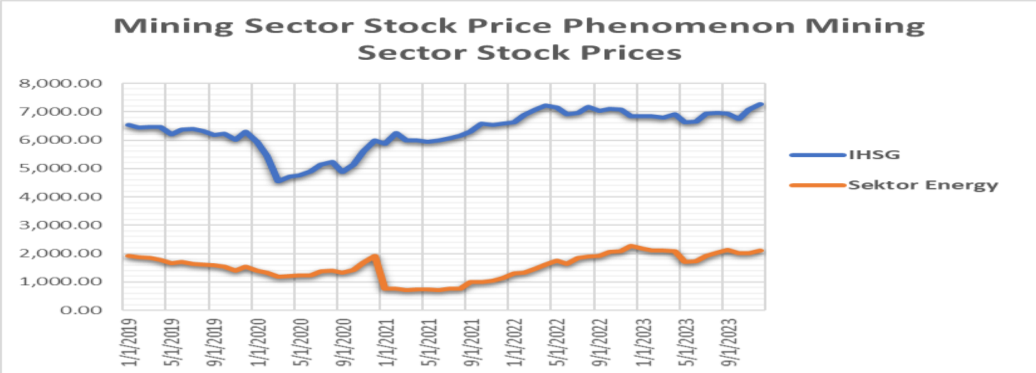
This study aims to analyze the effect of profitability, profitability, leverage and liquidity on stock prices (Y) in energy sector companies listed on the Indonesia Stock Exchange which are divided into two research period segments, namely 2019-2021, and the period 2022-2024.
This type of research is quantitative descriptive study, with purposive sampling technique. The number of observations used in this study was 72 data, with a purposive sampling technique. The research data that had been collected was then analyzed using a testing tool in the form of eviews 12, and presented with descriptive analysis.
The Result it can be concluded that in 2019-2021 all independent variables, namely profitability, profitability, leverage and liquidity, had a positive effect on stock prices (Y). While in 2022-2024, profitability, leverage and liquidity had a negative effect on stock prices (Y), and profitability had a positive effect on stock prices (Y). The results of the analysis also show that on period 2019-2021, and 2022-2024 Firm Size is able to moderate the effect of profitability, profitability, leverage and liquidity on stock prices.

Keywords: Rentability, Profitability, Leverage, Liquidity, Stock Prices, Firm Size

INTRODUCTION

Stocks are a financial market instrument favored by many investors due to their potential for profit (Hartini & Asnaini, 2024). Stocks are a form of security traded on the capital market and issued by companies organized as Limited Liability Companies (PT). A company's stock price can rise or fall over time (Daramola & Siyanbola, 2023). These price movements provide investors with the opportunity to profit by selling shares at a higher price than the initial purchase price, or suffer losses if the share price falls below the purchase price. Therefore, understanding the factors influencing stock prices and the ability to analyze market movements are crucial for investors in making investment decisions. By investing in shares, investors have the right to a portion of the company's income and assets, as well as the right to attend and vote at the General Meeting of Shareholders (GMS). Share prices reflect the value of the issuing company's assets, and price changes are primarily determined by supply and demand on the stock exchange (Chime et al., 2023).

Figure 1: Phenomenon of Companies Experiencing Declining Profits in 2023



Source: Indonesia Stock Exchange

Based on Figure 1.1 above, we can see that the Energy Sector's stock prices tend to fluctuate from month to month each year, with significant increases and decreases. Meanwhile, the Jakarta Composite Index (JCI) also fluctuates, but the trend tends to be more stable compared to the Energy Sector. There are periods of ups and downs, but the general trend shows more consistent growth over the long term. The Energy Sector experienced a significant share price decline, from 1,915.56 in December 2020 to 760.55 in January 2021. This decline was attributed to large-scale restrictions imposed during the global COVID-19 pandemic. However, since January 2022, the Energy Sector's share price has tended to fluctuate with upward growth and is considered more stable. The first factor suspected of influencing stock prices is profitability. Profitability is a ratio that measures a company's ability to generate profits from investments made by shareholders (Pekanov et al., 2023). The profits earned by the company are used to pay interest on debt, issue preferred shares, and then distributed to shareholders. Therefore, higher profitability is an effort to maximize the rate of return offered to investors. Profitability is a ratio that indicates a company's ability to generate profits based on sales (Lumopa et al., 2023). Net Profit Margin (NPM) is a profitability ratio that shows the ratio between net profit and sales. NPM is used to measure whether a company is generating sufficient profits overall, after deducting all expenses (Kurniawan, 2020). The higher the NPM ratio, the better because the resulting profit level will increase. This will attract investor interest in buying shares, thereby increasing demand for shares and increasing share prices.

Leverage is a ratio that measures the extent to which a company's total assets are funded by debt (Hidayat & Akhmadi, 2023). Leverage provides an overview of a company's funding policy, as well as the percentage of assets funded by debt compared to equity. Previous research by Fauziani & Kosadi (2024) successfully demonstrated that leverage has a negative and significant effect on stock prices. Similarly, other research conducted by Veronica & Widiyanto (2024) and Firman et al. (2024) also showed that leverage has a negative and significant effect on stock prices. Liquidity is a ratio that measures a company's ability to meet its short-term obligations using its current assets (Susanti et al., 2024). Liquidity provides an overview of a company's liquidity, as well as the extent to which the company's current assets are able to cover current liabilities that must be paid immediately. The higher the liquidity, the better the company's ability to meet its short-term obligations without having to sell fixed assets or seek additional funding. Firm Size is one indicator of a company's financial strength (Suttipun & Insee, 2024). A relatively large Firm Size can indicate growth, leading to a positive investor response and increased company value. Furthermore, larger companies are assumed to be more resilient in the face of economic shocks, while smaller companies are assumed to require greater effort to address financial challenges. Therefore, investors tend to favor larger companies over smaller ones.

LITERATURE REVIEW

Stakeholder Theory

Stakeholder theory emphasizes the importance of considering the interests and needs of various parties involved in a company, including shareholders (Stoelhorst & Vishwanathan, 2024). Because shareholders are a key stakeholder in a company, management decisions that impact the company's financial performance can also impact shareholder satisfaction and trust. Therefore, maintaining a healthy relationship with shareholders is a priority for improving company performance and value. This study aims to examine the influence of several financial variables, namely profitability, leverage, and liquidity, on stock prices. Within the framework of stakeholder theory, the results of this study can provide insight into how financial decisions made by company management can affect the company's stock price, thereby influencing shareholder trust and satisfaction. Therefore, this study can help companies understand and manage relationships with their key stakeholders, such as shareholders, to improve overall company performance and value.

Signaling theory

Signaling theory, popularized by Spence in 1973, describes the concept that informed parties, namely companies, provide signals to recipients, such as investors, about the company's condition, which can benefit the recipients. This signal is an effort made by companies to convey information to investors (Shahid et al., 2024). Disclosure of information about financial performance (profitability and profitability) is considered a signal to investors about the company's condition and prospects. Similarly, disclosure of a high net worth (NPM) can provide a signal about a company's financial performance, which can reduce perceived risk and support stock price increases. This research helps understand how financial information disclosure can function as a signal to investors (Bafera & Kleinert, 2023), which can then influence market perceptions and the company's stock price.

Capital Structure Theory

apital structure theory explains how companies choose the combination of debt and equity to finance their operations. The motivation behind a company's capital structure choice is to achieve an optimal balance between risk and cost of capital, which can maximize firm value (Brusov et al., 2023). The use of debt in the capital structure can provide benefits in the form of tax shields, but it also increases the risk of bankruptcy. For example, increasing debt can be seen as a signal that a company is confident in sufficient future cash flows to meet interest and principal payments. Conversely, a company that is more conservative in its use of debt signals uncertainty about future prospects. Debt policy is also closely related to the trade-off theory, where companies balance the benefits and costs of debt, including tax benefits, bankruptcy costs, and the impact on firm value (Esghaier, 2024).

Stock Price

A stock price is the value assigned to a stock at a specific time on the stock exchange, determined by the interaction between supply and demand from market participants. Stock price changes depend on the dynamics of supply and demand (Chohan et al., 2023). When demand exceeds supply, the stock price typically rises, and vice versa. The stock price represents the value of equity participation in a limited liability company listed on the Stock Exchange, where the shares are circulated. The stock price can also be defined as the price formed by the interaction between buyers and sellers of shares, driven by investors' expectations of the company's profitability (Dhodary, 2023). The closing stock price is the price requested by the seller or the price of the last trader for a given period (Li et al., 2024). Stock prices in the capital market are largely determined by the forces of supply and demand. Stock prices will rise when demand increases, and tend to fall when supply is in excess (Awan et al., 2023).

Profitability Ratio

This ratio is crucial because it reflects the percentage of profit a company manages to retain from each rupiah of sales generated. Profitability analysis provides an overview of a company's operational health and its ability to manage production, operating, and non-operating costs to maximize profits. The profitability ratio is a key benchmark for evaluating the success of company management in managing its resources, particularly in the production and sales processes. Companies with high profitability ratios typically excel at managing cost structures and effective marketing strategies. Profitability is also frequently used as an indicator in managerial performance assessments, bonus determinations, budget planning, and long-term strategic decisions. Furthermore, for investors and market analysts, this ratio indicates the potential return on investment through dividend distributions and stock price growth. Stable and high profitability generally indicates market confidence in a company's business continuity and growth prospects.

Rentability ratio

From a company's internal perspective, the profitability ratio is used to assess whether management's asset and capital policies are working effectively and generating adequate returns. Management needs this information to formulate strategies to improve financial performance, operational efficiency, and manage investments and working capital. For external parties, such as investors and creditors, this ratio is an important consideration in assessing a company's prospects, investment risks, and its ability to generate future returns. Investors, for example, are attracted to companies with high profitability because it reflects the company's ability to generate profits from its invested capital. Creditors also consider profitability to gauge a company's capacity to pay both long-term and short-term obligations, as consistent and efficient profits increase the likelihood of timely debt repayment.

Leverage

The leverage ratio is an important indicator in financial analysis, used to measure the extent to which a company uses external funding sources, particularly debt, to finance all its operational and investment activities. Generally, the higher a company's leverage ratio, the greater the proportion of debt in its capital structure. This means the company has a higher financial burden, which can increase the risk of default or financial distress if cash flow is unstable. On the other hand, a leverage ratio that is too low can indicate that the company is too conservative and is not maximizing the potential for debt financing for business growth. Therefore, understanding and managing the leverage ratio proportionally is crucial for maintaining a company's financial health.

Liquidity

Liquidity is a key indicator in assessing a company's operational stability, particularly in the short term, and is a primary concern for short-term creditors, suppliers, and internal management in making daily financial decisions. Companies with good liquidity are considered capable of maintaining healthy cash flow, thus gaining greater trust from external parties. Conversely, low liquidity indicates potential difficulties in meeting short-term obligations, which could lead to solvency issues or even bankruptcy if not promptly addressed.

Firm Size

Firm Size can be assessed from various perspectives, such as total assets, equity value, sales value, or profit (Wufron et al., 2023). The greater a company's assets or sales, the more well-known and influential it is in the market and society. Firm Size reflects its market capitalization, book value, and financial performance; large companies tend to have high market capitalizations and book values, as well as high profits, while small companies tend to have the opposite (Sumendap et al., 2023). Several factors are used to assess the dimensions of firm size, including total assets, equity value, sales value, or profit. In this study, total assets were used as a parameter because they better reflect the overall scale of a company's operations than revenue (Panjaitan & Supriyati, 2023). Total assets reflect the wealth a company has managed since its inception, while revenue only reflects financial performance within a specific period.

RESEARCH FRAMEWORK & HYPOTHESIS

Research Framework

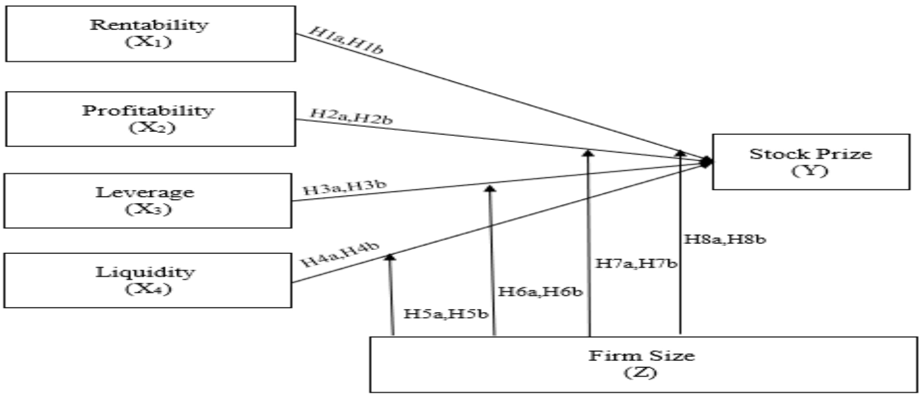


Figure 2: Conceptual Framework

Hypothesis

H1a: Profitability has a positive effect on a company's stock price in 2019-2021
H1b: Profitability has a positive effect on a company's stock price in 2022-2024
H2a: Profitability has a positive effect on a company's stock price in 2019-2021
H2b: Profitability has a positive effect on a company's stock price in 2022-2024
H3a: Leverage has a negative effect on a company's stock price in 2019-2021
H3b: Leverage has a negative effect on a company's stock price in 2022-2024
H4a: Liquidity has a positive effect on a company's stock price in 2019-2021
H4b: Liquidity has a negative effect on a company's stock price in 2022-2024
H5a: Firm Size Moderates the Effect of Profitability on Stock Prices in 2019-2021
H5b: Firm Size Moderates the Effect of Profitability on Stock Prices in 2022-2024
H6a: Firm Size Moderates the Effect of Profitability on Stock Prices in 2019-2021
H6b: Firm Size Moderates the Effect of Profitability on Stock Prices in 2022-2024
H7a: Firm Size Moderates the Effect of Leverage on Stock Prices in 2019-2021
H7b: Firm Size Moderates the Effect of Leverage on Stock Prices in 2022-2024
H8a: Firm Size Moderates the Effect of Liquidity on Stock Prices in 2019-2021
H8b: Firm Size Moderates the Effect of Liquidity on Stock Prices in 2022-2024

MATERIALS & METHODS

The research conducted is a causal associative study with the aim of determining the causal relationship between variables (Sugiyono, 2020). The population in this study was 51 energy companies listed on the Indonesia Stock Exchange during the 2019-2024 period. The sample was selected using a purposive sampling technique, selecting samples based on specific criteria determined by the researcher. All testing in this study was carried out with the help of Eviews 12 software.

STATISTICAL ANALYSIS

Descriptive Statistical Analysis

Descriptive statistical analysis is used to determine the characteristics of the sample used and describe the variables in the study. Descriptive statistical analysis consists of the sample size, range, minimum value, and maximum value (Ghozali, 2018). Descriptive statistics describe data to make the information clearer and easier to understand. The analysis is conducted to identify the variables to be tested for each hypothesis, as well as the profile and distribution of these variables.

Analytical Model Selection

To estimate model parameters with panel data, there are several techniques:

1. **Chow Test. The Chow Test.** Is a statistical to determine whether the Common Effects Model (CEM) or the Fixed Effects Model (FEM) is better.
2. **Hausman Test.** Is a statistical test to determine whether the Random Effects Model (REM) or the Common Effects Model (CEM) is more appropriate for panel data regression.
3. **The Lagrange Multiplier Test.** Is a statistical test to select whether the Common Effect Model (CEM) or Random Effect Model (REM) is more appropriate to use in panel data regression.

Hypothesis Testing

1. **Hypothesis Testing Using Multiple Linear Regression Analysis of Panel Data.** The data analysis method used is a panel data regression model, which uses regression to determine the extent of influence of independent variables on the dependent variable. This study was conducted to examine the influence of four independent variables on one dependent variable. This study also provides the values and results of partial tests (t-tests), simultaneous tests (F-tests), and coefficient of determination tests.
2. **Panel Data Moderation Regression Analysis.** Hypothesis testing using moderating variables is used to analyze the interaction between Firm Size and independent variables in influencing stock prices. This study uses a moderated regression analysis of moderating variables using the interaction method. This test is conducted to prove the hypothesis that Firm Size can moderate (strengthen or weaken) the relationship between the independent variables and the dependent variable.

RESULT

Descriptive Statistical Analysis Result

Ghozali (2018) explained that sample size, range, minimum value, and maximum value are some of the factors included in descriptive statistical analysis. In this study, the descriptive test results obtained are as follows:

Table 1 : Descriptive Statistical Analysis Result

RENTX1		PRFTX2	LEVX3	LIKDX4	HRGSHMY	UKRPRSZ
Mean	-0.12952	0.04408	0.60099	1.52369	1379.47200	28.32089
Median	0.05125	0.02945	0.52410	0.81740	411.00000	27.88805
Maximum	0.72090	0.73760	2.92320	11.55940	10050.00000	31.44560
Minimum	-4.76480	-0.11230	0.03120	0.02860	50.00000	23.97630
Std Dev	0.80775	0.46097	0.43166	1.95661	2242.19100	1.71195
Skewness	-3.81658	-0.40931	3.25908	2.89854	2.34901	0.04353
Kurtosis	19.35174	29.19495	16.62452	12.72485	7.91833	2.86528
Jarque-Bera	976.93310	2291.82900	684.41250	384.53640	138.74040	0.07719
Probability	0.00000	0.00000	0.00000	0.00000	0.00000	0.96214
Sum	-9.32471	3.17390	43.26970	109.70530	99322.00000	2039.10400
Sum Sq Dev	46.30145	15.98752	13.22933	271.01170	357.00000	208.08120
Observations	72	72	72	72	72	72

Source: Data processing by the author, with eviews 12

Based on Table 1 it can be seen that:

a. The profitability variable (RENT_X1) has an average value of -0.129524. Therefore, it can be stated that most companies have negative profitability values. The maximum profitability value obtained is 0.720300, thus the company has the highest profitability capability of 72%. Furthermore, the minimum value obtained is -4.764800, where the company has the lowest profitability capability of negative 476%. Profitability is assumed to be negative, because some sample companies experienced losses, meaning revenues were less than costs incurred. This can be caused by various factors, such as declining sales, high operational costs, or losses from investments.
b. The profitability variable (RENT_X1) has an average value of -0.129524. Therefore, it can be stated that most companies have negative profitability values. The maximum profitability value obtained is 0.720300, thus the company has the highest profitability capability of 72%. Furthermore, the minimum value obtained is -4.764800, where the company has the lowest profitability capability of negative 476%. Profitability is assumed to be negative, because some sample companies experienced losses, meaning revenues were less than costs incurred. This can be caused by various factors, such as declining sales, high operational costs, or losses from investments.
c. Leverage (LEVRG_X3) has an average value of 0.600968. This indicates that the sample companies' operational activities are highly dependent on investor funding. Furthermore, the maximum value obtained is 2.923200, indicating that PT Dwi Guna Lestari Tbk has a relatively high debt ratio of 292%. This high leverage value is feared to have a dual impact on investment interest. Furthermore, the minimum value obtained is 0.031200, indicating that the company has a relatively reasonable leverage value of 3.1%. This value can be a positive signal to stakeholders, indicating that the company is highly dependent on its own capital (equity) and has little debt to finance its operations.
d. Leverage (LEVRG_X3) has an average value of 0.600968. This indicates that the sample companies' operational activities are highly dependent on investor funding. Furthermore, the maximum value obtained is 2.923200, indicating that PT Dwi Guna Lestari Tbk has a relatively high debt ratio of 292%. This high leverage value is feared to have a dual impact on investment interest. Furthermore, the minimum value obtained is 0.031200, indicating that the company has a relatively reasonable leverage value of 3.1%. This value can be a positive signal to stakeholders, indicating that the company is highly dependent on its own capital (equity) and has little debt to finance its operations.
e. The average stock price (HRGSHM_Y) was 1,379.472, indicating that the company had an average closing stock price of 1,379 rupiah. Furthermore, the lowest stock price was 50 rupiah for PT Exploitasi Energi Tbk. The highest stock price was 10,050 for Transcoal Pacific Tbk.
f. Firm Size (UKRPRS_M) was 27.31954, indicating that the company had an average logarithmic asset ratio of 2.731%, indicating that the sample companies were relatively large overall. The maximum Firm Size was 31.44560, indicating that the largest company accounted for 3.144% of total assets. Furthermore, the value of the smallest Firm Size is 23.97630, which means that the smallest Firm Size is 2.397%, namely PT Dwi Guna Lestari Tbk.

Model Selection Test Results

The Chow Test Results

This study indicate that the probability value (p-value) obtained is 0.000, indicating that the selected model is the Fixed Effects Model (FEM).

Table 2: Chow Test Results

Effects Test	Statistic	d.f.	Prob.
Cross-section F	121.465861	(11,44)	0
Cross-section Chi-square	206.7443	11	0

Source: Data processing by the author, with eviews 12

Table 3: Hausman Test Result

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross section random	1.721605	4	0.7868

Source: Data processing by the author, with eviews 12

Hausman Test Result

Based on the results of the Hausman test in this study, it was found that the selected model was the Random Effect Model (REM), because the p-value obtained was 0.7868 > 0.005.

Lagrange Multiplier (LM) Result

Based on the results of the Lagrange Multiplier (LM) test, the selected model is the Random Effects Model (REM) because the Breusch-Pagan value obtained is 0.0000.

Table 4: Lagrange Multiplier Test Results

Cross-section		Test Hypothesis Time	Both
Breusch-Pagan	100.4387 (0.0000)	2.458751 (0.1169)	102.8954 (0.0000)
Honda	10.02181 (0.0000)	-1.586041 (0.9418)	5.977717 (0.0000)
King-Wu	10.02181 (0.0000)	-1.586041 (0.9418)	3.832450 (0.0001)
Standardized Honda	11.22831 (0.0000)	-1.405418 (0.9201)	3.806835 (0.0001)
Standardized King-Wu	11.22831 (0.0000)	-1.405418 (0.9201)	1.601945 (0.0546)
Gourieroux, et al.	-	-	100.4387 (0.0000)

Source: Data processing by the author, with eviews 12

Hypothesis Test Results
Multiple Linear Regression Test Results for Panel Data

Table 5: Results of Multiple Linear Regression Test in 2019-2021

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1381.694	845.887700	1.633425	0.112500
RENTX1	52.58329	298.317900	0.175679	0.861700
PRFTX2	5.770381	441.685200	0.013064	0.989600
LEVX3	4.055787	325.887600	0.012445	0.990100
LIKDX4	8.196135	195.817500	0.031642	0.975000
Effecf Spesification			S.D	Rho
Cross Section Random			2771.316	0.964430
Idiosyncratic Random			533.2998	0.035700
Weight Satisics				
R-squared	0.003327	Mean dependen var		153.0498
Adjusted R-squared	-0.125276	S.D dependen Var		483.1156
S.E. of regression	512.4843	Sum squared resid		8141844
F-statisic	0.002587	Durbin-Watson stat		2.714008
Prob(F-statisic)	0.998629			
Unweight Satisics				

Source: Data processing by the author, with eviews 12

The following explanation is provided:

a. The t-statistic for X1 is positive at 0.175679, with a probability of 0.8617 > 0.05. Therefore, profitability (X1) has a positive but insignificant effect on stock price (Y). **Hypothesis 1a is accepted.**

b. The t-statistic for X2 is positive at 0.013064, with a probability of 0.9901 > 0.05. Therefore, profitability (X2) has a positive but insignificant effect on stock price (Y). **Hypothesis 2a is accepted.**

c. The t-statistic for X3 is positive at 0.012445, with a probability of 0.6976 > 0.05. Therefore, leverage (X3) has a positive but insignificant effect on stock price (Y). **Hypothesis 3a is accepted.**

d. The t-statistic for X4 is positive at 0.031642, with a probability value of 0.9750 > 0.005. Therefore, it can be concluded that liquidity (X4) has a positive but insignificant effect on stock price (Y). **Hypothesis 4a is accepted.**

Table 6: Results of Multiple Linear Regression Test in 2022-2024

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1396.673	703.1499	1.98631	0.0559
RENTX1	-138.2850	164.3630	-0.84134	0.4066
PRFTX2	517.3705	430.7148	1.20119	0.2368
LEVX3	-25.25017	210.0251	-0.12023	0.9051
LIKDX4	-7.460228	53.56126	-0.13928	0.8901
Effecf Spesification			S.D	Rho
Cross Section Random			2367.093	0.9828
Idiosyncratic Random			313.1698	0.0172
Weight Satisics				
R-squared	0.052553	Mean dependen var		104.5646
Adjusted R-squared	-0.069698	S.D dependen Var		290.6880
S.E. of regression	300.6476	Sum squared resid		2802059
F-statisic	0.429875	Durbin-Watson stat		1.788557
Prob(F-statisic)	0.785916			

Source: Data processing by the author, with eviews 12

The following explanation is provided:

a. The t-statistic for X1 is negative 0.8413, with a probability of 0.4066 > 0.05. Therefore, profitability (X1) has a negative but insignificant effect on stock price (Y). **Hypothesis 1b is rejected.**

b. The t-statistic for X2 is positive 0.2011, with a probability of 0.2388 > 0.05. Therefore, profitability (X2) has a positive but insignificant effect on stock price (Y). **Hypothesis 2b is accepted.**

c. The t-statistic for X3 is negative 0.1202, with a probability of 0.9051 > 0.05. Therefore, leverage (X3) has a negative but insignificant effect on stock price (Y). **Hypothesis 3b is rejected.**

d. The t-statistic for X4 is negative 0.1392, with a probability value of 0.8901 > 0.05. Therefore, it can be concluded that liquidity (X4) has a positive but insignificant effect on stock price (Y). **Hypothesis 4b is rejected.**

F-Test Results

In this study indicate a positive F-statistic value of 0.025871 for the 2019-2021 data analysis, with a probability value of 0.998629. Therefore, it can be concluded that the variables of profitability, profitability, leverage, and liquidity simultaneously have a positive effect on stock prices. Meanwhile, the F-test results in this study indicate a positive F-statistic value of 0.429875 for the 2022-2024 data analysis, with a probability value of 0.785916. Therefore, it can be concluded that the variables of profitability, profitability, leverage, and liquidity simultaneously have a positive effect on stock prices.

Coefficient Of Determination (R2) Result

The determination result (R2) for the analysis year 2019-2021 obtained in this study was 0.003327. This indicates that the variables of rentability, profitability, leverage, and liquidity have an effect on stock prices by 0.33% and the rest is influenced by other variables not included in this study. The determination result (R2) for the analysis year 2022-2024 obtained in this study was 0.052553. This indicates that the variables of rentability, profitability, leverage, and liquidity have an effect on stock prices by 5.2%, and the rest is influenced by other variables not included in this study.

Moderated Regression Analysis Result

The results of the moderation test obtained in this study are as follows:

Table 7: Moderated Regression Analysis Result on 2019-2021

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2340.473	12454.31	-0.187925	0.8524
RENTX1	8839.430	26640.12	0.332308	0.7423
PRFTX2	-12831.34	28439.96	-0.451173	0.6556
LEVX3	2191.678	10466.47	0.209400	0.8358
LIKDX4	-3389.044	7535.350	-0.449753	0.6566
UKPRPSZ	114.0540	428.8937	0.2659926	0.7924
X1Z	-86.5756	941.7996	-0.337371	0.7385
X2Z	-273.1509	1016.582	0.457986	0.6508
X3Z	-51.49040	376.7217	-0.136680	0.8923
X4Z	121.5859	267.4985	0.454454	0.6533
Effecf Spesification			**S.D**	**Rho**
Cross Section Random			4176.829	0.9794
Idiosyncratic Random			605.5213	0.0206
Weight Satisics				
R-squared	0.025451	Mean depednent var		115.6073
Adjusted R-squared	-0.311892	S.D dependen Var		450.7980
S.E. of regression	512.3345	Sum squared resid		6931633
F-statisic	0.075447	Durbin-Watson stat		3.123675
Prob(F-statisic)	0.999822			

Source: Data processing by the author, with eviews 12

With the following explanation:

a. The coefficient value of variable X1Z is -317.7359. The t-statistic is -0.337371 and the probability is 0.7385 > 0.05. Therefore, an increase in firm size as a moderating variable by 1 weakens the effect of profitability (X1) on stock price (Y) by 317.7359. Therefore, it can be concluded that firm size moderates the relationship between profitability and stock price in 2019-2021, but not significantly. **Hypothesis 5a is accepted.**

b. The coefficient value of variable X2Z is 465.5806. The t-statistic is 4.57986 and the probability is 0.6508 < 0.05. Thus, an increase in the value of Firm Size as a moderating variable by 1 can strengthen the effect of profitability (X2) on stock price (Y) by 465.5806. Therefore, it can be concluded that Firm Size moderates the relationship between profitability and stock price in 2019-2021, but not significantly. **Hypothesis 6a is accepted.**

c. The coefficient value of the X3Z variable is -51.49040. With a t-statistic value of -0.136680 and a probability of 0.8923 > 0.05. Therefore, it can be interpreted that if the value of Firm Size as a moderating variable increases by 1, it can weaken the effect of leverage (X3) on stock prices (Y) by 51.49040. Therefore, it can be stated that Firm Size can moderate the relationship between the profitability variable and stock prices in 2019-2021, but not significantly. **Hypothesis 7a is accepted.**

d. The coefficient value of the X4Z variable is 121.5659. With a t-statistic value of 0.454454 and a probability of 0.6533 < 0.05. Therefore, it can be interpreted that if the value of Firm Size as a moderating variable increases by 1, it can strengthen the effect of liquidity (X4) on stock prices (Y) by 121.5659. Therefore, it can be stated that Firm Size moderates the relationship between profitability and stock prices in 2019-2021, but not significantly. **Hypothesis 8a is accepted.**

Table 8: Moderated Regression Analysis Result on 2022-2024

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6539.064	9060.808	0.721687	0.4769
RENTX1	9690.970	5518.430	1.754298	0.0912
PRFTX2	-16668.29	6923.599	-2.40746	0.0235
LEVX3	12078.39	14337.92	0.842409	0.4072
LIKDX4	381.3961	5075.224	0.075149	0.9407
UKPRPSZ	285.4332	322.8815	0.884109	0.3848
X1Z	-348.5280	203.6021	-1.711809	0.0988
X2Z	590.017	241.8042	2.440061	0.0218
X3Z	-439.4515	519.5468	-0.845836	0.4041
X4Z	-13.47727	181.7159	-0.074167	0.9414
Effecf Spesification			S.D	Rho
Cross Section Random			3427.861	0.992800
Idiosyncratic Random			292.2951	0.007200
Weight Satisics				
R-squared	0.342336	Mean dependen var		67.5082
Adjusted R-squared	0.114683	S.D dependen Var		265.0539
S.E. of regression	249.3926	Sum squared resid		1617113
F-statisic	1.503763	Durbin-Watson stat		1.689934
Prob(F-statisic)	0.198755			

Source: Data processing by the author, with eviews 12

With the following explanation:

a. The coefficient value of variable X1Z is -348.5280. The t-statistic is -1.7118 and the probability is 0.0988 > 0.05. Therefore, an increase in firm size as a moderating variable by 1 weakens the effect of profitability (X1) on stock price (Y) by 348.5280. Therefore, it can be concluded that firm size moderates the relationship between profitability and stock price, but not significantly. **Hypothesis 5b is accepted.**

b. The coefficient value of variable X2Z is 590.0170. The t-statistic is 2.4400 and the probability is 0.203 < 0.05. Therefore, an increase in firm size as a moderating variable by 1 strengthens the effect of profitability (X2) on stock price (Y) by 590.0170. Therefore, it can be stated that Firm Size can significantly moderate the relationship between profitability and stock prices. **Hypothesis 6b is accepted.**

c. The coefficient value of the X3Z variable is -439.4515. With a t-statistic value of -0.8458 and a probability of 0.4054 > 0.05. Therefore, it can be interpreted that if the value of Firm Size as a moderating variable increases by 1, it can weaken the effect of leverage (X3) on stock prices (Y) by 439.4515. Therefore, it can be stated that Firm Size can moderate the relationship between the leverage variable and stock prices, but not significantly. **Hypothesis 7b is accepted.**

d. The coefficient value of the X4Z variable is -13.4772. With a t-statistic value of -0.0741 and a probability of 0.9414 > 0.05. Therefore, it can be interpreted that if the value of Firm Size as a moderating variable increases by 1, it can weaken the effect of liquidity (X4) on stock prices (Y) by 13.4772. Therefore, it can be stated that Firm Size can moderate the relationship between liquidity variables and stock prices, but not significantly. **Hypothesis 8b is accepted.**

DISCUSSION

The Effect of Profitability on Stock Prices

Based on the results of statistical tests, profitability, as proxied by ROE, had a positive effect on a company's stock price in 2019-2021, while it had a negative effect in 2022-2024. ROE reflects the rate of return earned by business owners on the capital used to run the company's operations (Lestari & Triyonowati, 2023; Lubis, 2023;

Kartiko & Rachmi, 2021). Therefore, ROE is often used to assess a company's efficiency in utilizing its equity to generate net income and create added value for shareholders. A high ROE indicates a company's ability to provide high returns to shareholders, which in turn increases investment attractiveness.

The Effect of Profitability on Stock Prices

Based on the results of statistical tests, profitability, as measured by net profit margin, had a positive effect on the company's stock price in 2029-2021, while it had a negative effect in 2022-2024. Profitability is a primary concern for investors and shareholders because profit is a fundamental element that demonstrates a business's success in creating added value and ensuring its continuity (Kurniawan, 2020). Profit is also the primary source for dividend distribution, reinvestment, and business expansion, all of which are closely related to investor expectations regarding returns on investment. In Signaling Theory, information related to profitability is crucial because it can provide a positive signal to the market regarding a company's growth prospects and financial health. When management discloses high levels of profitability, this can increase investor confidence in the company's long-term prospects.

The Effect of Leverage on Stock Prices

Based on the results of statistical tests, leverage had a positive effect on company stock prices in 2019-2021, while it had a negative effect in 2022-2024. One indicator commonly used to measure a company's leverage level is the Debt-to-Asset Ratio (DAR), which is the ratio of total debt to total assets. This ratio provides an overview of the proportion of a company's assets financed by debt rather than equity. The higher the leverage (DAR), the greater the company's dependence on borrowed funds to finance its operations and assets. This can increase financial risk because the company must bear interest expenses and periodic debt repayment obligations. If not managed properly, this condition can impact the company's ability to meet its obligations and negatively impact investor perceptions (Podedworna-Tarnowska, 2023).

The Effect of Liquidity on Stock Prices

Based on the results of statistical tests, liquidity positively impacted a company's stock price in 2019-2021, while negatively impacting it in 2022-2024. Liquidity is a company's ability to meet its short-term obligations using available current assets. A good level of liquidity reflects a healthy financial position, indicating that the company has sufficient resources to cover maturing obligations. Liquidity is a key indicator in assessing a company's financial stability and its ability to maintain short-term operational continuity. Investors often consider liquidity as a primary consideration due to the risk of payment default, which can directly impact the company's stock value. One financial ratio used to measure liquidity is the Current Ratio (CR), which is the ratio of a company's total current assets to its total current liabilities. The CR indicates how much of a company's current assets are sufficient to cover every rupiah of its short-term liabilities (Mao, 2023). A high CR indicates that a company has sufficient current assets to meet its short-term obligations, and this is often considered a strong indicator of liquidity.

Firm Size in Moderating the Effect of Profitability on Stock Prices

Based on the results of statistical tests, it was found that Firm Size weakened the effect of profitability on stock prices in the observation years 2019-2021 and 2022-2024. Firm Size in this study reflects the size of the company, as reflected in the company's total asset value. The larger the company, the more investors tend to pay attention to it. This is because larger companies tend to have more stable conditions (Ahmad et al., 2023). Profitability is a company's ability to generate profits from the capital or resources used and is often used as an indicator of managerial efficiency and investment attractiveness. When large companies have high profitability, it tends to have a stronger influence on stock prices.

Firm Size in Moderating the Effect of Profitability on Stock Prices

Based on the results of statistical tests conducted, it was found that from 2019 to 2024, Firm Size strengthened the influence of profitability on stock prices. In this study, Firm Size reflects the size of a company, as reflected in its total asset value. The larger the company, the more likely it is that investors will pay attention to it (Panjaitan & Supriyati, 2023). As profitability increases, companies with a large operating scale have a stronger potential to generate significant net income. This provides a positive signal to investors about the ability of large company management to manage costs efficiently and create optimal value. High profitability in large companies is often interpreted by the market as an indicator of successful managerial strategies, operational efficiency, and long-term growth potential. Therefore, large companies with high profitability can more easily attract investor interest, ultimately driving stock prices up (Akbar, 2023).

Firm Size in Moderating the Effect of Leverage on Stock Prices

Based on the results of statistical tests conducted, it was found that from 2019 to 2024, Firm Size was able to weaken the effect of leverage on company stock prices. Firm Size is a reflection of the size that appears in the value of a company's total assets (Junaidi et al., 2024). The size of a company will affect its financial capacity. In other words, the larger the company, the greater its ability to manage its debt and assets more effectively. In large companies, high leverage can be seen as less risky than in small companies. This aligns with the findings of research by Wahyudi, A (2023), which states that in large companies, high leverage is often perceived as a positive signal because large companies typically have easier access to capital markets and financial institutions, and have a good reputation.

Firm Size in Moderating the Effect of Liquidity on Stock Prices

Based on the results of statistical tests conducted, it was found that in 2019-2021, Firm Size strengthened the effect of liquidity on stock prices, while in 2022-2024, it weakened the effect of liquidity on company stock prices. Firm Size reflects the total assets held by a company (Junaidi et al., 2024). The larger the company, the greater its ability to manage liquidity and financial operations. In other words, large companies tend to have stronger resources to maintain adequate liquidity, which can be reflected in the current ratio (Subhan, 2023). Liquidity is a company's ability to meet its short-term obligations with its assets. Large companies generally have more liquid assets that can be used to pay short-term obligations. Therefore, good liquidity, as measured by a high current ratio, in large companies is usually considered a positive signal by investors, as it indicates financial stability and the company's ability to face liquidity challenges.

CONCLUSION

Based on the statistical test results and the description of the findings, it is concluded that:

1. In 2019-2021, profitability had a positive effect on stock prices.
2. In 2022-2024, profitability had a negative effect on stock prices.
3. In 2019-2021, profitability had a positive effect on stock prices.
4. In 2022-2024, profitability had a positive effect on stock prices.
5. In 2019-2021, leverage had a positive effect on stock prices.
6. In 2022-2024, leverage had a negative effect on stock prices.
7. In 2019-2021, liquidity had a positive effect on stock prices.

8. In 2022-2024, liquidity had a negative effect on stock prices.
9. Firm Size moderated the effect of profitability on stock prices in 2019-2021.
10. Firm Size moderates the effect of profitability on stock prices in 2022-2024.
11. Firm Size moderates the effect of profitability on stock prices in 2019-2021.
12. Firm Size moderates the effect of profitability on stock prices in 2022-2024.
13. Firm Size moderates the effect of leverage on stock prices in 2019-2021.
14. Firm Size moderates the effect of leverage on stock prices in 2022-2024.
15. Firm Size moderates the effect of liquidity on stock prices in 2019-2021.
16. Firm Size moderates the effect of liquidity on stock prices in 2022-2024.

Limitation & Recommendation

This study was limited by the sample size. During the data collection process, the researchers discovered that several companies in the population did not meet the data collection requirements. Consequently, the number of companies studied may be reduced. Therefore, the researchers hope that future researchers can expand the sample size by adding companies from various sectors to the sample, allowing for a broader sample size, with a potential for innovative sector comparisons.

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