



The Impact of Firm Size, Leverage, and Profitability on Company Value in the Pharmaceutical Sector Listed on the Indonesia Stock Exchange (Idx) for the Period 2019-2023

Ajeng Wijaksana^{1*}, Jeni Irnawati²
Universitas Pamulang

Corresponding Author: Jeni Irnawati dosen02228@unpam.ac.id

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ABSTRACT

This study analyzes how company size, leverage, and profitability affect firm value using a quantitative approach. The population consists of all pharmaceutical companies listed on the Indonesia Stock Exchange (IDX). The study employed a purposive sampling method, resulting in a selection of eight pharmaceutical companies that met predefined criteria. Data collection was conducted using documentation techniques. This study examines three independent variables: Firm Size, Debt to Equity Ratio (DER), and Return on Assets (ROA), while the dependent variable is Price to Book Value (PBV). The research utilizes secondary data obtained from financial reports of pharmaceutical companies spanning the years 2019 to 2023. Data analysis includes descriptive examination and statistical processing using Eviews 12 software. The results reveal that Firm Size has a significant positive influence on firm value ($0.0024 < 0.05$), leverage also has a significant positive impact on firm value ($0.0076 < 0.05$), whereas profitability does not show any significant effect on firm value ($0.886 > 0.05$). Meanwhile, the simultaneous analysis reveals that firm size, leverage, and profitability collectively do not significantly influence firm value ($0,1870 > 0,05$).

INTRODUCTION

The pharmaceutical sector ranks as the fourth-largest contributor to Indonesia's non-oil and gas manufacturing industry. Recognized for its strategic importance, it has been included among the ten key industries prioritized in the National Industrial Development Master Plan (RIPIN) for the period 2015-2035. After half a decade of RIPIN, the pharmaceutical industry is still facing very complex dynamics. The government must conduct a comprehensive evaluation of the dynamics that are still occurring in the pharmaceutical industry within the framework of RIPIN 2015-2035. The pharmaceutical industry must be encouraged to be free from dependence on imported raw materials that could potentially threaten the pharmaceutical industry sector.

Domestic pharmaceutical companies admit that they are experiencing difficulties amid the pandemic that has hit all countries in the world today. This is mainly due to the increasingly strong dollar movement, which has an impact on the operational burden of companies that still have to rely on imports of raw materials in large quantities. PT Phapros (PEHA) said that the dependence on imported raw materials which reached 95% of all the company's needs forced the company to surrender this year. The movement of the dollar which continues to strengthen compared to last year will certainly put pressure on the company's financial condition. The worst-case scenario prepared by the company with the dollar continuing to increase makes the net profit projection much worse than IDR 135 billion. Meanwhile, its parent company, PT Kimia Farma Tbk (KAFF), which last year suffered a loss of IDR 12.72 billion in 2019, this year projects an increase in revenue amid the corona pandemic. Revenue is predicted to reach IDR 11.7 trillion, up from IDR 9.40 trillion in the company's achievements last year. In addition, this pharmaceutical company also asked the government for relief in terms of import duties on raw materials considering the high need for imported raw materials. He proposed that the government not impose import tariffs on raw materials.

2020 was a tough year for all industrial sectors. The pharmaceutical industry is no exception. The outbreak of the corona virus (Covid-19) since early March 2020 in Indonesia has influenced the expansion pace of the pharmaceutical sector declining quite sharply. GP Farmasi Indonesia noted that only sales of drugs and vitamins related to Covid-19 increased. The rest experienced a decline.

On June 21, 2023, President Joko Widodo announced that the government had officially revoked the COVID-19 pandemic status in Indonesia. Indonesia was declared to have shifted from a pandemic to an endemic period. However, in December 2023, the COVID-19 outbreak is now increasing again in several countries, such as Singapore and Malaysia, including Indonesia. Deputy Minister of Health Dante Saksono ensured that the reported COVID-19 cases in Indonesia are still under control. According to information released by the Ministry of Health on December 6, 2023, the average daily COVID-19 cases increased by 35-40 cases. Meanwhile, COVID-19 patients being treated in hospitals were recorded between 60-131 people. (source: detik.com)

The impact of Covid-19 has disrupted the supply of pharmaceutical raw materials from China. Meanwhile, the Indonesian pharmaceutical industry is

highly dependent on the supply of raw materials from China. This can impact a company's overall worth. Businesses that successfully boost their profits have the potential to grow and develop further. Expansion is a strategic move aimed at broadening and scaling up operations. Larger companies tend to have a greater advantage in enhancing profitability and increasing their market value.(Hansen, 2014) Big corporations tend to maintain stability and have the capability to achieve consistent profits.

The composition of a company's debt, also known as leverage, refers to the extent to which it relies on borrowed funds to support its business operations. When investors analyze a company, they may come across one that possesses substantial assets but also carries significant financial liabilities, which could indicate a high level of risk, investors should think twice about investing their funds in the company.(Sutama & Lisa, 2018). This is because investors are concerned that high assets will come from debt and increase investment risk if the company is unable to pay their obligations at the specified time.

Leverage which is proxied in this study is Debt to Equity Ratio. The Debt to Equity Ratio is a financial metric used to compare a company's debt with its equity. This ratio indicates how much of the company's own capital is allocated as security for its liabilities. A higher ratio suggests that the business relies more on external funding from lenders rather than internal financial resources, which could pose significant financial risks.

Enhancing corporate earnings and optimizing firm value are interconnected objectives aimed at boosting shareholder prosperity, making them essential factors in ensuring business sustainability. In this study, profitability is represented by Return on Assets (ROA). ROA is a ratio that is able to provide a measure of a company's ability to provide net profits that are in accordance with a certain level of assets.(Hanif & Bustamam, 2017)

According to Brigham and Houston (2001:90) in (Solihin, 2019) said Return on Assets (ROA) is a financial metric that compares net income to total assets, assessing how efficiently a company utilizes its assets to generate profit after accounting for interest and taxes. A higher ROA signifies strong financial performance, while a lower ROA suggests weaker efficiency in asset utilization and overall company performance (Kurniawan, 2016). Kurniawan (2016) also said that the ROA value that is closer to one, means the better the company's profitability because every existing asset can generate profit.

The firm's valuation in this research is represented by the Price Book Value (PBV). This metric is determined by dividing the market price of a single share by its corresponding book value per share (Hery 2016:145). According to Brigham and Houston (2014:115) the comparison between a stock's market price and its book value reflects how investors or companies perceive its worth. This metric also serves as an alternative method for assessing a stock's valuation since, in theory, its market price should align with its book value. Book value itself refers to the ratio of total equity to the number of shares in circulation. Based on its book value, price to book value (PBV) shows how much a company is able to create a value that is relative to the amount of capital invested. The higher the value of price to book value (PBV) indicates the better the company's value and vice versa.

The lower the value of Price to Book value (PBV) indicates the worse the company's value. So that investors' perceptions of the company are also not good.

Table 1. Average Company Size, *Leverage (DER)*, *Profitability (ROA)*, and *Firm Value (PBV)*

No	Year	Company Size (Firm Size)	Leverage (DER)	Profitability (ROA)	Company Values (PBV)
1	2019	28.74	66.07%	9.15%	1.71
2	2020	28.80	67.26%	9.26%	2.87
3	2021	29.00	112.98%	9.44%	2.54
4	2022	29.11	86.88%	11.58%	2.04
5	2023	29.08	96.04%	6.99%	1.76

Source: Annual report

The financial report of pharmaceutical companies increased in 2019-2020, including firm size increased by 0.06% which indicates the total assets obtained by a company, there was an increase in DER of 1.19% which indicates an increase in debt owned by a company, there was an increase in ROA of 0.11% this reflects a rise in the proportion of net earnings relative to the utilization of a company's resources. The movement of financial ratios is resulting in a 1.15% growth in the company's overall valuation.

In 2020-2021, the financial report of pharmaceutical companies showed an increase in firm size of 0.20%, indicating the total assets obtained by a company, an increase in DER of 40.02%, indicating an increase in debt owned by a company, an increase in ROA of 0.48%, indicating an increase in net profit against the utilization of corporate resources led to fluctuations in financial ratios, which in turn resulted in a 0.36% decline in the company's overall valuation.

In 2021-2022, the financial report of pharmaceutical companies showed a decrease in firm size of 0.03%, indicating an increase in total assets obtained by a company, an increase in DER of 20.40%, indicating a decrease in debt owned by a company, an increase in ROA of 2.02%, indicating an increase in the percentage of net profit to the use of a company's assets. The movement of financial ratios was, it experienced a decline in the company's value of 0.46% of a company.

In 2022-2023, the pharmaceutical financial report showed an increase in firm size of 0.08%, indicating an increase in total assets obtained by a company, an increase in DER of 9.16%, indicating an increase in debt owned by a company, a decrease in ROA of 4.55%, indicating a decrease in the percentage of net profit to the utilization of an organization's resources. The movement of financial ratios is subsequently accompanied by a 0.32% decline in the company's overall valuation.

Considering the previously discussed background, the researcher is motivated to carry out a study under the title "The Effect of Firm Size, Leverage, and Profitability on Company Value in Pharmaceutical Companies Listed on the IDX for the 2019-2023 Period".

LITERATURE REVIEW

Firm Size

A company's scale can be determined based on the overall value of its assets and the total revenue it generates. According to Nugraha and Riyadhi (2019:130), total assets are commonly used as an indicator to represent company size because of their stable nature. Purwanti (2020:60) explains that the larger a company, the more assets it owns, and the greater the amount of funds required to maintain its operational continuity. Larger companies are considered to have lower risk because they have more convenient entry into capital markets than smaller enterprises.

Company size generally influences investors' perceptions, where larger companies are seen as being better at managing investment funds. This aligns with signaling theory, which suggests that a larger company size serves as a positive signal to investors.

According to Nurmindanda et al. (2017:3), company size can indicate the scale of a company, measured by the amount of assets, sales volume, and market capitalization. It can be calculated using the following formula:

Company Size = Ln (Total Assets)

According to the research by Rizqia Muharramah & Zulman Hakim (2021), company size has a considerable positive influence on company value, indicating that as a company grows, securing funding becomes more accessible. This financial support allows management to optimize resources and improve the company's overall worth. However, this contradicts the findings of Sri Rahayu et al. (2020), who demonstrated that company size has a negative impact on company value.

H1: The scale of a company exerts a notable and substantial influence on the Price-to-Book Value (PBV) of pharmaceutical firms traded on the Indonesia Stock Exchange (BEI) during the period of 2019–2023.

Leverage

Leverage is a financial metric that assesses the proportion of a company's assets funded through borrowed capital (Akuntansi et al., 2020). Leverage refers to funding through long-term debt and reflects a company's ability to meet its long-term obligations.

The debt-to-equity ratio measures the proportion of a company's financing that comes from debt compared to its own equity. This ratio is calculated by dividing total liabilities by shareholders' equity, offering a perspective on the company's reliance on borrowed funds (Hery, 2015:168). It evaluates the entirety of a company's liabilities (Sujarweni, 2017:61).

This research assesses leverage through the Debt-to-Equity Ratio (DER), which reflects the proportion of debt to equity within a company's financial framework. It serves as an indicator of how well a company's equity can cover its financial commitments. The DER is calculated by dividing the total debt—comprising both short-term and long-term liabilities—by the total equity (Kasmir, 2015:157).

For this reason, the profitability ratio is often referred to as one of the tools for measuring management performance. The debt-to-equity ratio is determined by considering both total debt and shareholders' equity, which are computed using the following formula:

$$\text{Debt-to-Equity Ratio (DER)} = \text{Total Debt} / \text{Total Equity}$$

According to the research by I. Hidayat et al. (2022), Leverage greatly influences a company's value. Conversely, according to the research by Nur Fauziah and Nurhayati (2023), the level of leverage does not substantially influence the overall value of a company.

H2: The Debt-to-Equity Ratio significantly boosts the Price-to-Book Value (PBV) of pharmaceutical companies listed on the Indonesia Stock Exchange from 2019 to 2023.

Profitability

Profitability signifies a company's capacity to produce earnings within a designated timeframe, acting as an indicator of how efficiently the business operates. According to Kasmir (2015:196), Profitability ratios evaluate how effectively a company can generate earnings. A greater profitability ratio reflects better financial health, showcasing the company's strong performance capability to achieve substantial profits (Palupi & Hendiarto, 2018:179).

This research assesses profitability by utilizing the Return on Assets (ROA) ratio. ROA serves as an indicator of how efficiently a company converts its total assets into net profit. A higher ROA signifies greater profitability, reflecting the company's effectiveness in managing and leveraging its assets. Consequently, an increasing ROA ratio indicates stronger financial performance. The formula used to calculate ROA is:

$$\text{ROA} = (\text{Net Profit After Tax}) / (\text{Total Assets}) \times 100\%$$

According to research by I. Hidayat et al., nd 2021 proves that the company's value is significantly positively influenced by profitability. This impact arises due to the optimistic perception of investors, leading to a rise in stock prices and enhancing the overall worth of the company. Unlike (Nur Fauziah & Nurhayati, 2023) which proves profitability adversely impacts company value significantly.

H3: ROA significantly and positively impacts the PBV of pharmaceutical companies listed on the IDX from 2019 to 2023.

Company Value

The value of a company reflects investors' views on a leader's effectiveness in handling entrusted resources, which is frequently linked to stock market performance (Silvia Indrarini, 2019:48). Company value summarizes the investor's overall assessment of the company's operations, both in terms of current and future performance. Business value can be seen through inventory costs. If inventory costs increase, the organization's value will also rise, and vice versa.

This research determines company value by utilizing the Price to Book Value (PBV) ratio. The PBV ratio serves as a metric to assess whether a stock is relatively overvalued or undervalued in comparison to others. Generally,

businesses that achieve higher returns on equity tend to have shares traded at a greater multiple of their book value than those with lower profitability.

The PBV ratio is calculated by dividing a company's market price per share by its book value per share. It reflects how the market values a company's assets relative to their recorded cost. A value of less than one indicates that the company has failed to create value for its shareholders.

In essence, companies that survive are those that provide added value, not just through profitability and high performance. Company value is reflected in how well it can offer benefits and positive impacts from all aspects. Therefore, its existence is expected to contribute to the prosperity of both direct and indirect stakeholders. You can determine this ratio by applying the formula below:

$$\text{PBV} = (\text{Market Price per Share}) / (\text{Book Value per Share})$$

H4: The PBV of pharmaceutical companies on the Indonesia Stock Exchange is affected by factors like firm size, DER, and ROA during the period of 2019–2023.

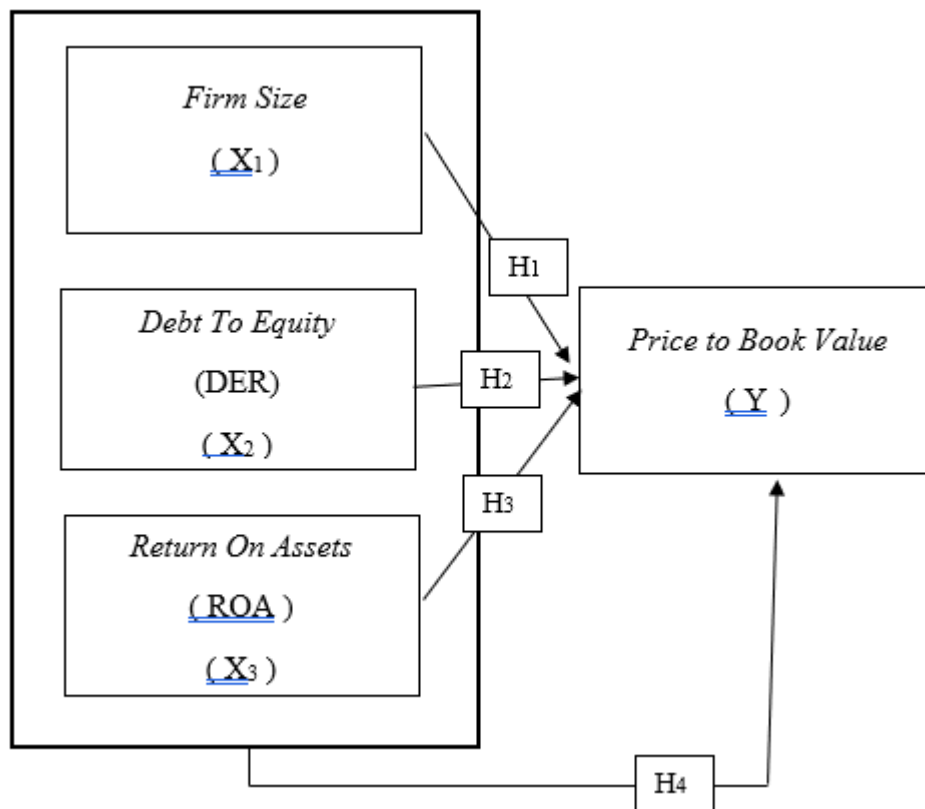


Figure 1. Conceptual Framework

METHODOLOGY

The research approach employed in this thesis utilizes quantitative methods with an explanatory research design. Quantitative descriptive research

is research that uses quantitative data obtained from research samples and then analyzed according to the statistical methods used. This research focused on pharmaceutical companies that were publicly traded on the Indonesia Stock Exchange (IDX) from 2019 to 2023, the study used a purposive sampling technique, resulting in a selection of eight pharmaceutical firms that met specific criteria. This study employed a documentation method to gather and analyze secondary data, specifically financial reports from pharmaceutical firms listed on the IDX between 2019 and 2023. The data collection was carried out by accessing data through the company's official website.

RESEARCH RESULT

Model Selection Test

This test performs the analysis stage before performing the regression analysis stage to determine which model is appropriate with the data obtained. There are several tests performed, these include the Chow Test, the Hausman Test, and the Lagrange Multiplier Test.

Chow Test

Table 2. Chow Test Result

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	10.592454	(7,29)	0.0000
Cross-section Chi-square	50.754443	7	0.0000

Source: Eviews 12, 2024 data processing results.

Referring to the table above, the Cross-section Chi-square Statistic is recorded at 50.754443, with a probability value of 0.0000. Since this probability is below the 0.05 threshold, it indicates that H1 is statistically accepted while H0 is rejected. Consequently, the Chow test results indicate that the Fixed Effect Model (FEM) is the most suitable choice.

Hausman test

Table 3. Hausman Test Results

Correlated Random Effects - Hausman Test
 Equation: Untitled
 Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	14.065665	3	0.0028

Source: Eviews 12, 2024 data processing results.

The Chi-Square value from the table is 14.065665 with a probability of 0.0028, which is below 0.05. Statistically, this supports H1 and rejects H0. Therefore, the Hausman test confirms the Fixed Effect Model (FEM) as the appropriate choice.

Lagrange Multiplier Test

Table 4. Lagrange Multiplier Test Results

Lagrange Multiplier Tests for Random Effects
 Null hypotheses: No effects
 Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided (all others) alternatives

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	11.34085 (0.0008)	0.006471 (0.9359)	11.34733 (0.0008)
Honda	3.367618 (0.0004)	0.080441 (0.4679)	2.438146 (0.0074)
King-Wu	3.367618 (0.0004)	0.080441 (0.4679)	2.094920 (0.0181)
Standardized Honda	4.916978 (0.0000)	0.338621 (0.3674)	0.417168 (0.3383)
Standardized King-Wu	4.916978 (0.0000)	0.338621 (0.3674)	0.033773 (0.4865)
Gourieroux, et al.	--	--	11.34733 (0.0012)

Source: Eviews 12, 2024 data processing results.

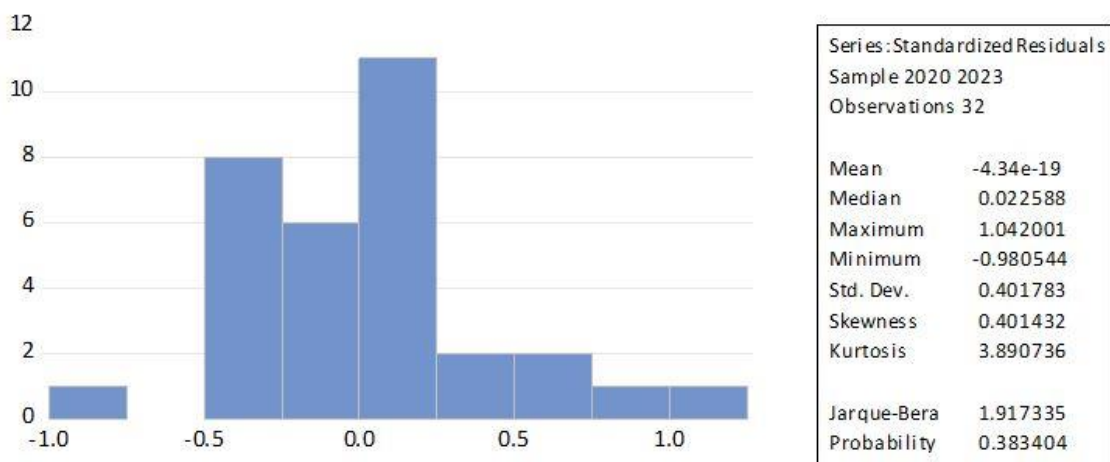
Referring to the table above, the Lagrange Multiplier test yielded a probability of 0.0008, which is below the 0.05 threshold. This statistical outcome confirms the acceptance of H1 while rejecting H0. In this Lagrange Multiplier test, the chosen model is the REM which is more appropriate to use.

Classical Assumption Test

The purpose of the classical assumption test is to assess and validate whether the regression model applied in this research is appropriate. This test encompasses several key aspects, including:

Normality Test

Table 5. Normality Test Results



Source: Eviews 12, 2024 data processing results.

Referring to the normality test results presented in Table 4.9, the Jarque-Bera (JB) statistic is recorded at 1.917335, with a probability value of 0.383404, which is greater than 0.05, the data is considered normally distributed, confirming that the normality assumption is satisfied.

Multicollinearity Test

Table 6. Multicollinearity Test Results

	Company Size	Leverage	Profitability
X1	1,000,000	-0.135652	-0.052006
X2	-0.135652	1,000,000	-0.617999
X3	-0.052006	-0.617999	1,000,000

Source: Eviews 12, 2024 data processing results.

From the analysis of the table data presented above, it has been determined that the coefficient value between variables remains below 0.80. This indicates that the coefficient values align with the established criteria for the multicollinearity

test. Consequently, it can be inferred multicollinearity does not pose a problem in this case.

Heteroscedasticity Test

Table 7. Heteroscedasticity Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.355393	0.953674	-1.421233	0.1659
X1	0.049922	0.033776	1.478028	0.1502
X2	-0.000300	0.000234	-1.280590	0.2105
X3	-0.001546	0.001762	-0.877238	0.3876

Effects Specification

Source: Eviews 12, 2024 data processing results.

Referring to the data in the table, all independent variables exhibit probability values exceeding 0.05, specifically X1 (firm size) at 0.1502, X2 (DER) at 0.2105, and X3 (ROA) at 0.3876. Thus, it can be concluded that the regression model does not encounter issues related to heteroscedasticity.

Autocorrelation Test

Table 8. Autocorrelation Test Results

Root MSE	0.395455	R-squared	0.426351
Mean dependent variable	0.008912	Adjusted R-squared	0.153184
SD dependent var	0.530479	SE of regression	0.488161
Akaike information criterion	1.669943	Sum squared residual	5.004320
Black criterion	2.173789	Log likelihood	-15.71908
Hannan-Quinn critter.	1.836954	F-statistic	1.560773
Durbin-Watson stat	2.291843	Prob(F-statistic)	0.187057

Source: Eviews 12, 2024 data processing results.

According to the test results, the Durbin-Watson (DW) statistic is recorded at 2.291843. By evaluating the DW value within the given range, it follows the condition: $DL < DU < DW < 4-DU < 4-DL$, specifically $1.3384 < 1.6589 < 2.2918 < 2.3411 < 2.6616$. From this analysis, it can be concluded that no autocorrelation is present in the regression model of this study after applying data transformation using the first difference method.

Panel Data Regression Analysis

Table 9. Panel Data Regression Test Results

Dependent Variable: D(LOG_Y)
 Method: Panel Least Squares
 Date: 11/30/24 Time: 02:07
 Sample (adjusted): 2020 2023
 Periods included: 4
 Cross-sections included: 8
 Total panel (balanced) observations: 32

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.214065	0.107599	1.989476	0.0598
D(X1)	-2.835094	0.820043	-3.457249	0.0024
D(X2)	0.008208	0.002780	2.952272	0.0076
D(X3)	0.045915	0.025711	1.785842	0.0886

Effects Specification

Cross-section fixed (dummy variables)			
Root MSE	0.395455	R-squared	0.426351
Mean dependent var	0.008912	Adjusted R-squared	0.153184
S.D. dependent var	0.530479	S.E. of regression	0.488161
Akaike info criterion	1.669943	Sum squared resid	5.004320
Schwarz criterion	2.173789	Log likelihood	-15.71908
Hannan-Quinn criter.	1.836954	F-statistic	1.560773
Durbin-Watson stat	2.291843	Prob(F-statistic)	0.187057

Source: Eviews 12, 2024 data processing results.

From the table's data, the panel data regression model equation is derived as follows:

$$Y = 0.21 - 2.83 * X1 + 0.01 * X2 + 0.05 * X3$$

The constant value is 0.21 stating that if the variable X is constant, then the Price Book Value variable is 0.21. The other equations are interpreted as follows:

1. If the company size increases, it will cause a decrease in Price Book Value of 2.83, assuming that the other independent variables are constant.

2. If Debt to Equity increases by 1 in units, If all other independent variables remain unchanged, the Price Book Value will rise by 0.01.
3. A one-unit rise in Return on Assets leads to a 0.05 increase in Price Book Value, provided that all other independent variables remain unchanged.

Hypothesis Testing

Partial Test (t-Test)

In this study, the resulting df (nk) was 36 (40-4). At a 5% significance level with 36 degrees of freedom, the corresponding t-table value was found to be 2.02809.

Table 10. Partial Test Results (t-Test)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.214065	0.107599	1.989476	0.0598
D(X1)	-2.835094	0.820043	-3.457249	0.0024
D(X2)	0.008208	0.002780	2.952272	0.0076
D(X3)	0.045915	0.025711	1.785842	0.0886

Source: Eviews 12, 2024 data processing results.

1. **The effect of company size on Price Book Value**
 The company size shows a significant impact on the Price Book Value, with a p-value of 0.0024 (below 0.05) and a t-statistic of 3.457249 (above the critical value of 2.02809), indicating a strong positive effect.
2. **The Influence of Debt to Equity on Price Book Value**
 The Debt to Equity probability (0.0076) is below the 0.05 threshold, and the t-value (2.952272) surpasses the critical t-table value (2.02809). These results indicate that Debt to Equity significantly and positively affects Price Book Value.
3. **The Influence of Return on Assets on Price Book Value**
 The p-value for Return on Assets (0.0886) is greater than the 0.05 significance level, and the t-value (1.785842) is below the critical t-table value (2.02809). Thus, Return on Assets has no impact on Price Book Value.

Simultaneous Test (F Test)

Table 11. Simultaneous Test Results (f-Test)

Root MSE	0.395455	R-squared	0.426351
Mean dependent variable	0.008912	Adjusted R-squared	0.153184
SD dependent var	0.530479	SE of regression	0.488161
Akaike information criterion	1.669943	Sum squared residual	5.004320
Black criterion	2.173789	Log likelihood	-15.71908
Hannan-Quinn critter.	1.836954	F-statistic	1.560773
Durbin-Watson stat	2.291843	Prob(F-statistic)	0.187057

Source: Eviews 12, 2024 data processing results.

The calculated F value of 1.560773 is less than the table F value of 2.87, while the probability value of 0.187057 exceeds 0.05. This indicates that, collectively, company size, Debt to Equity Ratio and Return on Assets have no significant impact on the firm value of pharmaceutical companies listed on the IDX from 2019 to 2023.

Coefficient of Determination Test (R-squared)

Table 12. Results of Determination Coefficient Test

Root MSE	0.395455	R-squared	0.426351
Mean dependent variable	0.008912	Adjusted R-squared	0.153184
SD dependent var	0.530479	SE of regression	0.488161
Akaike information criterion	1.669943	Sum squared residual	5.004320
Black criterion	2.173789	Log likelihood	-15.71908
Hannan-Quinn critter.	1.836954	F-statistic	1.560773
Durbin-Watson stat	2.291843	Prob(F-statistic)	0.187057

Source: Eviews 12, 2024 data processing results.

The R-squared value 0.426351 indicates that company size, debt-to-equity ratio, and return on assets account for 42.63% of the variations in company value. Meanwhile, the remaining 57.37% is affected by variables outside the scope of this study.

DISCUSSION

This research emphasizes the significance of company size and leverage in influencing firm value, while profitability requires further analysis to determine its relevance in the pharmaceutical sector. External factors, such as government policies and macroeconomic conditions, seem to have a major influence in shaping the firm value of pharmaceutical companies in Indonesia. The findings emphasize the necessity of a multidimensional approach when evaluating firm value.

CONCLUSIONS AND RECOMMENDATIONS

This study examines how firm size, leverage, and profitability influence the value of pharmaceutical companies listed on the Indonesia Stock Exchange from 2019 to 2023. Firm size is measured by the logarithm of total assets, leverage by the debt-to-equity ratio, and profitability by return on assets. Company value is evaluated using the price-to-book value ratio. After conducting an in-depth analysis and discussion regarding the impact of financial factors on a company's value in the pharmaceutical sector during the specified period, this study concludes that:

1. The findings from the partial test (t-test) indicate that the company size variable (X1) exerts a significant and positive influence on the Price to Book Value (Y) of pharmaceutical firms listed on the IDX between 2019 and 2023. This conclusion is supported by a significance value of 0.0024, which is below the threshold of 0.05 ($0.0024 < 0.05$), and a computed t-value of 3.457249, which surpasses the critical t-table value of 2.02809.
2. The findings from the partial test (t-test) indicate that the Debt to Equity Ratio (X2) has a strong positive impact on the Price to Book Value (Y) of pharmaceutical firms listed on the IDX from 2019 to 2023. This conclusion is supported by a significance level of 0.0076, which falls below the 0.05 threshold ($0.0076 < 0.05$), and a computed t-value of 2.952272, which exceeds the critical t-table value of 2.02809.
3. The findings from the partial test (t-test) indicate that the Return on Assets (X3) variable does not influence the Price to Book Value (Y) in pharmaceutical firms listed on the IDX between 2019 and 2023. This conclusion is drawn from a significance value of 0.886, which exceeds the threshold of 0.05 ($0.886 > 0.05$), and a computed t-value of 1.785842, which falls below the critical t-table value of 2.02809 ($1.785842 < 2.02809$).
4. The F test findings reveal that firm size, the Debt to Equity Ratio and Return on Assets have no significant impact on the Price to Book Value of pharmaceutical firms on the IDX from 2019 to 2023. This is evident from the F value (1.560773), which is below the F table threshold (2.87), and a probability (F statistic) of 0.187057, which exceeds the 0.05 significance threshold ($0.187057 > 0.05$).

ADVANCED RESEARCH

Based on the research conducted, several limitations were identified:

1. The sample used in this study was limited to pharmaceutical companies, which may not represent the entire industrial sector listed on the Indonesia Stock Exchange (BEI).
2. The study only considered company size, Debt to Equity Ratio (DER), and Return on Assets (ROA) as independent variables to explain the Price-to-Book Value (PBV). Other factors that may influence PBV were not included.
3. The research covered only a five-year period, from 2019 to 2023, which may not fully reflect the long-term condition of the companies.

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