

The Influence of Financial Performance, Capital Structure, and Firm Size on Firm Value with the Board of Commissioners' Size as an Intervening Variable

Nesa Intan Ramadani ^{1*}, Arna Suryani ², Ahmadi ³

^{1,2,3} Universitas Batanghari Jambi, Indonesia

Email: nesaintan1@gmail.com

ABSTRACT

The purpose of this study was to determine and analyze how the influence of Financial Performance, Capital Structure and Size of the Board of Commissioners directly and indirectly on Firm Value with the Size of the Board of Commissioners as an Intervening Variable in the Pharmaceuticals Industry Listed on the Indonesia Stock Exchange for the 2019-2023. Company value is one of the main indicators reflecting a company's level of success and competitiveness. Company value is not only a measure of shareholder well-being but also reflects investor confidence in its future prospects and financial performance. The higher the company value, the greater investor confidence in the company's ability to face market challenges, maintain growth, and deliver maximum returns. The results showed that the total direct effect of Return On Asset, Debt to Equity Ratio, Firm Size, and Size of the Board of Commissioners on Price to Book Value was 89.63%, while the indirect effect was -11.60%, so the total effect was 78.02%. Return On Asset and Firm Size have no effect on Board Size, while Debt to Equity Ratio has a significant effect. In addition, Return On Asset and Debt to Equity Ratio have a significant effect on Price to Book Value, while Firm Size has no effect. The size of the Board of Commissioners also has no significant effect on Price to Book Value, but can mediate the effect of Return On Asset, Debt to Equity Ratio, and Firm Size on Price to Book Value simultaneously. These findings indicate the importance of capital structure and financial performance in increasing firm value, although the role of the board of commissioners as an intervening variable is still limited.

Keywords: Return On Asset; Debt to Equity Ratio; Firm Size; Size of the Board of Commissioners; Price to Book Value

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INTRODUCTION

In today's increasingly competitive business environment, firm value has become one of the main indicators that reflect a company's success and competitiveness. Firm value not only serves as a benchmark for shareholder welfare but also reflects investor confidence in the company's prospects and future financial performance. The higher the firm value, the greater the investors' confidence in the company's ability to face market challenges, sustain growth, and provide maximum returns. A high firm value plays a significant role in building a positive reputation in the eyes of the public and other stakeholders. A good reputation, in turn, supports business sustainability amidst intensifying competition. Maintaining firm value, however, is a complex challenge, particularly due to the ever-changing dynamics of the global economy. Firm value can be defined as investors' assessment of a company's success and financial performance, which is reflected in the stock price formed in the capital market. Firm value, as represented by stock price indicators, demonstrates the existence of investment potential with promising long-term prospects.

Firm value is commonly proxied by Price to Book Value (PBV). This ratio is the comparison between the stock price and its book value. PBV indicates whether a stock (market price) is traded above or below its book value. Price to Book Value not only reflects the market's perception of a company's book value but is also influenced by the company's available investment opportunities. Financial performance is one of the key indicators used to measure a company's operational efficiency and effectiveness in generating profits. Companies with strong performance are generally considered more stable and capable of managing market risks, thereby attracting greater investor interest. Financial performance is essentially an analysis conducted to assess the extent to which a company has managed its financial operations in accordance with established principles and standards.

In this study, capital structure is proxied by the solvency ratio, which measures a company's ability to meet its obligations, including both short-term and long-term debts. Capital structure is measured using the Debt to Equity Ratio (DER), which represents the proportion of total debt to total equity. Capital structure, as reflected in the mix of debt and equity financing, is an important factor in determining firm value. An optimal capital structure can help companies minimize financial risk and increase flexibility in executing business strategies.

Meanwhile, firm size is often associated with the capacity to manage large-scale projects, operational stability, and stronger market reputation. Larger firms tend to have greater market capitalization, higher book values, and higher earnings, while smaller firms typically have lower market capitalization and earnings. A higher relative market share indicates stronger competitiveness compared to key rivals, leading to positive investor responses and an increase in firm value. Firm size is generally measured by the natural logarithm of a company's total assets.

However, not all firms with strong financial performance, an ideal capital structure, or a large size succeed in achieving maximum firm value. This suggests the presence of other factors influencing the relationship between these variables and firm value. One factor increasingly discussed in corporate governance literature is the role of the board of commissioners. The size of the board of commissioners is considered one of the factors influencing firm value, as the board is responsible for monitoring and ensuring that the company's objectives are achieved. According to agency theory, the board of commissioner's functions as the highest internal control mechanism responsible for overseeing the actions of top management.

It is therefore important to understand how the size of the board of commissioners may serve as a factor influencing the relationship between financial performance, capital structure, and firm size on firm value. Furthermore, companies are not only confronted with internal challenges but must also deal with external pressures. Macroeconomic conditions such as inflation, interest rates, and exchange rate fluctuations may affect financial stability and market perception of firm value. Additionally, regulatory changes, technological innovation, and the growing emphasis on sustainability present further challenges that companies must address.

Based on the above discussion, the research problem can be formulated as follows: What is the influence of financial performance, capital structure, and firm size on firm value with board of commissioners' size as an intervening variable in pharmaceutical companies listed on the Indonesia Stock Exchange during the period 2019–2023?

LITERATURE REVIEW

Management

Management is a fundamental element that must be carried out by every leader of an organization or institution (Effendhie, 2011:57). Leaders act as managers and must therefore utilize organizational resources, finances, equipment, information, and human resources to achieve predetermined objectives. To realize its goals, a company must implement sound management practices in regulating and making decisions. Management is a process consisting of planning, organizing, measuring, and following up in order to achieve the established objectives by utilizing the available resources. According to Handoko (2012:47), management is a process of planning, organizing, directing, and supervising the efforts of organizational members and human resources to achieve organizational goals.

Financial Management

According to Horne & Wachowicz (2016:17) in their book *Fundamentals of Financial Management* (translated into Indonesian as *Prinsip-Prinsip Manajemen Keuangan*), financial management concerns the acquisition of assets, financing, and asset management based on several general objectives. Fahmi (2012:76) states that financial management is a combination of science and art that studies, examines, and analyzes how financial managers utilize all company resources to raise, manage, and allocate funds, with the aim of generating profits for shareholders and ensuring the sustainability of the business.

Financial Ratio Analysis

Financial ratios are calculations derived from financial statements that function as a tool to measure a company's financial condition and performance. A financial ratio is a figure obtained by comparing one item in the financial statements with another item that has a relevant and significant relationship (Hery, 2015:99). Munawir (2017:93) defines ratio analysis as a method used to determine the relationship between certain items in the balance sheet or income statement, either individually or in combination. Similarly, Harahap (2010:10) emphasizes that financial ratios reflect meaningful relationships between items in financial statements and serve as tools for assessing performance.

Return on Assets (ROA)

Return on Assets measures a company's overall ability to generate profits using the total assets available. Fahmi (2014:83) explains that ROA indicates the extent to which investments made can provide expected returns, where

these investments are essentially the company's assets. Husnan and Pudjiastuti (2012:76) add that ROA calculates how much net income after tax is generated by all assets owned by the company. Thus, ROA serves as an indicator of management's effectiveness in utilizing its investments.

Debt to Equity Ratio (DER)

The Debt-to-Equity Ratio is used to assess the proportion of debt relative to equity. It is calculated by comparing total liabilities, including current liabilities, to total equity. This ratio shows the extent to which creditors finance the company relative to shareholders. Van Horne and Wachowicz (2016:151) describe DER as "a ratio that measures how much a company uses funds from debt or loans." According to Hery (2016:161), DER reflects the degree to which a company's assets are financed by debt and thus serves as an important measure of financial leverage.

Firm Size

According to Budi (2020:64), firm size is a value or scale used to classify a company as large or small. It is typically measured by the scale of assets, using the natural logarithm (Ln) of total assets. Neldi and Elfishwandi (2023:20) explain that firm size is an attribute that can influence profitability. Larger firms generally have stronger capabilities in overcoming business challenges and higher potential profits, supported by greater resources.

Board of Commissioners' Size

According to Sembiring (2005) in Anggraini (2015:6), board size refers to the total number of commissioners in a company. Collier and Gregory (2019:4) argue that the larger the board of commissioners, the easier it is to control managers and the more effective the monitoring of managerial activities. The board of commissioners serves as a control mechanism within the company, functioning as a practical application of agency theory.

Price to Book Value (PBV)

Price to Book Value is the ratio of a company's stock price to its book value. A company with strong management is expected to have a PBV of at least 1 or greater (overvalued). Conversely, if PBV is below 1, it indicates that the stock's market price is lower than its book value (undervalued). According to Setianto (2016:73), a low PBV suggests a decline in the quality and fundamental performance of the issuer concerned.

RESEARCH METHODOLOGY

The data used in this study are secondary data. The data collection method applied is library research, which involves searching for and reviewing various literature, scientific works, and books related to the research topic. The population of this study consists of 13 listed companies, of which 9 companies were selected as the sample based on specific characteristics. In addition, the study collected financial statement data from pharmaceutical companies obtained through the official website of the Indonesia Stock Exchange (www.idx.co.id).

RESULTS AND DISCUSSION

Normality Test

According to Ghozali (2019:154), the normality test is conducted to assess whether the data distribution of a variable follows a normal distribution. To determine this, the Kolmogorov-Smirnov (K-S) statistical test was employed. The assumption is as follows: if the significance value is < 0.05 , the data distribution is not normal; conversely, if the significance value is > 0.05 , the data distribution is normal.

Tabel 1.
One-Sample Kolmogorov-Smirnov Test

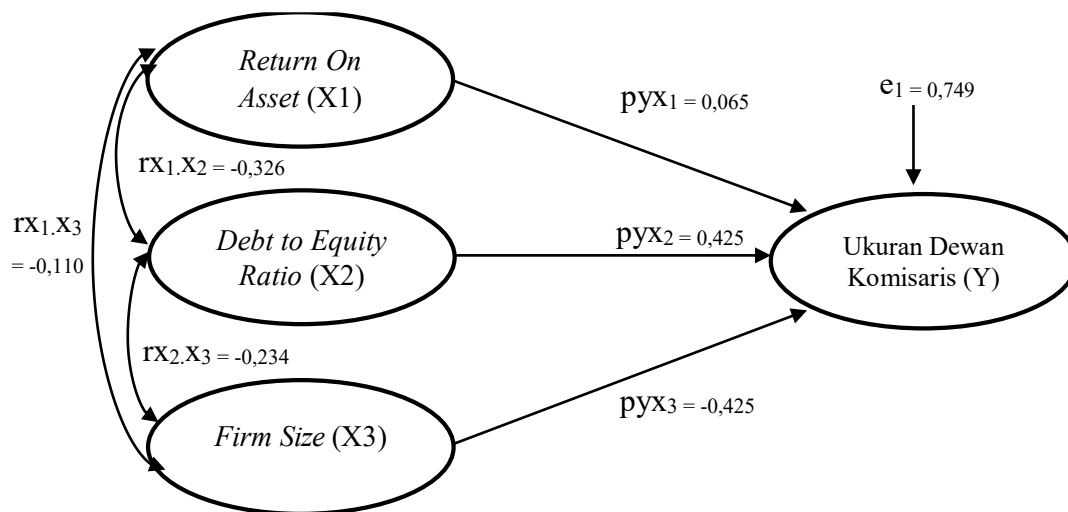
		Unstandardized Residual
N		45
Normal Parameters ^{a,b}	Mean	0.0000000
	Std. Deviation	0.41429312
Most Extreme Differences	Absolute	0.066
	Positive	0.066
	Negative	-0.053
Test Statistic		0.066
Asymp. Sig. (2-tailed)		0.200 ^{c,d}

a. Test distribution is Normal.

b. Calculated from data.

Source: Processed Data, 2025

Based on the Asymp. Sig value in the table above, it can be observed that the significance level is 0.200, which is greater than 0.05. Therefore, the data are normally distributed.



Picture 1

Based on the calculation above, the direct effect of Return on Assets (X1) on the Board of Commissioners' Size (Y) is 0.4225%, while the indirect effects of Return on Assets (X1) on the Board of Commissioners' Size (Y) are -0.900575% and 0.303875%. Thus, the total effect of Return on Assets (X1) on the Board of Commissioners' Size (Y) is -0.1742%. Therefore, it can be concluded that Return on Assets (X1) has no significant effect on the Board of Commissioners' Size (Y).

1) The Effect of Debt to Equity Ratio (X2) on the Board of Commissioners' Size (Y)

The direct effect of Debt to Equity Ratio (X2) on the Board of Commissioners' Size (Y) is 18.0625%, while the indirect effects of Debt to Equity Ratio (X2) on the Board of Commissioners' Size (Y) are -0.900575% and 4.226625%. Thus, the total effect of Debt to Equity Ratio (X2) on the Board of Commissioners' Size (Y)

is 21.388175%. Therefore, it can be concluded that Debt to Equity Ratio (X2) has an influence on the Board of Commissioners' Size (Y).

2) The Effect of Firm Size (X3) on the Board of Commissioners' Size (Y)

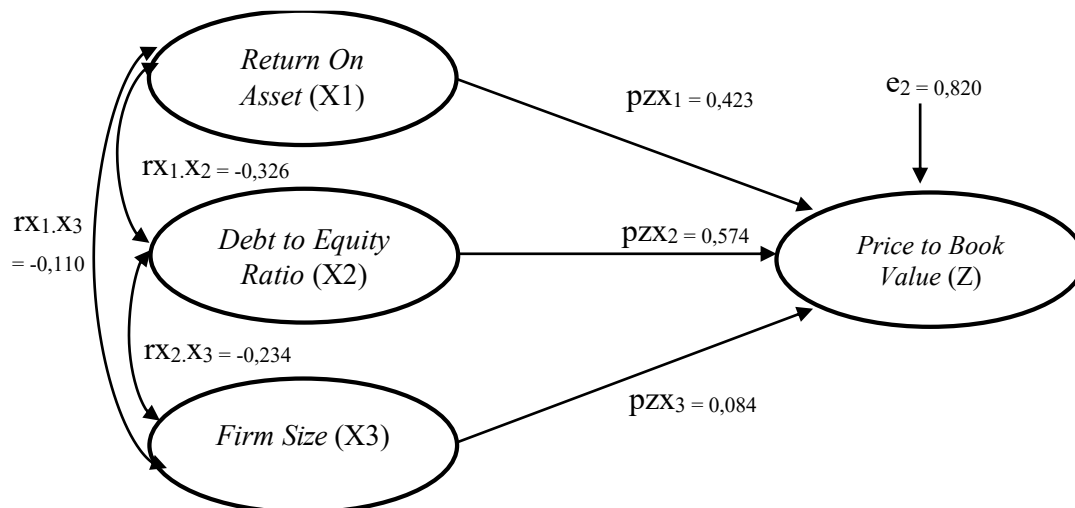
The direct effect of Firm Size (X3) on the Board of Commissioners' Size (Y) is 0.180625%, while the indirect effects of Firm Size (X3) on the Board of Commissioners' Size (Y) are 0.303875% and 4.276625%. Thus, the total effect of Firm Size (X3) on the Board of Commissioners' Size (Y) is 4.761125%. Therefore, it can be concluded that Firm Size (X3) has no significant influence on the Board of Commissioners' Size (Y). Based on the path coefficient calculation, the results can be summarized in the following table:

Table 2.

Variabel	Langsung	Tidak Langsung			Total
		X1	X2	X3	
<i>Return On Asset</i>	0,4225		-0,900575	0,303875	-0,1742
<i>Debt to Equity Ratio</i>	18,0625	-0,900575		4,226625	21,388175
<i>Firm Size</i>	18,0625	0,303875	4,226625		22,593
Pengaruh X1,X2 dan X3					43,806975
Pengaruh Variabel lain					56,193025

Source: Processed Data, 2025

Based on the analysis, it is evident that Return on Assets, Debt to Equity Ratio, and Firm Size contribute 43.806975% to the Board of Commissioners' Size, while the remaining 56.193025% is influenced by other variables not examined in this study.



Picture 2

1) The Effect of Return on Assets (X1) on Price to Book Value (Z)

The direct effect of Return on Assets (X1) on Price to Book Value (Z) is 17.8929%, while the indirect effects are -7.9153452% and -0.390852%. Thus, the total effect of Return on Assets (X1) on Price to Book Value (Z) is 9.5867028%. Therefore, it can be concluded that Return on Assets (X1) has no significant influence on Price to Book Value (Z).

2) The Effect of Debt to Equity Ratio (X2) on Price to Book Value (Z)

The direct effect of Debt to Equity Ratio (X2) on Price to Book Value (Z) is 32.9476%, while the indirect effects are -7.9153452% and -1.1282544%. Thus, the total effect of Debt to Equity Ratio (X2) on Price to Book Value (Z) is 23.9040004%. Therefore, it can be concluded that Debt to Equity Ratio (X2) has no significant influence on Price to Book Value (Z).

3) The Effect of Firm Size (X3) on Price to Book Value (Z)

The direct effect of Firm Size (X3) on Price to Book Value (Z) is 0.7056%, while the indirect effects are -0.390852% and -1.1282544%. Thus, the total effect of Firm Size (X3) on Price to Book Value (Z) is -0.8135064%. Therefore, it can be concluded that Firm Size (X3) has no significant influence on Price to Book Value (Z).

Hypothesis Testing

F-Test

The Effect of Return on Assets, Debt to Equity Ratio, and Firm Size Simultaneously on the Board of Commissioners' Size.

Table 3.
ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	0.150	3	0.050	10.644	0.000 ^b
	Residual	0.193	41	0.005		
	Total	0.343	44			

a. Dependent Variable: UDK

b. Predictors: (Constant), FS, ROA, DER

Source: Processed Data, 2025

Based on the results of hypothesis testing, the simultaneous effect of Return on Assets, Debt to Equity Ratio, and Firm Size on the Board of Commissioners' Size shows that the calculated F-value is greater than the critical F-value ($10.644 > 2.833$) with a significance level of $0.000 < 0.05$. Therefore, according to the decision-making criteria in the F-test, it can be concluded that Return on Assets, Debt to Equity Ratio, and Firm Size simultaneously have a significant effect on the Board of Commissioners' Size.

The Effect of Return on Assets, Debt to Equity Ratio, and Firm Size Simultaneously on Price to Book Value

Table 4.
ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3.662	3	1.221	6.626	0.001 ^b
	Residual	7.552	41	0.184		
	Total	11.214	44			

a. Dependent Variable: PBV

b. Predictors: (Constant), FS, ROA, DER

Source: Processed Data, 2025

Based on the results of this hypothesis testing, the simultaneous effect of Return on Assets, Debt to Equity Ratio, and Firm Size on Price to Book Value shows that the calculated F-value is greater than the critical F-value ($6.626 > 2.833$) with a significance level of $0.001 < 0.05$. Therefore, according to the decision-making criteria in the F-test, it can be concluded that Return on Assets, Debt to Equity Ratio, and Firm Size simultaneously have a significant effect on Price to Book Value.

t-Test

The Partial Effect of Return on Assets, Debt to Equity Ratio, and Firm Size on the Board of Commissioners' Size

Table 5.
Coefficients^a

Model		t	Sig.
1	(Constant)	2.036	0.048
	ROA	0.513	0.610
	DER	3.284	0.002
	FS	-3.456	0.001

a. Dependent Variable: UDK

Source: Processed Data, 2025

Based on the results of the t-test presented in the table above:

- Return on Assets** on the Board of Commissioners' Size shows a calculated t-value of 0.513 compared to the critical t-value of 2.01954, meaning ($0.513 < 2.01954$) with a significance level of $0.610 > 0.05$. This indicates that Return on Assets has no significant effect on the Board of Commissioners' Size.
- Debt to Equity Ratio** on the Board of Commissioners' Size shows a calculated t-value of 3.284 compared to the critical t-value of 2.01954, meaning ($3.284 > 2.01954$) with a significance level of $0.002 < 0.05$. This indicates that Debt to Equity Ratio has a significant effect on the Board of Commissioners' Size.
- Firm Size** on the Board of Commissioners' Size shows a calculated t-value of -3.456 compared to the critical t-value of 2.01954, meaning ($-3.456 < 2.01954$) with a significance level of $0.001 < 0.05$. This indicates that Firm Size has a negative and significant effect on the Board of Commissioners' Size.

The Partial Effect of Return on Assets, Debt to Equity Ratio, and Firm Size on Price to Book Value.

Table 6.
Coefficients^a

Model		t	Sig.
1	(Constant)	-0.950	0.348
	ROA	3.052	0.004
	DER	4.054	0.000
	FS	0.621	0.538

a. Dependent Variable: PBV

Source: Processed Data, 2025

Based on the results of the *t*-test in the table above:

- Return on Assets** on Price to Book Value, as indicated by a *t*-calculated value of 3.052 compared to a *t*-table value of 2.01954, shows that $(3.052 > 2.01954)$ with a significance level of $0.004 < 0.05$. This means that Return on Assets has a significant effect on Price to Book Value.
- Debt to Equity Ratio** on Price to Book Value, as indicated by a *t*-calculated value of 4.054 compared to a *t*-table value of 2.01954, shows that $(4.054 > 2.01954)$ with a significance level of $0.000 < 0.05$. This means that Debt to Equity Ratio has a significant effect on Price to Book Value.
- Firm Size** on Price to Book Value, as indicated by a *t*-calculated value of 0.621 compared to a *t*-table value of 2.01954, shows that $(0.621 < 2.01954)$ with a significance level of $0.538 > 0.05$. This means that Firm Size has no effect and is not significant on Price to Book Value

The Effect of Board of Commissioners' Size on Price to Book Value.

Table 7.
Coefficients^a

Model		t	Sig.	Tolerance	VIF
1	(Constant)	2.199	0.033		
	UDK	0.821	0.416	1.000	1.000

a. Dependent Variable: PBV

Source: Processed Data, 2025

Based on the results of the *t*-test between the Board of Commissioners' Size and Price to Book Value, the *t*-calculated value is 0.821, while the *t*-table value is 2.01954 $(0.821 < 2.01954)$, with a significance level of $0.416 > 0.05$. This indicates that the Board of Commissioners' Size has no effect and is not significant on Price to Book Value.

DISCUSSION

The discussion in this study aims to answer the research questions presented in the previous chapter. The discussion can be divided into the following sections:

The Effect of Return on Assets, Debt to Equity Ratio, and Firm Size Directly and Indirectly on the Board of Commissioners' Size

Based on the test results, it was found that Return on Assets directly affects the Board of Commissioners' Size by 0.4225% and indirectly by -0.900575% and 0.303875%, resulting in a total effect of -0.1742%. Debt to Equity Ratio directly affects the Board of Commissioners' Size by 43.806975% and indirectly by -0.900575% and -4.276625%, resulting in a total effect of 12.8853%. Meanwhile, Firm Size directly affects the Board of Commissioners' Size by 0.180625% and indirectly by 0.303875% and 4.276625%, resulting in a total effect of 4.761125%. The total effect of Return on Assets, Debt to Equity Ratio, and Firm Size on the Board of Commissioners' Size, both directly and indirectly, is 84.41%.

The Partial Effect of Return on Assets, Debt to Equity Ratio, and Firm Size on the Board of Commissioners' Size

1. Effect of Return on Assets on the Board of Commissioners' Size

Based on the test results, Return on Assets on the Board of Commissioners' Size shows a *t*-calculated value of 0.513 compared to a *t*-table value of 2.01954 ($0.513 < 2.01954$) with a significance level of $0.610 > 0.05$. This indicates that Return on Assets has no effect and is not significant on the Board of Commissioners' Size. This result is consistent with Rahmawati and Lutfi (2021), who stated that Return on Assets has no significant effect on the board size in the Indonesian banking industry. Similarly, Putri and Widyaningsih (2020) found that financial performance measured by ROA does not influence the board structure, indicating that asset returns are not the main factor in determining the size of the board of commissioners in manufacturing companies.

2. Effect of Debt to Equity Ratio on the Board of Commissioners' Size

Based on the test results, Debt to Equity Ratio on the Board of Commissioners' Size shows a *t*-calculated value of 3.284 compared to a *t*-table value of 2.01954 ($3.284 > 2.01954$) with a significance level of $0.002 < 0.05$. This indicates that Debt to Equity Ratio has a significant effect on the Board of Commissioners' Size. This finding is consistent with Pratiwi and Suardana (2019), who found that companies with higher leverage tend to expand the board size to strengthen management oversight. Astuti and Hapsari (2021) also supported this result, showing that DER significantly influences board structure, as higher debt levels increase the need for stricter monitoring through the board of commissioners.

3. Effect of Firm Size on the Board of Commissioners' Size

Based on the test results, Firm Size on the Board of Commissioners' Size shows a *t*-calculated value of -3.456 compared to a *t*-table value of 2.01954 ($-3.456 < 2.01954$) with a significance level of $0.001 < 0.05$. This indicates that Firm Size has a negative and significant effect on the Board of Commissioners' Size. This finding is consistent with Widiastuti and Erawati (2021), who found that larger companies tend to have more established management and internal control systems, thereby requiring fewer commissioners. Similarly, Sari and Sudana (2019) revealed that Firm Size negatively affects board structure because larger firms rely more on managerial professionalism rather than increasing supervisory members.

The Direct and Indirect Effect of Return on Assets, Debt to Equity Ratio, and Firm Size on Price to Book Value

Based on the test results, the total direct effect of Return on Assets, Debt to Equity Ratio, Firm Size, and the Board of Commissioners' Size on Price to Book Value is 89.6312%, while the total indirect effect is -11.6091%. Thus, the overall effect is 78.02215%. It can be concluded that the direct effect is much stronger than the indirect effect, as the latter is negative and reduces the total impact on Price to Book Value. This result is in line with Putra and Lestari (2021), who showed that ROA, DER, and Firm Size jointly have a significant impact on Price to Book Value in Indonesian manufacturing firms. Saputra and Indrawati (2020) also found that profitability, leverage, and firm size simultaneously contribute to firm value as measured by Price to Book Value.

The Partial Effect of Return on Assets, Debt to Equity Ratio, Firm Size, and Board of Commissioners' Size on Price to Book Value

1. Effect of Return on Assets on Price to Book Value

The test results show a t -calculated value of 3.052 compared to a t -table value of 2.01954 ($3.052 > 2.01954$) with a significance level of $0.004 < 0.05$, indicating that Return on Assets has a significant effect on Price to Book Value. This finding is consistent with Widiartini and Dwirandra (2019), who found that higher profitability improves investor confidence and firm value. Mahardika and Rahyuda (2021) also demonstrated that ROA significantly influences PBV, as higher profits are perceived as positive signals by the market.

2. Effect of Debt to Equity Ratio on Price to Book Value

The test results show a t -calculated value of 4.054 compared to a t -table value of 2.01954 ($4.054 > 2.01954$) with a significance level of $0.000 < 0.05$, indicating that Debt to Equity Ratio has a significant effect on Price to Book Value. This finding aligns with Ariani and Darmawan (2022), who stated that a healthy capital structure enhances investor trust in the firm's market value. Sari and Kurniawati (2020) also confirmed that DER significantly affects PBV, as well-managed leverage can increase firm value.

3. Effect of Firm Size on Price to Book Value

The test results show a t -calculated value of 0.621 compared to a t -table value of 2.01954 ($0.621 < 2.01954$) with a significance level of $0.538 > 0.05$, indicating that Firm Size has no effect and is not significant on Price to Book Value. This result is consistent with Fitriani and Saifi (2020), who found that larger company size does not always translate into higher market value. Similarly, Dewi and Suartana (2021) argued that other factors such as financial performance and business prospects are more influential than size alone in determining firm value.

4. Effect of Board of Commissioners' Size on Price to Book Value

The test results show a t -calculated value of 0.821 compared to a t -table value of 2.01954 ($0.821 < 2.01954$) with a significance level of $0.416 > 0.05$, indicating that the Board of Commissioners' Size has no effect and is not significant on Price to Book Value. This finding is consistent with Trisnawati and Meiranto (2018), who found that the number of commissioners does not necessarily reflect effective oversight that can enhance firm value. Wulandari and Pamudji (2020) also confirmed that board size does not significantly contribute to increasing firm value in the market.

The Effect of Return on Assets, Debt to Equity Ratio, and Firm Size on Price to Book Value with the Board of Commissioners' Size as an Intervening Variable

The analysis shows that Return on Assets, Debt to Equity Ratio, and Firm Size significantly affect Price to Book Value through the Board of Commissioners' Size with a contribution of 52.35%. This finding is consistent with Pratama and Widanaputra (2019), who found that financial factors such as profitability, capital structure, and governance characteristics indirectly influence firm value. Wahyuni and Nurhayati (2021) also supported this result, showing that financial variables can affect firm value both directly and through intervening variables such as board size.

CONCLUSION

Based on the analysis of the research results presented in the previous chapter, several conclusions can be drawn, which help in understanding the findings of this study:

1. The total direct effect of Return on Assets, Debt to Equity Ratio, Firm Size, and the Board of Commissioners' Size on Price to Book Value is 89.6312%, while the total indirect effect is -11.6091%. Thus, the overall effect is 78.02215%. The direct effect is much greater than the indirect effect, as the indirect effect is negative and reduces the total influence on Price to Book Value.
2. Return on Assets has no significant effect on the Board of Commissioners' Size, Debt to Equity Ratio has a significant effect on the Board of Commissioners' Size, and Firm Size has a negative and significant effect on the Board of Commissioners' Size in pharmaceutical companies listed on the Indonesia Stock Exchange during 2019–2023.
3. Return on Assets directly affects Price to Book Value by 17.8929% and indirectly by -7.9153452% and -0.390852%, resulting in a total effect of 9.5867028%. Debt to Equity Ratio directly affects Price to Book Value by 32.9476% and indirectly by -7.9153452% and -1.1282544%, resulting in a total effect of 23.904%. Meanwhile, Firm Size directly affects Price to Book Value by 0.7056% and indirectly by -0.390852% and -1.1282544%, resulting in a total effect of -0.8135064%. The total effect of Return on Assets, Debt to Equity Ratio, and Firm Size on Price to Book Value, both direct and indirect, is 32.68%.

4. Return on Assets has a significant effect on Price to Book Value, Debt to Equity Ratio has a significant effect on Price to Book Value, and Firm Size has no significant effect on Price to Book Value in pharmaceutical companies listed on the Indonesia Stock Exchange during 2019–2023.
5. The Board of Commissioners' Size has no significant effect on Price to Book Value in pharmaceutical companies listed on the Indonesia Stock Exchange during 2019–2023.
6. Return on Assets, Debt to Equity Ratio, and Firm Size have a significant effect on Price to Book Value through the Board of Commissioners' Size as an intervening variable in pharmaceutical companies listed on the Indonesia Stock Exchange during 2019–2023.

RECOMMENDATIONS

The recommendations of this study are as follows:

1. For pharmaceutical companies, it is recommended to improve the management of capital structure, particularly the Debt to Equity Ratio (DER), which has been proven to significantly influence the Board of Commissioners' Size. Although not all variables directly affect firm value, DER plays an important role in corporate strategic decision-making.
2. Pharmaceutical companies are expected to pay attention to the management of Firm Size. The finding that Firm Size has a negative effect on the Board of Commissioners' Size highlights the importance of structuring the organization effectively. Companies need to ensure that firm size does not hinder the effectiveness of the board of commissioners in supervising and making strategic decisions that can enhance firm value.
3. Companies are advised to focus on improving Return on Assets (ROA). Since ROA significantly affects Price to Book Value (PBV), it highlights the importance of efficiency in asset utilization. Therefore, companies should explore ways to enhance operational efficiency, such as optimizing asset management and minimizing unproductive operating costs.

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