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The Impact of the Price Earnings Ratio (PER), the Debt to Equity Ratio (DER), and the Dividend Payout Ratio (DPR) on the Price Book Value (PBV) of Trading Companies Listed on the Indonesia Stock Exchange (IDX) from 2015 to 2019

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Abstract

PER, DER, and DPR (dividend payout ratios) on Price Book Value (PBV) in Indonesian Stock Exchange-listed trading companies are all examined for the years 2015–2019 in this study (IDX). Secondary data are used in this investigation. Purposive sampling was used to obtain the sample. The results of multiple linear analysis indicate that 1) PER has a positive and statistically significant effect on PBV in trading companies listed on the IDX. (2) DER has a severe negative impact on the PBV of trading companies listed on the IDX. (3) DPR has a major negative influence on the PBV of companies in the trading sector that are listed on the IDX.

Keywords
price earning ratio; debt to equity ratio; dividend payout ratio and price book value

I. Introduction

In the growing world of economy and business, many companies are doing various ways to maintain the existence of their companies to meet their capital needs. A business, in general, has two objectives: short- and long-term objectives (Kraus et al., 2020). The short-term goal is to maximize profit with the available resources, while the long-term goal is to increase the value of the company. The importance of company value makes investors and creditors more selective in investing and providing credit to companies (Hertina, 2021).

Firm value is an investor's view of the company. Because the company's worth is determined by the assets it owns, the company's value may be determined by its stock price, which is stable and increasing on a daily basis. Optimization of company value can be accomplished by the execution of the financial management function, which occurs whenever a financial decision is made that has an effect on subsequent financial decisions and hence on company value (Schwarz, 2018). Financial performance is a measuring instrument to know the process of implementing the company's financial resources. It sees how much management of the company succeeds, and provides benefits to the community (Ichsan, R. et al. 2021). The value of shares will increase if the company's value increases as well, which is typically reflected in a high rate of return on investment for shareholders. Price Book Value is one of the ratios used to determine a company's value. The Price Book Value ratio indicates how much the market values the stock, or a comparison of the company's stock price to its book value, where the book value is calculated by dividing equity by the number of shares outstanding (DesJardine & Durand, 2020).

A company can be said to be growing well if it has a Price Book Value (PBV) of greater than one. This indicates that the stock price is more than its book value. The ability of a business to earn earnings or profits can be influenced by the company's valuation.

A manager must be able to make sound judgments in order to accomplish company objectives (Husna & Satria, 2019). The owner of the business appreciates the firm's value being at an optimal level because it has a positive effect on the company in the future. The prosperity of investors in the long term can be seen by the existence of a good company value. Shareholder welfare can also be interpreted into increasing investment decisions, increasing investment profits will make the company value high (Tekic & Koroteev, 2019).

Investment decisions made by the company's management are very important because this will increase the company's income from capital investments made either in the form of business expansion or asset replacement investments. The Price Earnings Ratio (PER) indicates that investment decisions have a positive and significant effect on firm value. Thus, the more the profit of the business, the greater the value of the business, which translates into greater prosperity for the business's owner (Block et al., 2019). Prudent investment decision-making on the part of the company will enable it to increase its own assets, which will have a positive effect on the company's overall performance. Positive signals received by investors as a result of optimal company performance will result in an increase in stock prices and company value (Susanti & Restiana, 2018).

The selection of the right capital structure will determine the appropriate source of funds for a company. The availability of funds or company capital from internal and external sources will affect the company's funding decisions. Funding decisions are those made by a business on the sources of finances used to carry out operational or other business activities (Chakrabarti & Chakrabarti, 2019). In making a funding decision, management is faced with a choice. These options include, whether the source of funds to be used will come from internal or external sources of funds. Therefore, a very precise decision is needed in determining the source of funding (Gillan et al., 2021).

A dividend policy is a form of decision that will be implemented by the company's internal parties in determining the rate of return on investment for shareholders. Receipt of high dividends by investors will make them judge that the company has been able to prosper its shareholders, so that shareholder confidence will increase and consider the company worthy of being used as a place to invest again. Dividend policy is proxied in the form of the Dividend Payout Ratio (DPR) (Mahardini et al., 2020).

Dividend payout ratio refers to the percentage of earnings distributed to shareholders in cash. In the decision to distribute dividends, it is necessary to consider the survival and growth of the company (Septiani et al., 2020). For investors who invest, of course, the level of return or profit that will be obtained from the investment invested is in the form of capital gains and dividends which are part of the profits given to shareholders (Angelina & Toni, 2020).

Financial ratios analysis results show that academics are interested in identifying what factors affect the value of small trading enterprises listed on the Indonesian Stock Exchange. On the Indonesian Stock Exchange, researchers want to study the impact of Price Earnings Ratio (PER), Debt to Equity Ratio (DER), and Dividend Payout Ratio (DPR) on PBV.

II. Review of Literature

2.1 Signaling Theory

Signaling theory is a theory that can cause changes in firm value. The emergence of a positive signal can give a sign of company growth. While a negative signal may be a sign that the company will experience losses in the future (Cowan & Guzman, 2020).

2.2 Financial Management

Financial management is a manifestation of a financial manager's duties and obligations. The primary responsibility of financial management is to make investment decisions, finance business activities, and finance dividends of a company; hence, the financial manager's primary responsibility is to plan to maximize the firm's worth (Mosteanu & Faccia, 2020). Sutrisno explained that the financial management function consists of three main decisions that must be made by a company, specifically, investment, financing, and dividend policies (Nugraha et al., 2020).

2.3 Capital Structure

Capital structure is closely related to stock prices, with stock price values being investors' perceptions of the company's performance (Firm Value), first, the company's company, and capital structure. It would be a big mistake to not consider the cost of bankruptcy as an element that determines the good or bad of direct performance as an active variable in determining the company (Rahayu & Saifi, 2019).

2.4 Price Earning Ratio

The price earning ratio (PER) is a frequently used investment selection ratio that compares the market price per share (MPS) to the earnings per share (EPS) (EPS). Kurniawan said the P/E ratio was used as a reference for stock analysis by looking at the relationship between stock prices and company earnings. For investors, the greater the Price Earnings Ratio, the greater the predicted profit growth (Narulita, 2019). Thus, the Price Earnings Ratio will increase, as will the predicted profit growth. As a result, the Price Earnings Ratio (also known as the price-to-profit ratio) compares the share price to the earnings price (Kadim et al., 2020).

2.5 Debt to Equity Ratio

Kasmir defines DER as the ratio used to evaluate debt to equity. The debt to equity ratio method can be used to compare total debt to total equity. According to the theory outlined above, the Debt to Equity Ratio is the ratio used to calculate the quantity of funds provided by creditors and the value of each rupiah of capital used as collateral between creditors and business owners and or shareholders (Juwita & Diana, 2020).

2.6 Dividend Pay Out Ratio

Profits are allocated to shareholders in the form of dividends and earnings per share as a financing source by the dividend payout ratio. This ratio shows how much of a company's profits are paid out in the form of dividends to its shareholders. The company's profits to be paid as dividends are smaller (Bustani et al., 2021). A critical part of dividend policy is calculating the optimal profit allocation between dividend payments and retained earnings. The higher this percentage, the larger the level of dividends provided to shareholders, ensuring their prosperity and attracting future investors to purchase firm shares (Wahyudi, 2020).

2.7 Hypothesis

Based on the theoretical studies that have been put forward, the following hypotheses in this study:

H1: Investment Decision (PER) has a positive and significant effect on Firm Value (PBV) in Trading Companies

H2: Funding Decision (DER) has a negative and significant effect on Firm Value (PBV) in Trading Companies.

H3: Dividend policy (DPR) has a negative and significant effect on Company Value (PBV) in Trading Companies.

III. Research Method

The research was carried out using descriptive analysis and quantitative methods. The data used in this study is secondary data obtained from financial statements that have been audited and published. The study was conducted to be able to see the Firm Value (PBV) of trading sector companies that have been listed on the IDX for the period 205-209 and are associated with Investment Decisions (PER), Funding Decisions (DER), and Dividend Policy (DPR).

IV. Results and Discussion

4.1 Results

a. Normality Test

Table 1. Normality Test Results

	Unstandardized Residual
N	80
Normal Parameters[a,b]	.0000000
Mean	.83542509
Most Extreme Differences	.088
Std. Deviation	.088
Absolute	-.055
Positive	.088
Negative	.200[c,d]
Test Statistic	
Asymp. Sig. (2-tailed)	

A value of 0.05 or above indicates that the data for the dependent variable company value (PBV) and the independent variables investment decision (PER), funding decision (DER), and dividend policy are normally distributed in this study, according to the table shown above.

b. Multicollinearity Test

Table 2. Multicollinearity Test Results

Model	Collinearity Statistics	
	Tolerance	VIF
1 PER	.883	1.132
DER	.878	1.139
DPR	.991	1.009

Table 2 shows that there is no multicollinearity between the independent variables in this regression model.

c. Heteroscedasticity Test

Table 3. Heteroscedasticity Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1(Constant)	.450	.156	.167	2.885	.005
PER	.014	.010	.136	1.426	.158
DER	.085	.073	-.125	1.160	.250
DPR	-.273	.240		-1.134	.260

In Table 3, the Glejser test for heteroscedasticity found a significance value greater than 0.05, which indicates that the three variables above do not pose a problem.

d. Autocorrelation Test

Table 4. Autocorrelation Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.619[a]	.383	.359	.85175	1.764

When utilizing a 5% significance level and an 80-person sample, the DW value obtained from the table is 1.764%, which is higher than the table's DW value. So that the value of dU = 1.7153 and dL = 1.5600 and the value of 4 - 1.7153(dU) = 2.2847. This is in agreement with the choice criteria, namely dU < DW < 4-dU (1.7153 < 1.764 < 2.2847). therefore DW lies between dU and 4-dU, so it may be stated that there is no autocorrelation.

e. Multiple Linear Regression Analysis

Table 5. Multiple Linear Regression Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant) PER DER DPR	-.107 .088 .225 .762	.259 .016 .121 .399	.510 .179 .173	-.413 5.315 1.860 1.908	.680 .000 .067 .060

This is the linear regression equation, as shown in Table 5, based on the results of the study of multiple linear regressions:

$$Y = \alpha + \beta 1X1 + \beta 2X2 + \beta 3X3$$

$$Y = -0.107 + 0.088_{PER} + 0.225_{DER} + 0.762_{DPR}$$

Where:
Y = Firm Value
α = constant
β1, β2, β3= independent variable regression coefficient
X1 = Investment Decision (PER)
X2 = Funding Decision (DER)
X3 = Dividend Policy (DPR)

1. The constant value is -0.107, as displayed. No change or constant value of variables Investment Decision (PER), Funding Decision (DER), and Dividend Policy DPR (PBV) results in a value of -0.107.
2. A regression coefficient of 0.088 indicates that if the variable is increased by one point, firm value (PBV) will increase by 0.088 if the other variables remain constant. This implies that, assuming that other factors remain constant, the price earning ratio variable has a positive effect on the firm value (PBV) variable.
3. In other words, if the funding decision (DER) variable is increased by one point, the price book value (PBV) will rise by 0.225. For example, this shows that funding decisions have an impact on the company's value (PBV). Assuming that all other variables remain constant.
4. A coefficient of 0.762 indicates that if the dividend policy variable is increased by one point, the company's value (PBV) will rise by 0.762. d There is a positive correlation between the dividend policy variable (DPR) and the company's value (PBV). Assuming that all other variables remain constant.

f. F Test

Table 6. F Test Results

Sum of Squares	df	Mean Square	F	Sig.
34.222 55.137 89.359	3 76 79	11.407 .725	15.72 4	.000[b]

The computed F value of 15,724 with a significant value of 0.000 is shown in Table 6. Based on these data values of 0.005, it can be concluded that the model is significant and feasible for use in future research. Indicators of investment, funding, and dividend policy decisions are all included in the sig value. PER, DER, and DP variables can be found in this table (DPR) can explain any changes in the value of the price book value variable due to their significant influence. 2.72 F table. This means that if the F count is more than the F table (15,724 > 2,72), Ha is accepted.

g. Coefficient of Determination Test (R^2)

Table 7. Coefficient of Determination Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.619[a]	.383	.359	.85175

The coefficient of determination R2 = 0.359 or 35.9 percent was determined from the results of the computation for the value of Adjusted R Square (R2) in Table 7. This means that while the ability of independent variables such as investment decisions, funding decisions, and dividend policy can account for 38.3 percent of the dependent variable, namely the firm value, the remaining portion (100 percent - 35.9 percent = 64.1 percent) is influenced by variables not examined in this study.

h. T-Test

Table 8. T-Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.107	.259	.510	-.413	.680
PER	.088	.016	.179	5.315	.000
DER	.225	.121	.173	1.860	.067
DPR	.762	.399		1.908	.060

Based on the table above, it is explained as follows:

1. H1: Investment Decisions (PER) have a positive and significant effect on the value of the company (PBV). According to the T-test results in the table above, the investment decision (PER) on the company's worth as determined by the t count is 5.315 with a sig value of 0.00 and (0.00 0.05). Thus, Ho is rejected whereas Ha is accepted, indicating that the investment choice (PER) has a large positive effect on the firm's worth (PBV).
2. H2: In trade sector firms, Funding Decisions (DER) have a negative and considerable effect on Firm Value (PBV). According to the T-test results in the table above, the effect of the funding decision (DER) on the company's worth as determined by the t count is 1.860 with a sig value of 0.67 and a sig value (0.67 > 0.05). Thus, the funding decision (DER) has a detrimental influence on the firm's worth.
3. H3: Dividend Policy (DPR) has a strong negative impact on firm value (PBV).

According to the T-test results in the table above, the funding decision on firm value is 1.908 with a sig value of 0.60, while the t table is 1.991, indicating that the value is sig (0.60 > 0.05). Then Ha indicates that dividend policy has a considerable negative impact on firm value (PBV).

4.2 Discussion

a. Effect of Investment Decision (PER) on Firm Value (PBV)

In the study, the Investment Decision (PER) has a favorable and significant impact on Firm Value, according to the findings (PBV). Investors' faith in investing in the form of stock increases as earnings per share rises. For investors, earnings per share is a good indicator of how well a firm is doing at making money for its shareholders. Utami and Darmayanti (2018) found that investment decisions have a positive and significant impact on business value, and this study's findings are consistent with their findings. If the corporation sets a high level of investment decision (PER), it will have a better chance of making large profits. The results of this study also support the signaling theory where investment spending gives a positive signal about the company's growth in the future so that the stock price is used as an indicator of company value. While the research results are not in line with the research by Salama & Untu (2019), stating that it does not affect investment decisions (PER) due to uncertainty factors in the future, these uncertainties are in the form of technology companies, socio-economic conditions, and government policies.

b. The Effect of Funding Decisions (DER) on Firm Value (PBV)

Firm Value is negatively and significantly affected by the Funding Decision (DER), according to the findings of the research above (PBV). Investors have less faith in a company if its debt-to-equity ratio is high. The management organization must make paying off the debt a top priority. Haryadi (2016) found that a high use of debt will lead to higher bankruptcy costs, agency fees, and interest expenses. The cost of debt which is assumed to be constant regardless of the proportion of debt used will make the value of the company increase. Meanwhile, the results of research from Utami and Darmayanti (2018), indicate that the higher the company uses foreign capital, the higher the tendency of the company's stock price. Funding through debt will not incur costs at that time but in the future, namely payment of principal and interest on the debt, so that funding with debt is considered by investors as the right step. Therefore, funding decisions through debt will increase the value of the company in the eyes of investors.

c. The Effect of Dividend Policy (DPR) on Firm Value (PBV)

This research shows that dividend policy (DPR) has a negative and significant impact on firm value, based on the findings (PBV). The findings of this investigation are consistent with the findings of previous studies by Krisnawati and Miftah (2019) and Febriana (2019), if the dividend policy paid to shareholders increases, the value of the company will decrease, this is because the higher the level of dividends paid, the less retained earnings and as a result the result is that it inhibits the rate of growth in its earnings and share prices, so that it will hinder the growth of the company. According to Miller and Modligiani's theory, dividend policy has no impact on firm value because the dividend payout ratio is only a detail that has no bearing on shareholders' interests. While the results of research from Kurniawan and Asmara Putra (2019), Dividend Policy (DPR) influences Company Value (PBV). Thus, the company's value will be impacted by a rise in dividend policy. Bird in Hand theory suggests that investors want to pay dividends, hence

an increase in dividends will have a positive impact on stock price, which in turn will have a positive impact on the company's worth.

V. Conclusion

The Price Earnings Ratio (PER), Debt to Equity Ratio (DER), and Dividend Payout Ratio (DPR) all have a positive and significant effect on Price Book Value (PBV) in trading sector companies listed on the Indonesian stock exchange (IDX) from 2015 to 2019, according to the authors' research. Trade sector companies' Price Book Value (PBV) is negatively impacted by the Debt to Equity Ratio (DER) between 2015 and 2019. Trade sector companies' Price Book Value (PBV) is unaffected by the Dividend Payout Ratio (DPR) for the 2015–2019 period.

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