

Determinants of stock price performance in the Indonesian basic industry

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ABSTRACT

Purpose — *This study aimed to identify the determinant factors of the stock price performance, proxied by price earnings ratio, in the basic industry (IDXBASIC) and the causal relationship between them.*

Method — *Data were collected from the Indonesia Stock Exchange for a period of five years, spanning from 2017 to 2021. The purposive sampling method was chosen, and a total of sixty firms were selected for the final sample of this study. This study adopts generalized least squares of panel data analysis using STATA version 13 software.*

Result — *The results revealed that return on equity, debt-equity ratio, price-to-book value, earnings growth, and dividend payout significantly impact the price-earnings ratio (PE) and thus become significant determinants of the price-earnings ratio (PE). On the other hand, market return and firm size showed no significant influence on the price-earnings ratio.*

Contribution — *This study's academic contribution is its specific focus on the Indonesia Basic Industry (IDXBASIC) and exploration of the factors influencing the Price-Earning Ratio (P/E ratio) within this sector, filling a significant gap in the literature and offering valuable insights for investors, policymakers, and market participants.*

Keywords: *price earning ratio, basic industry, chemical industry, determinants*



INTRODUCTION

For publicly traded firms, effectively managing their financial position and achieving strong performance is of utmost importance. By demonstrating good financial performance, these firms increase their chances of attracting additional capital from the market to support their operations or pursue new expansion investments. Therefore, the information contained in a firm's financial statements holds great significance and serves as a valuable resource for potential investors, enabling them to conduct thorough analysis and make informed decisions before engaging in share trading ([Sunaryo, 2011](#)). One of the analyses that can be used to assess the financial statements reflecting the company's performance is fundamental analysis. The Price-Earnings Ratio (P/E) is one of the fundamental analysis tools for a firm and a method to evaluate the intrinsic value of an asset. Fundamental analysis theory is commonly used by market analysts to assess the fair value of a firm based on its current and future earnings information ([Bernard, 1994](#)), then compared to the market value to determine whether the firm is a viable investment or should be excluded ([Wafi et al., 2015](#)).

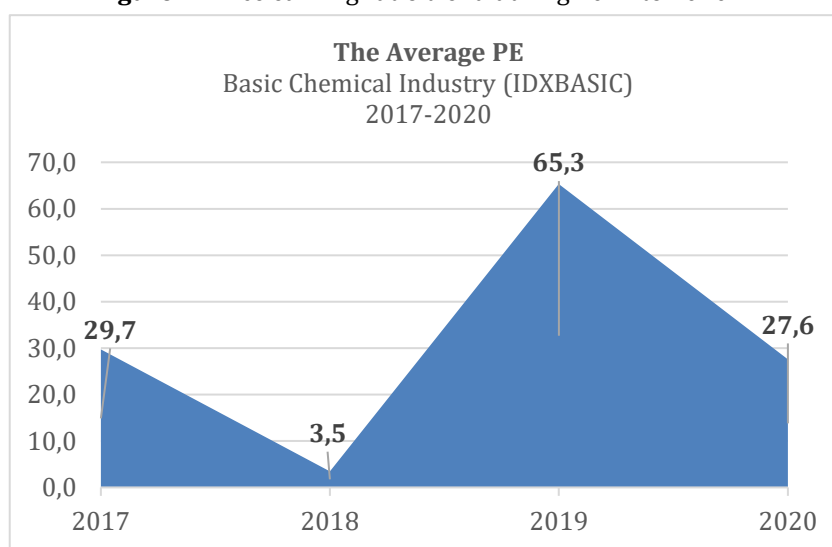
The significance of the Price-Earning Ratio lies in its role as a benchmark for gauging market confidence ([Ayundhasurya & Murtaqi, 2012](#)) and market appreciation ([Januaristy, 2014](#)) of a firm's performance. A declining PE indicates poor performance and a lack of proper management of invested capital, leading to a decline in market confidence and undervalued shares. A firm may also be perceived as having a lower growth rate or more risk, which may further decrease investor interest and make it difficult for the firm to gain capital from the market ([Rahma & Djazuli, 2014](#)).

The basic industry (IDXBASIC) consists of several sectors benefiting from the availability of raw materials, a large domestic market, and advanced technology. For example, the pulp and paper sector contributes to Indonesia's economy, benefiting the country's foreign exchange amounting to USD 3.57 billion and employing about 260 thousand direct workers and 1.1 million indirect laborers (www.kemenperin.go.id). The Ministry of Industry stated that Indonesia's GDP expanded from 71.3% to 74.9% based on the basic and chemical industry and improved the Industrial Confidence Index (IKI) in December 2022. Nevertheless, the chemical industry still faces challenges due to insufficient supply chain coordination between upstream and downstream businesses, as well as changes in infrastructure development regulations that might impact logistic prices, resulting in higher operational expenses for chemical industries ([Business Indonesia, 2020](#)). Firms must be prepared to face this challenge and have

confidence in securing funding for the continuity of their operations, especially those that are publicly traded.

Additionally, based on Figure 1 from 2017 to 2020, there was a noticeable decline in the industry's growth, as depicted in Figure 1. This declining trend in the Price-Earning (PE) ratio signifies reduced market interest in the future prospects of the firms. Consequently, it leads to undervalued shares and poses challenges in raising capital from the market due to the perceived decrease in firm performance and potential.

Figure 1. Price earning ratio trend during 2017 to 2020



Source: authors' compilation (2023)

Several studies have investigated determining factors of the price-earning ratio. For example, [Rahma & Djazuli \(2014\)](#) indicated that Return on Equity had a significant and negative influence on the price-earning ratio. Other determining factors, such as Debt-Equity Ratio ([Mulyani & Pitaloka, 2017](#); [Sudaryanti & Sahroni, 2016](#); [Afza & Tahir, 2012](#)), Price-to-Book Value ([Hayati, 2010](#); [Sitepu, 2013](#)), Growth ([Arisona, 2013](#); [Ayundhasurya & Murtaqi, 2012](#); [Dutta et al., 2018](#)), Firm Size ([Fesokh & Haddad, 2019](#)), Market Return ([Afza & Tahir, 2012](#)), and Dividend Payout Ratio ([Dutta et al., 2018](#)), also exerted a significant influence on the Price-Earning Ratio. To date, only a few research studies on the Price-Earning Ratio (PE) have been conducted for basic industry firms in Indonesia, especially after the newer industrial classification in 2021.

Therefore, it is essential to understand the contribution and challenges faced by the IDXBASIC industry to maintain a healthy financial position in the market, ensuring that finding additional capital will not be difficult ([Sunaryo, 2011](#)).

Hence, the primary purpose of this study is to thoroughly explore and identify the determining factors of the Price-Earning Ratio (PE) in the Basic Industry listed under the IDXBASIC categorization by the Indonesia Stock Exchange.

METHOD

This research is quantitative research, and the data are collected from the Indonesia Stock Exchange (www.idx.go.id) and Stockbit (www.stockbit.com). The observation period in this study is 2017-2021 (five years) with a total population of 90 firms. Then, purposive sampling is applied by selecting participants based on certain criteria. The criteria for participant selection in this study are as follows:

1. Listed firms belonging to the IDXBASIC Classification of the Indonesia Stock Exchange during the period of 2017-2021.
2. Firms that have never been delisted or suspended within the period of 2017-2021.
3. Actively traded firms that publish a complete financial statement dataset for the years 2017 to 2021.

Based on the criteria, sixty firms are selected as the final sample. The independent variables consist of Return On Equity (ROE), Debt Equity Ratio (DER), Price Book Value (PBV), Earning Growth (EG), Size, Market Return (MR), and Dividend Payout (DP). The dependent variable is Price-Earnings Ratio (PE). The following is the variable operationalization table used to measure the variables in this research.

Table 1. Variable code and measurement method

	Variables	Measurement	Source
Independent Variable	ROE	$ROE = \frac{\text{Earning After Tax}}{\text{Total equity}}$	IDX
	DER	$DER = \frac{\text{Total Debt}}{\text{Total Equity}}$	IDX
	PBV	$PBV = \frac{\text{Stock Price}}{\text{Book Value}}$	IDX
	EG	$EG = \frac{EAT_t - (EAT_{t-1})}{EAT_{t-1}}$	IDX
	SIZE	$SIZE = \text{Natural log of assets}$	Stockbit
	MR	$MR = \frac{\text{div} + (\text{stock price}_t - \text{stock price}_{t-1})}{\text{stock price}_{t-1}}$	Stockbit
	DP	$DPR = \frac{\text{Dividend Per Share}}{\text{Earning Per Share}}$	Stockbit
Dependent Variable	PE	$PE = \frac{\text{Stock Price}}{\text{EPS}}$	Stockbit

Source: authors' compilation (2023)

This study employed the Generalized Least Squares test. GLS provides the modeling of the residual covariance structure, which can result in more accurate estimations of the regression coefficients and improved inferential results. By using this technique, we may reduce the sum of squared vertical distances between the dataset's observed response and the linear regression predictor. In Stata, 'xtgls' estimates a panel data generalized least squares (GLS) regression while considering different assumptions regarding the structure of the correlation among the errors across the cross-sectional units. When working with data that display correlation and heteroscedasticity, it enables more accurate parameter estimates and legitimate statistical inference ([Kolev, 2014](#)).

Hypotheses development

Return on Equity and Price Earning Ratio

The first determining factor for the Price-Earnings Ratio (PE) is Return on Equity (ROE). ROE reflects the firm's ability to generate profit from its capital. According to [Hutami \(2012\)](#), a higher ROE is generally associated with an increase in the firm's stock price, resulting in an elevated PE. When a firm has a higher Return on Equity, it demonstrates efficient utilization of market funds to generate profits, creating the perception among investors that their invested capital will yield a greater return. Moreover, a higher ROE encourages investors to acquire more shares, elevating market expectations and boosting the stock price, making the firm's stock more attractive. Thus, we propose the following hypothesis:

H1: ROE has a significant impact on PE

Debt Equity Ratio and Price Earning Ratio

The Debt Equity Ratio (DER) is a ratio used to measure a company's performance from the solvency aspect. It assesses the proportion of total debt to equity, providing a general indication of the company's feasibility and risks, especially concerning debt payments ([Puspitadewi & Rahyuda, 2016](#)). The firm's debt level is crucial as it indicates its outstanding debt obligations, which can significantly affect its ability to generate profits, particularly during expansion. A decrease in corporate profits leads to a decline in earnings per share (EPS), lowering expectations for future earnings growth. This risk makes the stock less attractive to investors, resulting in a decrease in both the stock price and the Price-Earnings Ratio (PE) ([Ratnaningrum & Susilowati, 2010](#)). Therefore, the following hypothesis is proposed:

H2: DER has a significant impact on PE

Price Book Value and Price Earning Ratio

The Price Book Value (PBV) is a financial ratio used to assess the performance of a stock market's price in relation to a company's book value ([Ramadhani et al., 2019](#)). In simpler terms, it measures how much the market values a firm relative to its accounting book value. A higher PBV ratio indicates that the market values the company more, which can result in higher returns for shareholders compared to their initial investment. Additionally, a high PBV ratio reflects a favorable perception of the company's future potential, leading to increased corporate value and profitability for genuine stakeholders. As a result, this heightened expectation can positively influence the company's share price and also impact the presence of the Price-Earnings ratio (PE) ([Ismayana, 2020](#)). Therefore, based on the information presented above, the following hypothesis is proposed:

H3: The Price Book Value (PBV) significantly impacts the Price-Earnings ratio (PE)

Earning Growth and Price Earning Ratio

A firm's ability to generate profits is crucial for its survival as these profits can be utilized to enhance its capital structure and expand its operations. Consequently, earning growth (EG) becomes one of the crucial factors that influence the Price-Earnings ratio (PE) of a company. A higher rate of profit growth indicates that the firm is managing its business effectively and adding value to the organization ([Napitupulu, 2017](#)). When a company exhibits high earnings growth, it mitigates the risk effect, thereby increasing investor confidence. As a result, the price-to-earnings ratio is positively influenced and improved ([Afza & Tahir, 2012](#)). Hence, based on the information presented above, the following hypothesis is proposed:

H4: Earning growth (EG) has a significant impact on the Price-Earnings ratio (PE)

Firm Size and Price Earning Ratio

The size of a firm is closely related to its growth opportunities and is a significant determinant of the Price-Earnings ratio (PE). Larger firms tend to have certain advantages over smaller ones, such as leveraging economies of scale, enjoying more favorable terms from creditors, using their assets as collateral, and benefiting from diversification opportunities ([Emudainohwo, 2017](#)). However, it

is important to note that larger firms may experience slower earnings growth compared to smaller firms (Dutta et al., 2018).

In a growing stock market, investors often value shares of smaller firms more because of their potential for growth. However, during times of market decline or uncertainty, investors may prefer to invest in larger and more stable firms, leading to a higher price-earnings ratio in larger firms (Afza & Tahir, 2012). Therefore, based on the information presented above, the following hypothesis is proposed:

H5: Firm size has a significant impact on the Price-Earnings ratio (PE)

Market Return and Price Earning Ratio

Another crucial factor influencing the Price-Earnings ratio (PE) is Market Return (MR). When the overall market is performing well, investors tend to anticipate higher future earnings for individual firms. This positive expectation leads to a higher PE ratio, as investors are willing to pay a premium for potential earnings growth (Afza & Tahir, 2012). The optimistic sentiment further bolsters investor confidence in selecting those specific firms to include in their investment portfolios, ultimately contributing to a higher PE ratio (Emudainohwo, 2017). Based on the information presented above, the following hypothesis is proposed:

H6: Market Return (MR) has a significant impact on the Price-Earnings ratio (PE)

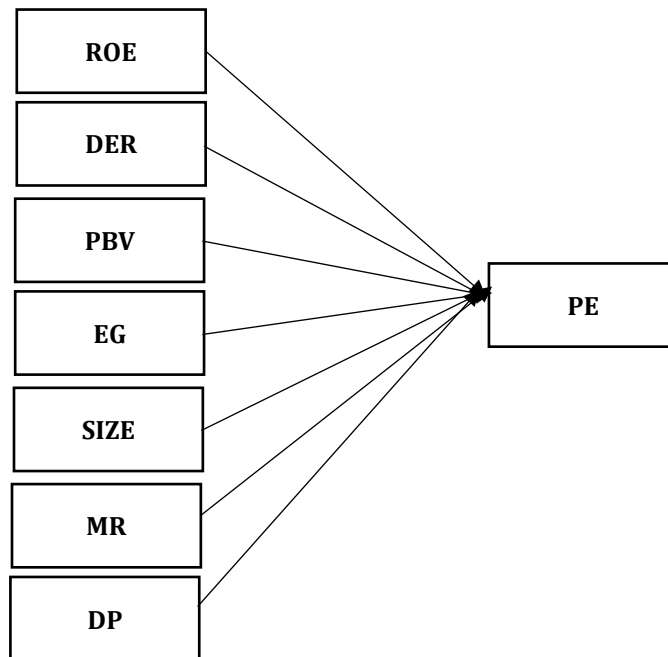
Dividend Payout Ratio and Price Earning Ratio

The Dividend payout ratio of a company reveals the proportion of its earnings that it distributes to shareholders, with a larger ratio suggesting that a higher portion of earnings is paid out as dividends (Afza & Tahir, 2012). Firms with larger dividend payouts are particularly appealing to income-oriented investors as it signifies the company's ability to generate profits and its willingness to share those rewards with shareholders (Janiman, 2020).

When a company makes significant dividend payouts, it enhances investor confidence and positively impacts both the projected return and stock value. As a result, the Price-Earnings ratio (PE) tends to be higher. This phenomenon occurs because investors seek bigger returns, and a higher stock value is associated with a higher PE ratio (Wenjing, 2008). Therefore, based on the information presented above, the following hypothesis is proposed:

H7: Dividend payout ratio has a significant impact on the Price-Earnings ratio (PE)

Figure 2. Research model



Source: authors' compilation (2023)

RESULT AND DISCUSSION

Descriptive statistics

The descriptive statistics test was conducted to provide an overview of the data. The dataset consists of 300 observation-years, and it is well-balanced, with 60 firms observed over a five-year period. The Price-Earnings ratio (PE) values range from a minimum of -30.38 to a maximum of 93.815. The presence of negative PE values indicates that some firms experienced financial losses during the observation period.

Higher PE values suggest that stock prices are expected to increase in line with earnings per share. On the other hand, the Return on Equity (ROE) has an average value of -0.40, indicating that most companies in this industry recorded losses during the observation period of 2017-2021. One notable instance is Alumindo Light Metal Industry, which recorded a minimum ROE value of -136.43 in 2019. This significant decrease was attributed to a 50% reduction in exports for the company, as reported on their website (www.alumindo.com).

Table 2. Descriptive statistic result

Variable	N	Mean	Std. Dev.	Min	Max
PE	300	18.83	1.85	-30.38	93.81
ROE	300	-0.40	7.89	-136.43	4.73

DER	300	2.14	1.80	-50.24	422.8
PBV	300	1.38	1.13	0.26	3.70
EG	300	0.31	1.24	-1.63	2.79
DP	300	0.12	0.21	0.00	0.61
SIZE	300	7.73	0.96	6.51	9.04
MR	300	0.22	0.61	-0.49	1.97

Source: processed data with STATA (2023)

The basic industry exhibits an average Debt-to-Equity Ratio (DER) of 2.14, signifying a high level of debt in relation to equity. This characteristic is inherent in the industry, which heavily relies on long-term financing through borrowing. Notably, the minimum value of DER reaches -50.24, indicating that certain firms incurred losses greater than their equity, rendering them financially precarious. Conversely, the maximum DER value is 422.8, suggesting that some companies heavily depend on debt as a primary source of financing.

Furthermore, the mean Price Book Value (PBV) for the basic industry is 1.38, with values ranging from 0.26 to 3.70. The fact that the mean PBV exceeds one indicates that most companies in the basic industry possess a greater ability to compensate their stockholders in the event of liquidation. Additionally, the higher PBV values reflect elevated market expectations regarding the firm's performance, with stock prices surpassing the actual book value of the firms.

In terms of Earning Growth (EG), the average growth rate for all companies in the industry stands at 0.31 (31%). The range of EG spans from -1.63 to 2.79, with negative values implying a decline in net income and lower performance compared to the previous year. Notably, certain companies experienced negative or declining growth during the period between 2018 and 2019, contributing to the overall decline of 95.33% of firms within the industry in 2019. However, a select few companies, such as Alkindo Naratama, Samator Gas, and Bumi Resource Minerals, demonstrated strong performance in specific years.

The Dividend Payout Ratio (DP) of the basic industry exhibits an average value of 0.12, with values ranging from 0.00 to 0.61. A DP value of 0.00 indicates that certain companies chose not to distribute their earnings to investors or did not pay dividends. Conversely, there were firms consistently providing substantial dividends, such as Indocement Tunggul Prakasa, Steel Pipe Industry of Indonesia, Semen Indonesia, and Unggul Indah Cahaya.

Furthermore, the average firm size within the industry is 7.73, with values varying between 6.51 and 9.04. This observation suggests that firms in the basic industry possess relatively substantial assets due to their engagement in extensive operational activities.

Lastly, the average Market Return (MR) for the industry amounts to 0.22, with a range spanning from -0.44 to 1.97. Negative MR values indicate that certain companies experienced losses during the observation year or faced declining stock prices in the market.

Multicollinearity test

A multicollinearity test was also conducted to examine the correlation between variables used in this study. According to Gujarati & Porter (2009), a correlation problem occurs when the correlation matrix between variables is high (> 0.8). The correlation matrix is presented in Table 3. As shown in Table 4, all variables included in this study, namely Return on Equity (ROE), Debt Equity Ratio (DER), Price Book Value (PBV), Earning Growth (EG), Dividend Payout Ratio (DP), Firm Size (SIZE), and Market Return (MR), showed either no absolute correlation or correlations lower than > 0.8 . Therefore, no correlation problem existed among the current variables used in this study. The highest correlation was found between Market Value (MR) and Earning Growth (EG), with a significance level of 99.9% and a correlation value of 0.241.

Table 3. Multicollinearity test

Variables	PE	ROE	DER	PBV	EG	DP	SIZE	MR
PE	1.000							
ROE	0.039 (0.500)	1.000						
DER	-0.006 (0.924)	-0.081*** (0.000)	1.000					
PBV	0.354*** (0.000)	-0.116** (0.045)	0.162* (0.005)	1.000				
EG	0.157** (0.007)	0.103 (0.074)	-0.060 (0.303)	0.031 (0.591)	1.000			
DP	0.136* (0.019)	0.030 (0.606)**	-0.042 (0.464)	0.010 (0.668)	-0.163** (0.005)	1.000		
SIZE	0.113** (0.050)	0.004 (0.950)	-0.003 (0.960)	0.161** (0.005)	0.109 (0.059)	0.192*** (0.001)	1.000	
MR	0.152** (0.008)	0.062 (0.283)	-0.033 (0.565)	0.165** (0.004)	0.241*** (0.000)	-0.051 (0.379)	0.132* (0.023)	1.000

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: processed data with STATA (2023)

Heteroscedasticity test

The heteroscedasticity test is conducted using the Modified Wald Test, which involves regressing the absolute residual values as the dependent variable against the independent variables. Heteroscedasticity does not occur if the

probability of significance is above the confidence level of 5% (0.05) (Ghozali, 2018). The results of the heteroscedasticity test are presented in Table 4.

Table 4. Heteroscedasticity test

Modified Wald test for heteroscedasticity	Statistics	Probability
	6.2e+31	0.0000

Source: processed data with STATA (2023)

According to Table 4, the probability value is 0.000. The null hypothesis of this test is that the variance is constant for each individual unit. The result of the Wald Test in Table 5 indicates that heteroscedasticity is present in the model. Therefore, to address the heteroscedasticity issue in the regression model, we include the "panels (hetero)" command in STATA after applying the Generalized Least Square model.

Autocorrelation test

After conducting the heteroscedasticity test, the Wooldridge test is applied to check for autocorrelation. The results of the autocorrelation test are presented in Table 5. Based on the data in Table 6, the probability value (Prob) is 0.1533. The null hypothesis of the test is "H0: There is no first-order autocorrelation." Therefore, we can conclude that there are no serial correlation problems in the characteristics of the selected data.

Table 5. Autocorrelation test

Wooldridge test	F (1,3)	Probability	Statistics	Probability
	3.618	0.1533	6.2e+31	0.0000

Source: processed data with STATA (2023)

Generalized least square test

In order to investigate the causal relationship between the independent variables, namely ROE, DER, PBV, EG, DP, SIZE, and MR, with respect to PE, we employed the Generalized Least Square test. The observation period covers 2017 to 2021 and includes a total of 60 firms operating in the basic and chemical industry (IDXBASIC). The statistical results are presented in Table 6.

Table 6. Statistical result

Variables	Result	Significance	Sign
ROE	2.771***	Significant	+
DER	0.822***	Significant	+
PBV	7.039***	Significant	+
EG	1.726**	Significant	+
DP	24.98***	Significant	+
SIZE	-1.452	No Significance	-
MR	0.157	No Significance	+
Constant	12.84**		
N	300		
Number of Firms	60		

*** p<0.001, ** p<0.01, * p<0.05

Source: processed data with STATA (2023)

According to Table 6, the variables ROE, DER, PBV, EG, and DP exhibited significant influences on the Price Earning Ratio (PE), while SIZE and MR did not show significant influences on PE. The results indicated that ROE has a positive and significant influence on PE, with a coefficient value of 2.771 and a significance level of 99.9%. A higher ROE leads to a higher PE, making it a crucial determinant factor in PE. Similarly, DER has a significant influence on PE, with a positive relationship and a confidence level of 99.9%. The regression coefficient of DER is 0.822, making it a relatively lower determinant factor for PE. Additionally, the results revealed that PBV significantly influences PE in a positive direction, with a coefficient of 7.039 (p<0.001).

Furthermore, Dividend Payout Ratio (DP) exhibited the highest influence among all the variables in this research, with a coefficient of 24.98 and a confidence level of 99.9% on PE. In contrast, SIZE did not show a significant effect on PE, and Market Return (MR) also did not demonstrate any significant influence on PE.

To test the robustness of this model, we conducted another regression test by eliminating the data from the year 2020-2021. The purpose of conducting the robustness test is to assess the consistency of the results. The reason for omitting the year 2020-2021 is due to the global pandemic and the uncertainty that affected the industry's overall financial performance during those years.

Model 1 displays the main model, including all the years in the observation period. On the other hand, Model 2 shows the regression results for the years 2017-2019, after excluding the data from 2020-2021. The robustness test is presented in Table 7.

Table 7. Robustness test result

Variables	Model 1	Model 2
ROE	2.771***	2.911***
DER	0.822***	0.882***
PBV	7.039***	5.669***
EG	1.726**	2.384***
DP	24.98***	31.01***
SIZE	-1.452	-1.799
MR	0.157	5.111**
Constant	12.84**	15.60**
N	300	180
Number of Firms	60	60

*** p<0.001, ** p<0.01, * p<0.05

Source: processed data with STATA (2023)

According to the Robustness test in Table 7, there were a total of 180 observations with 60 firms included. The results indicated that all the variables used in this research, namely ROE, DER, PBV, EG, DP, SIZE, and MR, consistently showed the same signs. As a result, the regression model used in this study is considered robust.

Discussion

Return on Equity on Price Earning Ratio

According to the statistical results in Table 6, ROE showed a positive and significant influence on PE. This finding supports Hypothesis 1, which posits that ROE has a significant influence on PE. A higher Return on Equity encourages investors to increase their number of shares, leading to increased market expectations and a rise in the stock price, making the firm's stock more attractive. Firms that excel in managing their equity to generate profits tend to have higher market expectations, resulting in higher stock prices and PE in the Basic Industry (IDX BASIC). Thus, ROE emerges as a determining factor of the Price Earning Ratio (PE).

This finding is consistent with previous research by [Kurniawan et al. \(2020\)](#) and [Ramadhani et al. \(2019\)](#). [Kurniawan et al. \(2020\)](#) analyzed the influence of ROE on PE in the Real Estate and Property Sector in Indonesia. Similarly, the study conducted by [Ramadhani et al. \(2019\)](#) also found a positive and significant impact of ROE on PE in the Indonesian Manufacturing Sector.

Debt Equity Ratio on Price Earning Ratio

The results revealed a positive and significant influence of DER on PE, thereby confirming Hypothesis 2. Debt Equity Ratio (DER) is a determinant variable of PE, as it provides insights into a firm's leverage and level of risk associated with its capital structure. Generally, a higher DER indicates higher risk. However, in the context of the basic industry (IDX_BASIC), most firms require significant upfront capital investment in the form of debt to fund their operations and expansions. Therefore, a high DER does not raise concerns for investors; instead, it becomes a signal that firms are actively operating and growing.

This result is consistent with previous research by [Mulyani & Pitaloka \(2017\)](#) in their study on Indofood Sukses Makmur during 2012-2014, where they found a positive and significant influence between DER and PE. Similarly, [Sudaryanti & Sahroni \(2016\)](#) found that DER had a significant influence on Price-Earning Ratio in their study on Holcim Indonesia.

Price Book Value on Price Earning Ratio

The results also indicated that PBV has a positive and significant impact on PE, thus supporting Hypothesis 3. PBV emerges as one of the determining factors of PE. Within the Basic Industry (IDX_BASIC), the average PBV values for firms were notably high, with most firms having PBV values exceeding 1. This higher PBV suggests that the market places a high value on the firm's assets and reflects confidence in the firm's future growth prospects. Consequently, investors are willing to pay a higher price for the firm's earnings, leading to a higher PE ratio.

The finding of this study is consistent with previous research. [Sitepu \(2013\)](#) also found a positive and significant effect of PBV on PE, with high PBV leading to an increased PE for Manufacturing firms listed on the Indonesia Stock Exchange. Similarly, recent research by [Ismayana \(2020\)](#) found a positive and significant influence between PBV and PE in the Automotive sub-sector in Indonesia.

Earning Growth on Price Earning Ratio

The fourth hypothesis testing, which examines the significant influence of EG on PE, is confirmed. Thus, EG also becomes one of the determining factors of PE. When firms demonstrate increasing performance and Earnings Growth (EG), the market recognizes their ability to deliver higher returns. Firms that exhibit substantial earnings growth are perceived as more prosperous and promising by the market. This positive perception leads to the market having larger

expectations for future earnings, which enhances demand for the firm's stock. Therefore, firms with higher earnings growth tend to have higher PE ratios. On the other hand, firms with declining earnings may have lower PE ratios, as the market regards them as less appealing investment options.

This finding is consistent with research by [Ayundhasurya & Murtaqi \(2012\)](#). Their research displayed a positive and significant influence between PBV and PE in the Mining Sector listed on the Indonesia Stock Exchange.

Firm Size on Price Earning Ratio

Hypothesis 5, which stated that Firm Size has a significant influence on PE, is rejected. These findings indicate that firm size does not significantly determine the Price-Earning Ratio in the basic industry firms (IDXBASIC) in Indonesia. The uniqueness of this industry lies in firms' substantial investments in their operations. Factors such as manufacturing efficiency and market demands are considerably more critical in this industry. Consequently, the overall asset of these firms has little influence on the market's investment decisions. As a result, the price-earnings ratio (PE) is less likely to be influenced because investors prioritize a company's operational performance over its asset composition.

This result differs from the previous study conducted by [Afza & Tahir \(2012\)](#) in the Pakistan Chemical Sector. Their results showed that Firm Size negatively affects the Price-Earning ratio, as markets are more willing to invest in smaller firms. However, the result in this study aligns with the previous study by [Renaldo et al. \(2023\)](#) in the MNC 36 Index during 2017-2021. Their research indicated no significant effect of Size on PE. Larger-sized companies are often perceived as more resilient during crises, making it easier for them to obtain loans or external funding rather than generating additional funds from the capital market.

Market Return on Price Earning Ratio

The variable Market Return (MR) did not have a significant influence on the Price Earning Ratio (PE). Hence, the sixth hypothesis in the study is rejected. In the context of the basic chemical business, the share price in some sectors, such as the mining sector, is particularly volatile, making long-term investors more vulnerable as share prices fluctuate in an unpredictable manner. The returns generated from dividends may not always align with the fluctuations and movements of the overall market. Volatility and price changes in the market can significantly affect shares and capital gains, leading to a decrease in the market's initial investment in firms and resulting in a lower Price-Earning Ratio (PE).

The result of this study is consistent with previous research by [Afza & Tahir \(2012\)](#) and [Aribawa & Swasito \(2020\)](#). The research by [Afza & Tahir \(2012\)](#) showed no significant influence of MR on PE in the Pakistan Chemical Sector. This aligns with the research of [Aribawa & Swasito \(2020\)](#) who conducted a study on Indonesia Property and Real Estate Companies, and they found no significant influence between MR and PE.

Dividend Payout Ratio on Price Earning Ratio

Hypothesis 7, stating that DP has a significant impact on PE, is supported. In addition to having a positive and significant influence on PE, the Dividend Payout Ratio also emerges as the highest determinant factor among all variables used in the research. A higher dividend payout ratio indicates that a corporation pays out a greater portion of its earnings as dividends to shareholders. Firms that distribute a larger share of their earnings as dividends can be perceived as having higher profitability. Consequently, investors may view the company as financially strong and attractive, leading to increased demand for its stock due to investor confidence. In other words, investors are willing to pay a premium for the company's earnings because they have faith in the firm's ability to generate consistent profits and pay dividends, ultimately leading to an increase in PE.

These findings are consistent with research conducted by [Afza & Tahir \(2012\)](#) and [Janiman \(2020\)](#). The study by [Janiman \(2020\)](#) on Property, Real estate, and Building Constructions during the period of 2016-2018 demonstrated a significant impact of Dividend Payout on Price-Earning ratio.

CONCLUSION

The purpose of this study is to examine the determinants of the Price-Earning Ratio in Indonesia's basic industry (IDX_BASIC) during the period of 2017-2021. Several variables, including ROE, DER, PBV, EG, and DP, are considered important factors influencing the PE ratio. Notably, the variable with the highest impact on PE is the dividend payout (DP). These findings are consistent with previous research conducted by various scholars.

The managerial implication of this study is that understanding the factors influencing firm performance allows companies to strategically manage their businesses in alignment with market and investor preferences. Firms can enhance their attractiveness to potential investors by focusing on these determinant factors. This may involve improving key performance measures

such as profitability (ROE), efficiency (DER), growth potential (EG and DP), financial stability (PBV), and dividend policy (DP). Properly managing the dividend payout policy can instill market confidence in investing in firms and boost market expectations.

However, this study has some limitations. The observation sample is limited to only one industry with high volatility, which may restrict the generalizability of the findings. For future research, including other industries in the study can provide a comparative insight into the determinants of PE. Additionally, exploring the impact of other variables, such as Current Ratio ([Setiawan, 2012](#)), Inventory Turnover ([Sitepu, 2013](#)), and Return on Asset ([Hayati, 2010](#)), can further enrich the understanding of the key factors influencing PE.

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