THE DETERMINANTS OF PRICE EARNING RATIO: EVIDENCE FROM INDONESIA

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\textbf{ABSTRACT}

\textbf{Purpose:} This paper aims to examine the determinants of the Price Earning Ratio of LQ45 Companies listed on the Indonesia Stock Exchange 2016-2021.

\textbf{Theoretical framework:} Price Earning Ratio (PER) is a comparison between market price per share and earnings per share, PER is the ratio used by investors to value a company's shares, Price Earning Ratio (PER ) as a way of valuation to find out the true value of shares of a company. This PER is used to analyze stock prices that show unreasonable prices, (Fahmi, 2016) . Meanwhile, (Wahyudiono, 2014) Price Earning Ratio (PER) is a ratio that shows the comparison between the price of shares in the primary market offered compared to the income received.

\textbf{Design/Methodology/Approach:} Sampling in this study was carried out by purposive sampling, meaning that the sample selection method was selected based on judgment sampling, which means the selection of samples was not random, the information obtained with certain considerations. Using Panel Data regression to determine the determinants of the Price Earning Ratio in LQ45 companies in Indonesia from 2016 to 2021.

\textbf{Findings:} This study reveals that the five determinants of the Price Earning Ratio (Debt to Equity Ratio, Return On Assets, Firm Size, Sales, and Dividend) have a significant effect on the price earning ratio. The Debt to Equity Ratio has a positive correlation with the Price Earning Ratio, while Return On Assets, Firm Size, Sales and Dividend has a negative correlation with the Price Earning Ratio. In addition, one other variable, the current ratio, has no significant effect on the Price Earning ratio. The shares of SMGR, ASII, HMSC, TLKM, BBCA are the most expensive shares when viewed from the ratio of share prices to earnings, and shares of TKIM, ITMG, INKP, ADRO, PGAS are the cheapest share prices when viewed from the ratio of share prices to company profits period 2016-2021.

\textbf{Research, practical & social implications:} where the findings of this study prove that ROA, Sales, and Dividend have a significant negative effect on PER, meaning that if a company wants a share price ratio (PER) value that is attractive to investors (the lower the PER the more attractive it is to investors), then the company must increase profits, sales growth and the value of the company's cash dividends. Furthermore, for investors, the findings of this study prove that SMGR, ASII, HMSC, TLKM, BBCA shares are the most expensive stock prices when viewed from the ratio of share price to earnings earned during the 2016-2021 period. And TKIM, ITMG, INKP, ADRO, PGAS shares are the cheapest share prices when viewed from the ratio of share prices to company profits for the 2016-2021 period. So this will be a consideration for investors in choosing the best stock portfolio for stock investment on the Exchange.

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OS DETERMINANTES DO RÁCIO DE GANHO DE PREÇO: EVIDÊNCIAS DA INDONÉSIA

RESUMO
Objetivo: Este artigo tem como objetivo examinar os determinantes do Índice de Lucro de Preço de Empresas LQ45 listadas na Bolsa de Valores da Indonésia 2016-2021.

Estrutura teórica: Relação entre Preço e Ganhos (PER) é uma comparação entre preço de mercado por ação e ganhos por ação. PER é a razão usada pelos investidores para avaliar as ações de uma empresa. Relação entre Preço e Ganhos (PER) como forma de avaliação para descobrir o verdadeiro valor das ações de uma empresa. Este PER é usado para analisar preços de ações que mostram preços não razoáveis, (Fahmi, 2016). Enquanto isso, (Wahyudiono, 2014) Price Earning Ratio (PER) é uma proporção que mostra a comparação entre o preço das ações no mercado primário oferecido em comparação com a renda recebida.

Projeto/Metodologia/Abordagem: A amostragem neste estudo foi realizada por amostragem objetiva, o que significa que o método de seleção da amostra foi selecionado com base na amostragem de julgamento, o que significa que a seleção de amostras não foi aleatória, a informação obtida com determinadas considerações. Utilizar a regressão de dados do painel para determinar os determinantes da relação de ganhos de preço em empresas LQ45 na Indonésia de 2016 a 2021.

Constatações: Este estudo revela que os cinco determinantes do Índice de Ganho de Preço (Índice de Dívida para Patrimônio Líquido, Retorno sobre Ativos, Tamanho Firme, Vendas e Dividendo) têm um efeito significativo sobre o índice de ganho de preço. O Índice de Dívida para Patrimônio Líquido tem uma correlação positiva com o Índice de Ganho de Preço, enquanto o Retorno de Ativos, Tamanho Firme, Vendas e Dividendos tem uma correlação negativa com o Índice de Ganho de Preço. Além disso, uma outra variável, o rácio atual, não tem um efeito significativo no rácio de Preço Ganho. As ações da SMGR, ASII, HMSP, TLKM, BBCA são as ações mais caras quando vistas a partir do rácio entre os preços das ações e os lucros, e as ações da TKIM, ITMG, INKP, ADRO, PGAS são os preços das ações mais baratos quando vistas a partir do rácio entre os preços das ações e os lucros das empresas no período 2016-2021.

Pesquisa, prática & implicações sociais: onde as descobertas deste estudo provam que ROA, Vendas e Dividendos têm um efeito negativo significativo sobre PER, o que significa que se uma empresa deseja um valor de índice de preço de ações (PER) que seja atraente para os investidores (quanto menor o PER, mais atraente será para os investidores), então a empresa deve aumentar os lucros, o crescimento das vendas e o valor dos dividendos em dinheiro da empresa. Além disso, para os investidores, as conclusões deste estudo provam que as ações da SMGR, ASII, HMSP, TLKM e BBCA são as ações mais caras quando vistas a partir do rácio entre o preço das ações e os lucros obtidos durante o período de 2016-2021. E as ações da TKIM, ITMG, INKP, ADRO, PGAS são as ações mais baratas quando vistas a partir do rácio entre os preços das ações e os lucros das empresas para o período de 2016-2021. Portanto, esta será uma consideração para os investidores na escolha da melhor carteira de ações para investimento de ações na Bolsa.

Originalidade/Valor: LQ45 empresas listadas na Bolsa de Valores da Indonésia para o período 2016-2021 foram recrutadas como amostra de pesquisa. Mas a polêmica e a inconsistência dos resultados são discutíveis.


LOS DETERMINANTES DE LA RELACIÓN PRECIO/GANANCIA: EVIDENCIA DE INDONESIA

RESUMEN
Objetivo: Este artículo tiene como objetivo examinar los determinantes de la relación precio-beneficio de las empresas LQ45 cotizadas en la Bolsa de Valores de Indonesia 2016-2021.

Marco teórico: La relación precio/beneficio (PER) es una comparación entre el precio de mercado por acción y las ganancias por acción, PER es la relación utilizada por los inversores para valorar las acciones de una empresa, la relación precio/beneficio (PER) como una forma de valoración para averiguar el verdadero valor de las acciones de una empresa. Este PER se utiliza para analizar los precios de las acciones que muestran precios irrazonables, (Fahmi, 2016). Por su parte, (Wahyudiono, 2014) Price Earning Ratio (PER) es una relación que muestra la comparación entre el precio de las acciones en el mercado primario ofertadas en comparación con los ingresos recibidos.

**Diseño/Metodología/Enfoque:** El muestreo en este estudio se llevó a cabo por muestreo intencional, lo que significa que el método de selección de muestras se seleccionó en base al muestreo de juicio, lo que significa que la selección de muestras no fue aleatoria, la información obtenida con ciertas consideraciones. Uso de regresión de datos de panel para determinar los determinantes de la relación precio-beneficio en empresas LQ45 en Indonesia de 2016 a 2021.

**Hallazgos:** Este estudio revela que los cinco determinantes de la Relación Precio Ganancia (Relación Deuda a Capital, Retorno sobre Activos, Tamaño de la Empresa, Ventas y Dividendo) tienen un efecto significativo en la relación precio-ganancia. La relación deuda/capital tiene una correlación positiva con la relación precio-beneficio, mientras que el rendimiento de los activos, el tamaño de la empresa, las ventas y los dividendos tiene una correlación negativa con la relación precio-beneficio. Además, otra variable, la ratio actual, no tiene un efecto significativo en la ratio precio/beneficio. Las acciones de SMGR, ASII, HMSP, TLKM, BBCA son las acciones más caras cuando se ven desde la relación entre los precios de las acciones y las ganancias, y las acciones de TKIM, ITMG, INKP, ADRO, PGAS son los precios de las acciones más baratos cuando se ven desde la relación de los precios de las acciones a los beneficios de la empresa periodo 2016-2021.

**Implicaciones sociax, prácticas y de investigación:** cuando los resultados de este estudio demuestran que ROA, Ventas y Dividendos tienen un efecto negativo significativo en el PER, lo que significa que si una empresa quiere un valor de ratio de precio de acción (PER) que sea atractivo para los inversores (cuanto menor sea el PER, más atractivo sea para los inversores), entonces la empresa debe aumentar las ganancias, el crecimiento de las ventas y el valor de los dividendos en efectivo de la empresa. Además, para los inversores, los resultados de este estudio demuestran que las acciones de SMGR, ASII, HMSP, TLKM y BBCA son las cotizaciones bursátiles más caras si se consideran desde la relación entre el precio de las acciones y las ganancias obtenidas durante el periodo 2016-2021. Y las acciones de TKIM, ITMG, INKP, ADRO y PGAS son los precios más baratos cuando se ven desde la relación entre los precios de las acciones y las ganancias de la empresa para el periodo 2016-2021. Por lo tanto, esto será una consideración para los inversores a la hora de elegir la mejor cartera de acciones para la inversión bursátil en la Bolsa.

**Originalidad/Valor:** Se contrataron como muestra de investigación a las empresas de 45 LQ que cotizaban en la Bolsa de Valores de Indonesia para el periodo 2016-2021. Sin embargo, la controversia y la inconsistencia de los resultados es discutible.

**Palabras clave:** Ratio Actual, Ratio Deuda/Patrimonio, Rendimiento de Activos, Tamaño de la Empresa, Ventas, Dividendo, Ratio Precio/Ganancia.

**INTRODUCTION**

Stock price is interpreted as the price that is most easily determined from the real market because it is taken from the price in the ongoing market (Darmadji & Fakhruddin, 2012). The high and low price of a stock is determined by the demand and supply of that stock.

Price earning ratio is the price per share, this indicator has practically been applied in the final income financial statements and has become a standard form of financial reporting for public companies in Indonesia. This ratio shows how much investors value stock prices against earnings multiples (Harmono, 2017). A high price earning ratio indicates investors expect high net income growth from the company. A high price earning ratio in a stock can be interpreted as an expensive stock if in the future period of time the company is not able to achieve a higher net income. The high and low price earning ratio is determined by comparing it with the price earning ratio of other stocks or the appropriate sector/market price earning for comparison. Loss-making companies do not have a price-earning ratio.
Indices in the capital market are divided into several types that are classified according to certain categories. Companies incorporated in LQ45 are issuers that always give good signals to their investors, as evidenced by the criteria in the form of liquidity and stock prices that are most actively traded in the capital market, in addition to being seen from the company's growth prospects and other elections. The competition of companies to be listed in LQ45 companies is very visible and makes each company improve its performance to generate high liquidity figures.

The LQ45 Index is an index consisting of 45 of the most active selected stocks traded on the Indonesia Stock Exchange based on liquidity and high market capitalization. Thus, it is interesting for researchers to make LQ45 shares as the object of research to see whether strong or worsening economic conditions can bring influence on changes in the company's Stock Return. The LQ45 index is selected every February and August (every six months). Some of the criteria used are liquidity, market capitalization, and supported by good fundamentals in the last 12 months. The criteria used in the selection make the LQ45 Index ideal for providing investors with positive returns. There are many financial ratio analyses to measure the financial performance of LQ45 companies. The financial ratio consists of the leverage ratio, liquidity, and market value ratio which presents a comparison of the figures in the financial statements.

According to Hartono in (Oktaviasari, 2017) there are two analytical tools that can be used for investors or potential investors in conducting stock investment analysis, namely fundamental analysis and technical analysis. Fundamental analysis uses fundamental data, namely data derived from company finances, while technical analysis is stock market data to determine the value of shares. Technical analysis is used by practitioners to determine stock prices, while fundamental analysis is used by academics.

Fundamental analysis has two approaches to calculating stock value, namely the present value approach and the price earning ratio. According to Priansyah in (Batubara et al., 2020) one of the fundamental analyses that can be used to assess the fairness of stock prices is the price earning ratio because it is quite easy for investors to understand. Price earning ratio is used to predict the company's ability to generate future profits by investors. Companies with high growth rates usually have a high price earning ratio and vice versa companies that have low growth rates usually have a low price earning ratio as well. Investors usually look at PER to identify undervalued or overvalued stock prices so that investors can make decisions to invest, namely by buying undervalued securities and selling them when overvalued (Batubara et al., 2020). Using PER in stock analysis because PER makes it easier for investors to assess...
future stock prospects, PER makes it easier for investors to compare companies in one industry (Sijabat & Suajraya, 2018b).

Current ratio is one of the liquidity ratios that shows the company's ability to meet its current obligations by using its current assets. Debt to equity ratio is part of the solvency ratio which shows the amount of assets whose source of funds is debt. DER is used to assess debt to equity through a comparison of total debt divided by all equity (Sihaloho & Rochyadi, 2021).

Based on the description of some of these ratios, according to several previous researchers such as (W. I. Sari et al., 2021) the current ratio has a positive and significant effect on the price earning ratio, the debt to equity ratio variable has a positive and significant effect on the price earning ratio, but according to (Yosefa et al., 2020) the current ratio and dividend have no significant effect on the price earning ratio, while return on equity has a negative and significant effect on the price earning ratio. Furthermore, according to (Odelia & Wibowo, 2020) Current Ratio, Debt to Equity Ratio, Return on Equity does not have a significant effect on the Price Earning Ratio and according to (Jusmansyah, 2020) ROA has a significant effect on PER while the Current Ratio, Debt Equity Ratio does not have a significant effect on the Price Earning Ratio. According to (Pratiwi et al., 2016) the firm size variable does not affect the price earning ratio. Meanwhile, according to (Utami & Rudianto, 2020) the debt to equity ratio (der) and sales have no significant effect on the stock price ratio. Meanwhile, according to (Sijabat & Suajraya, 2018b) shows that Dividend has a positive and significant effect on the Price Earning Ratio, the Debt to Equity Ratio has a negative and significant effect on the Price Earning Ratio, Return on Assets has a positive and significant effect on the Price Earning Ratio.

By looking at the above problems, further research is needed related to the factors that affect the Price Earning Ratio and Dividend using the variables Current Ratio (CR), Debt to Equity Ratio (DER), Return On Asset (ROA), Firm Size (FS) and Sales in LQ45 companies on the Indonesia Stock Exchange 2016-2021.

**THEORETICAL FRAMEWORK**

Capital Market is a means that can be used by issuers or companies that need funds to develop their business and investors, places or media to invest so as to benefit from investing in the capital market. The presence of the Capital Market in Indonesia has a very large role in increasing the growth of the national economy. The capital market provides a variety of investment products for investors such as stocks, bonds, mutual funds, and other valuable
currencies (Fransiskus Paulus Paskalis Abi, 2016). One of the well-known types of securities is stocks.

One of the main elements so that a business can run well is capital. There are various sources of capital obtained by an entrepreneur to advance his business, including: derived from his own capital, loans from other parties such as banks or raising funds from third parties such as the issuance of company shares (stock) to be sold to the public or third parties, (Fransiskus Paulus Paskalis Abi, 2016)

Shares can be defined as a sign of capital participation of a person or party (business entity) in a company or limited liability company. By including this capital, the party has a claim on the company's income, a class on the company's assets, and is entitled to attend the General Meeting of Shareholders (GMS). The level of profit from Stock Investment is quite high (high return), resulting in stocks becoming one of the most popular investment products so far. But behind as a product that has a high level of profit (high return), stock investment also has a fairly high level of loss as well.

**Price Earning Ratio**

According to (Fahmi, 2016), the definition of Price Earning Ratio (PER) is a comparison between market price per share and earnings per share, then PER is the ratio used by investors to assess the shares of a company.

Meanwhile, according to (Wahyudiono, 2014) the definition of Price Earning Ratio (PER) is a ratio that shows a comparison between the price of shares in the initial market offered compared to the income received. Price Earning Ratio (PER) as a way of valuation to find out the true stock value of a company. This PER is used to analyze stock prices that show unnatural prices.

Based on the above understanding, it can be synthesized that the price earning ratio is a picture of market appreciation of the company's ability to generate income through a comparison of market price per share and earnings per share.

In this study, researchers used the Price Earning Ratio (PER) or the ratio of earnings from stocks which is one way to measure the performance of stocks on the stock exchange. So with PER the potential investors are able to assess and analyze the company's financial performance. This means that in investing, investors must pay attention to PER as one of the considerations in making investment decisions, where with the increase in PER investors expect
company growth higher ones, in otherwords, P/E will have a positive impact on the stock price. The indicators used in this study, namely according to (Fahmi, 2016) which states that

\[ \text{PER} = \frac{\text{Harga Saham}}{\text{EPS}} \]

**Dividend**

Dividend is the distribution of net income to shareholders according to the proportion of shares owned by shareholders (Brigham & Ehrhardt, 2011). Dividend is the distribution of profits to shareholders. Dividends must be taken from the current year's net income or retained earnings balance. Dividend distribution is not carried out by all companies, only companies that earn profits can distribute dividends. But there are also companies that make a profit not distributing dividends.

Types of dividends that can be distributed by companies to their shareholders are as follows (Rudianto, 2012) Cash dividends, namely the portion of operating profits distributed to shareholders in cash. Before dividends are distributed, companies must consider the availability of funds to pay dividends. If the company chooses to distribute cash dividends, it means that when the dividends will be distributed to shareholders, the company has sufficient cash. Property Dividend, which is a type of dividend distributed to shareholders in the form of assets other than cash, usually in the form of merchandise or assets owned by the company. Script dividend, which is part of the company's operating profit that is distributed to shareholders in the form of a written promise to pay a certain amount of money in the future. Script dividends occur because the company wants to distribute dividends in cash, but there is not enough cash available, even though retained earnings show an adequate balance. Because of this, the company's management promised to pay a certain amount of money in the future to the shareholders. Share dividends, which are the part of the operating profit to be distributed to shareholders in the form of new shares of the company itself. Stock dividends are distributed because the company wants to capitalize a portion of the operating profits it earns permanently. Liquidation Dividend, namely the dividend that the company wants to pay to shareholders in various forms, but is not based on the amount of operating profit or the balance of the company's retained earnings. The liquidation dividend is a return on capital for the owner's investment by the company.

In this study, the dividend to be used as research material is a cash dividend. The cash dividend formula is as follows (Ross & Ukil, 2021) :
\[ \text{Dividen Kas} = \frac{\text{Total Dividen Kas}}{\text{Jumlah Saham Beredar}} \]

**Current Ratio**

Current Ratio According to (Sulindawati et al., 2018) is one of the most frequently used methods in analyzing the liquidity level of a company. The elements used in the calculation of working capital can be expressed in ratios, which compare total current assets with current debt.

According to (Kasmir, 2014) the formula for finding the current ratio that can be used is \( \frac{\text{Current Assets}}{(\text{Current Debt})} \). According to (Fahmi, 2016) Current Assets are items that are one year old or less, or a larger normal business operating cycle. In this study, researchers used the current ratio according to (Sujarweni, 2017) as a measuring tool used to measure the company's ability to pay its short-term obligations using current assets owned by a company. The way to calculate the cash ratio is:

\[ \text{CR} = \frac{\text{Aktiva Lancar}}{\text{Hutang Lancar}} \]

**Debt to Equity Ratio**

Debt to Equity ratio is classified into solvency ratio or leverage ratio. The solvency ratio is a ratio used to measure the extent to which a company's assets are financed with debt. This means how much debt burden the company bears compared to its assets. In a broad sense, it is interpreted that the solvency ratio is used to measure the company's ability to pay all its obligations, both short and long term if the company is dissolved (Kasmir, 2014).

In practice, if from the calculation results, the company turns out to have a high solvency ratio, it will have an impact on the risk of greater losses, but there is also a large opportunity to get profits. Conversely, if the company has a lower solvency ratio, it certainly has a smaller risk of loss, especially when the economy declines. This impact also results in low returns at a time when the economy is high. Therefore, financial managers are required to manage solvency ratios well so as to be able to balance high returns with the level of risk faced. It should be noted that the size of this solvency ratio is very dependent on the loans owned by the company, in addition to the assets owned (Kasmir, 2014).

Debt to Equity Ratio is a ratio used to assess debt with equity. This ratio is useful for knowing the amount of funds provided by borrowers (creditors) with company owners. In other words, this ratio serves to find out every rupiah of own capital used for debt security (Kasmir,
The greater the Debt to Equity ratio shows that the capital structure utilizes more debt, the greater the company's burden and dependence on external parties so that the level of risk is greater.

(Kasmir, 2014) and (Huong, 2023) formulates the Debt to Equity Ratio as follows:

$$ DER = \frac{\text{Total Liability}}{\text{Total Equity}} $$

**Return on Assets**

According to (Sirait, 2017) the definition of Return On Assets (ROA) is the Return on Assets (ROA) ratio also called the earning power ratio, describing the company's ability in generating profit from available resources (assets).

Meanwhile, according to (Hery, 2016) Return On Assets is a ratio that shows how much the contribution of assets is in creating net income. According to (Sujarweni, 2017) Return On Assets as follows: Return On Assets (ROA) is a ratio used to measure the ability of capital invested in all assets to generate net profit.

From several definitions of Return On Assets (ROA) above, it can be concluded that Return On Assets (ROA) is a company's financial ratio to measure the company's strength in getting profits or pre-tax profits on income level, assets and also share capital.

According to (Kasmir, 2014) the calculation of Return on Assets (ROA) can be done with the following formula:

$$ ROA = \frac{\text{Net Income After Tax}}{\text{Total Asset}} $$

**Firm Size**

According to (Widiastari & Yasa, 2018) suggests that the size of the company is a scale where it can be classified as the size of the company measured by total assets, the amount of sales, stock value and so on. According to (Azizah & Ponziani, 2018) explained that Company Size is a reflection of the total assets owned by a company. Dan (Novianti & Agustian, 2018) explained that the size of the company is seen from the business field being operated. The size of the company can be determined based on total sales, total assets, average sales level.

Based on the explanation above, it can be concluded that the size of the company can be seen from the large number of assets owned by the company. The size of the company is one of the factors that can affect profit generation. The larger a company size, it will usually have
its own strength in dealing with business problems and the company's ability to obtain high profits because it is supported by large assets so that the company's obstacles can be overcome. Companies that have total assets or large total assets indicate that the company has reached the maturity stage where in this stage the company's cash flow It has been positive and is considered to have good prospects over a relatively long period of time.

In this study, the Company Size indicator is measured using the natural logarithm (Ln) of total assets. Natural logarithms (Ln) are used to reduce the significant difference between company sizes that are too large and company sizes that are too small, then from the number of assets natural logarithms are formed which aim to make data on the number of assets normally distributed (Pribadi, 2018).

The total value of assets is usually greater than other financial variables, so the total asset variable is refined into Log Assets or Ln Total Assets. Using the natural logarithm (Ln) of total assets with a value of hundreds of billions or even trillions will be simplified without changing the proportion of total assets.

Indicators for calculating Company Size according to (Pribadi, 2018), namely:

\[ FS = \text{Ln} (\text{Total Aktiva}) \]

**Sales**

According to (Swastha, 2014) sales are activities carried out by sellers in selling goods or services in the hope of obtaining profits from these transactions. Sales Objectives According to (Swastha, 2014) suggests that a company has three goals in sales, namely to achieve a certain sales volume, to get a certain profit, and to support company growth. In this research nature mathematically can be formulated as follows:

\[ Sales = \text{Ln} (\text{Total Sales}) \]
METHODOLOGY

This study reveals the influence of bound variables, namely Stock Return and one intervening variable, namely Dividend and 5 independent variables, namely the Current Ratio, Debt to Equity ratio, Return On Assets, Firm Size, and Sales variables which are thought to have an influence on Dividends and their implications for the Price Earning Ratio in LQ45 companies listed on the IDX.

For determinant factors include 5 independent variables (not bound) used in this study which will be tested on 1 dependent variable (dependent) namely Dividend and its implications for Price Earning Ratio. So that Dividend as an intervening variable while Price Earning Ratio as a dependent variable (dependent variable).
Population

According to (Sugiyono, 2014) Population is a generalized area consisting of objects and subjects that have certain qualities and characteristics determined by researchers to be studied and then conclusions drawn. Population is not only people, but also other natural objects and objects. Population is also not just the number that exists in the object or subject studied, but includes characteristics or traits possessed by that subject or object.

In this study, the population used was lq45 companies as many as 45 companies listed on the Indonesia Stock Exchange in 2016-2021.

Sample

According to (Sugiyono, 2014) states that the sample is part of the number and characteristics possessed by the population. If the population is large, and it is impossible for the researcher to study everything in the population, then the researcher can use a sample that is from that population.

Sampling in this study is carried out by purposive sampling, meaning that the sample selection method is chosen based on consideration (judgement sampling) which means non-random sample selection whose information is obtained with certain considerations. The sample criteria used are as follows:

<table>
<thead>
<tr>
<th>Sample Selection Criteria</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>LQ45 companies listed on the Indonesia Stock Exchange (IDX) during 2016 - 2021.</td>
<td>45</td>
</tr>
<tr>
<td>Companies that do not regularly distribute dividends 2016-2021</td>
<td>(5)</td>
</tr>
<tr>
<td>Companies that meet the sample criteria</td>
<td>40</td>
</tr>
</tbody>
</table>

Source: Prepared by the authors (2023)

Panel Data Regression Analysis

This study used Panel Data regression analysis using the Eviews 11 program. The structural equation for the research model above is as follows:

\[
\text{PER} = \beta_0 + \beta_1 \text{CR} + \beta_2 \text{DER} + \beta_3 \text{ROA} + \beta_4 \text{FS} + \beta_5 \text{S} + \beta_6 \text{Div} + \epsilon
\]

Where

RESULT AND DISCUSSION

Result

Descriptive statistical analysis

<table>
<thead>
<tr>
<th>Information</th>
<th>PER</th>
<th>DIV</th>
<th>CR</th>
<th>DER</th>
<th>ROA</th>
<th>FS</th>
<th>SI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.902929</td>
<td>4.290686</td>
<td>0.311366</td>
<td>0.028429</td>
<td>1.694460</td>
<td>17.45332</td>
<td>9.994036</td>
</tr>
<tr>
<td>Median</td>
<td>2.886425</td>
<td>4.193588</td>
<td>0.444686</td>
<td>-0.056696</td>
<td>1.832549</td>
<td>17.18665</td>
<td>9.987137</td>
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<tr>
<td>Maximum</td>
<td>6.265662</td>
<td>8.019613</td>
<td>2.406044</td>
<td>2.837323</td>
<td>3.835142</td>
<td>21.26885</td>
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<tr>
<td>Minimum</td>
<td>1.026042</td>
<td>1.139762</td>
<td>-1.832581</td>
<td>-4.605170</td>
<td>2.302585</td>
<td>13.96275</td>
<td>6.763885</td>
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<tr>
<td>Std. Dev.</td>
<td>0.743686</td>
<td>0.011564</td>
<td>-0.544887</td>
<td>-0.093105</td>
<td>1.075059</td>
<td>0.505971</td>
<td>1.555989</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>5.406948</td>
<td>2.998486</td>
<td>2.720956</td>
<td>3.361508</td>
<td>4.948676</td>
<td>3.031499</td>
<td>8.247186</td>
</tr>
<tr>
<td>Jarque-Bera</td>
<td>78.05535</td>
<td>1.005237</td>
<td>12.33836</td>
<td>1.612280</td>
<td>82.09837</td>
<td>99.93936</td>
<td>362.8692</td>
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<tr>
<td>Probability</td>
<td>0.000000</td>
<td>3.997385</td>
<td>3.002093</td>
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<tr>
<td>Sum</td>
<td>679.2854</td>
<td>1004.020</td>
<td>72.85961</td>
<td>6.652423</td>
<td>396.5037</td>
<td>408.0764</td>
<td>2338.604</td>
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<td>Sum Sq. Dev.</td>
<td>111.3559</td>
<td>584.9053</td>
<td>210.2988</td>
<td>322.0786</td>
<td>273.0866</td>
<td>606.8836</td>
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<td>Observations</td>
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<td>234</td>
<td>234</td>
<td>234</td>
<td>234</td>
<td>234</td>
</tr>
</tbody>
</table>

Source: Prepared by the authors (2023)

Based on the results of descriptive statistical calculations of research data from table 2 above, it can be seen that the number of data on each variable is 234 observations from 40 samples of LQ45 companies listed on the Indonesia Stock Exchange for the period 2016 to 2021. Each variable will be described according to the data in table 3 below:

Price Earning Ratio (PER), the results of the descriptive statistical analysis in table 2 show that of the 234 observations, the PER data ranges from 1,026 to 6,266 with an average (mean) of 2,903 and a standard deviation of 0.691. Dividend (Div), the results of the descriptive statistical analysis in the table show that of the 234 observations, the Div data ranges from 0.1398 to 8.0196 with an average (mean) of 4.291 and a standard deviation of 1.584. Current Ratio (CR), the results of the descriptive statistical analysis in table 5.1 show that of the 234 observations, the CR data ranged from -1.833 to 2.4060 with an average (mean) of 0.311 and a standard deviation of 0.950. Debt Equity Ratio (DER), the results of the descriptive statistical analysis in table 2 show that of the 234 observations, the PER data ranges from -4.605 to 2.837 with an average (mean) of 0.0284 and a standard deviation of 1.1757. Return On Assets (ROA), the results of the descriptive statistical analysis in table 2 show that of the 234 observations, the PER data ranges from -2.3026 to 3.835 with an average (mean) of 1.694 and a standard deviation of 1.083. Firm Size (FS), the results of the descriptive statistical analysis in table 2 show that of the 234 observations, PER data ranged from 13,963 to 21,269 with an average (mean) of 17,453 and a standard deviation of 1,614. Sales (SI), the results of

the descriptive statistical analysis in table 2 show that of the 234 observations, PER data ranged from 6,764 to 17,514 with an average (mean) of 9,994 and a standard deviation of 1,779.

Panel data regression

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>15.04983</td>
<td>1.265245</td>
<td>11.8948</td>
<td>0</td>
</tr>
<tr>
<td>CR?</td>
<td>-0.048416</td>
<td>0.067844</td>
<td>-0.713642</td>
<td>0.4763</td>
</tr>
<tr>
<td>DER?</td>
<td>0.20041</td>
<td>0.053482</td>
<td>3.747206</td>
<td>0.0002</td>
</tr>
<tr>
<td>ROA?</td>
<td>-0.097405</td>
<td>0.033388</td>
<td>-2.917413</td>
<td>0.004</td>
</tr>
<tr>
<td>FS?</td>
<td>-0.284474</td>
<td>0.054412</td>
<td>-5.228134</td>
<td>0</td>
</tr>
<tr>
<td>S?</td>
<td>-0.658475</td>
<td>0.161198</td>
<td>-4.084869</td>
<td>0.0001</td>
</tr>
<tr>
<td>DIV?</td>
<td>-0.099432</td>
<td>0.032202</td>
<td>-3.087749</td>
<td>0.0023</td>
</tr>
</tbody>
</table>

Fixed Effects (Cross)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMGR--C</td>
<td>5.352686</td>
<td>1.265245</td>
<td>4.299618</td>
<td>0</td>
</tr>
<tr>
<td>ASII--C</td>
<td>2.100853</td>
<td>0.033388</td>
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<tr>
<td>HMSP--C</td>
<td>1.969627</td>
<td>0.053482</td>
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<tr>
<td>TLKM--C</td>
<td>1.90255</td>
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<td>57.6387</td>
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</tr>
<tr>
<td>BBCA--C</td>
<td>1.69102</td>
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<td>31.4532</td>
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</tr>
<tr>
<td>BBRI--C</td>
<td>1.48332</td>
<td>0.054412</td>
<td>27.3188</td>
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</tr>
<tr>
<td>GGRM--C</td>
<td>1.477285</td>
<td>0.054412</td>
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<td>BMRI--C</td>
<td>1.383568</td>
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</tr>
<tr>
<td>ICBP--C</td>
<td>1.264078</td>
<td>0.054412</td>
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</tr>
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<tr>
<td>UNTR--C</td>
<td>1.039342</td>
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<td>18.3188</td>
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</tr>
<tr>
<td>CPIN--C</td>
<td>0.952559</td>
<td>0.054412</td>
<td>17.3188</td>
<td>0</td>
</tr>
<tr>
<td>INT--C</td>
<td>0.785748</td>
<td>0.054412</td>
<td>15.3188</td>
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</tr>
<tr>
<td>INDF--C</td>
<td>0.780219</td>
<td>0.054412</td>
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<tr>
<td>ANTM--C</td>
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<td>0.054412</td>
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<tr>
<td>BBNI--C</td>
<td>0.555896</td>
<td>0.054412</td>
<td>9.3188</td>
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<tr>
<td>EXCL--C</td>
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<td>WKA--C</td>
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<td>0</td>
</tr>
<tr>
<td>KLB--C</td>
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<td>0.054412</td>
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<td>-0.288393</td>
<td>0.054412</td>
<td>-5.3188</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Prepared by the authors (2023)

PER= 15.05 - 0.05CR + 0.20DER - 0.10ROA - 0.28FS - 0.66SI - 0.10DIV, it is known that the constant is 15.05. This means that if the independent variables are assumed to be constant, then the dependent variable, namely PER, is 15.05. The CR variable coefficient of -0.05 means that every increase in Current Ratio by 1 will cause a decrease in PER by 0.05. Assuming other variables are constant / fixed. The DER variable coefficient of 0.20 means that every increase in DER of 1 will cause an increase in PER of 0.20. Assuming other variables are constant / fixed. The ROA variable coefficient of -0.10 means that every increase in ROA by 1 will cause a decrease in PER by 0.10. Assuming other variables are constant / fixed. The FS variable coefficient of -0.28 means that every 1 increase in FS will cause a decrease in PER of 0.28.
Assuming other variables are constant / fixed. The SG variable coefficient of -0.66 means that every increase in SG by 1 will cause a decrease in PER of 0.66. Assuming other variables are constant / fixed. The DIV variable coefficient of -0.10 means that every increase in DIV by 1 will cause a decrease in PER by 0.10. Assuming other variables are constant / fixed.

Based on table 3 above, the 5 (Five) most expensive stock prices compared to the profit obtained in the LQ45 index in the 2016-2021 period are SMGR, ASII, HMSP, TLKM, BBCA STOCKS. And the 5 (five) cheapest stock prices are TKIM, ITMG, INKP, ADRO, PGAS.

Test the Hypothesis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
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<th>t-Statistic</th>
<th>Prob.</th>
</tr>
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<tbody>
<tr>
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<td>3.747206</td>
<td>0.0002</td>
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</tr>
<tr>
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<td>0.054412</td>
<td>-5.228134</td>
<td>0</td>
</tr>
<tr>
<td>Sales?</td>
<td>-0.658475</td>
<td>0.161198</td>
<td>-4.084869</td>
<td>0.0001</td>
</tr>
<tr>
<td>DIV?</td>
<td>-0.099432</td>
<td>0.032202</td>
<td>-3.087749</td>
<td>0.0023</td>
</tr>
</tbody>
</table>

Source: Prepared by the authors (2023)

From table 4 it is known that the results of the analysis show that the CR Prob value is 0.48 > 0.05. With a t-statistic value of -0.71. This means that the CR variable partially has no significant effect on PER. DER has a probability value of 0.00 <0.05. With a t-statistic value of 3.75. This means that the DER variable partially has a significant effect on PER. ROA has a probability value of 0.00 <0.05. With a t-statistic value of -2.92. This means that the ROA variable partially has a significant effect on PER. FS has a probability value of 0.00 <0.05. With a t-statistic value of -5.23. This means that the FS variable partially has a significant effect on PER. Sales have a Probability value of 0.00 <0.05. With a t-statistic of -4.08. This means that the Sales variable partially has a significant effect on PER. Div has a Probability value of 0.00 < 0.05. With a t-statistic value of -3.09. This means that the Div variable partially has a significant effect on PER in LQ45 companies listed on the Indonesia Stock Exchange in 2016-2021.
DISCUSSION

The Effect of CR on PER

A CR variable coefficient of -0.05 means that every increase in the Current Ratio of 1 will cause a decrease in PER of 0.05. Assuming other variables are constant/fixed. It is known that the results of the analysis show a CR of Prob values of 0.48 > 0.05. With a t-statistic value of -0.71. This means that the CR variable has no significant effect on the PER of LQ45 companies listed on the Indonesia Stock Exchange in 2016-2021. This result is in line with research conducted by (Yosefa et al., 2020) the current ratio does not have a significant effect on the price earning ratio, and research conducted by (Odelia & Wibowo, 2020) the Current Ratio, does not have a significant effect on the Price Earning Ratio.

The Effect of DER on PER

A variable DER coefficient of 0.20 means that every increase in DER by 1 will lead to an increase in PER of 0.20. Assuming other variables are constant/fixed. It is known that the results of the analysis show that DER has a Probability value of 0.00 < 0.05. With a t-statistic value of 3.75. This means that the DER variable partially has a significant effect on the PER of LQ45 companies listed on the Indonesia Stock Exchange in 2016-2021. This result is different from the research conducted by (R. P. Sari et al., 2021) the variable debt to equity ratio has a positive and significant effect on the price earning ratio, and the same as the research conducted by (Odelia & Wibowo, 2020) Debt to Equity Ratio does not have a significant effect on the Price Earning Ratio, and Research conducted by (Jusmansyah, 2020) Debt to Equity Ratio does not have a significant effect on Price Earning Ratio.

The Effect of ROA on PER

A variable ROA coefficient of -0.10 means that every increase in ROA of 1 will cause a decrease in PER of 0.10. Assuming other variables are constant/fixed. It is known that the results of the analysis show that ROA has a Probability value of 0.004 < 0.05. With a t-statistic value of -2.92. This means that the ROA variable partially has a significant effect on the PER of LQ45 companies listed on the Indonesia Stock Exchange in 2016-2021. This result is in line with research conducted by According to (Martono, 2019) Return On Asset has a significant effect on Price Earning Ratio (PER) and is different from the Research conducted (Sijabat &; Suarjaya, 2018a) with the results of Return on Asset has no effect on Price Earning
The Determinants of Price Earning Ratio: Evidence from Indonesia

Neldi, M., Hady, H., Elfiswandi, Lusiana. (2023)

Ratio. And return on assets, which proxies for profitability, does not seem to have any influence on the stock price (Akib et al., 2023)

The Effect of FS on PER

The FS variable coefficient of -0.28 means that every increase in FS by 1 will lead to a decrease in PER by 0.28. Assuming other variables are constant/fixed. It is known that the results of the analysis show FS has a Probability value of 0.00 < 0.05. With a t-statistic value of -5.23. This means that the FS variable partially has a significant effect on the PER of LQ45 companies listed on the Indonesia Stock Exchange in 2016-2021. This result is different from research conducted by (Heryatno, 2019), stating that Firm Size does not have a significant effect on the Price Earning Ratio, and research conducted by (Pratiwi et al., 2016) shows that the results of firm size do not have a significant effect on the Price earning Ratio.

The Effect of Sales on PER

The variable Sales coefficient of -0.66 means that every increase in Sales by 1 will cause a decrease in PER by 0.66. Assuming other variables are constant/fixed. It is known that the results of the analysis show SG has a Probability value of 0.00 < 0.05. With a t-statistic of -4.08. This means that the SG variable partially has a significant effect on the PER of LQ45 companies listed on the Indonesia Stock Exchange in 2016-2021. This result is different from the research conducted by (Ridwan & Diyani, 2018) the Sales variable does not have a significant effect on changes in stock prices, and this result is the same as the research conducted by (Hanif & Fuadyah, 2021) states that Sales have a significant effect on the Stock Price Ratio.

The Effect of Div on PER

A variable DIV coefficient of -0.10 means that every increase in DIV by 1 will cause a decrease in PER by 0.10. Assuming other variables are constant/fixed. The analysis results show that the Div has a Probability value of 0.002 < 0.05. With a t-statistic value of -3.09. This means that the Div variable partially has a significant effect on the PER of companies listed on the Indonesia Stock Exchange in 2016-2021. This result is the same as Research conducted by (Sijabat & Suarjaya, 2018a) show that Dividend has a positive and significant influence on the Price Earning Ratio, and in contrast to Research conducted by (Sijabat & Suarjaya, 2018a) states that dividends do not have a significant effect on the price earning ratio.
CONCLUSION

The results of this study can be used as a reference and consideration for companies in order to increase their share prices on the Indonesia Stock Exchange (IDX), where the findings of this study prove that ROA, SG, and Div have a significant negative effect on PER, meaning that if the company wants the value of the share price ratio (PER) to be attractive to investors (the lower the PER the more attractive to investors), then the company must increase profits, sales growth and the value of the company's cash dividends. Furthermore, for investors, the findings of this study prove that SMGR, ASII, HMSP, TLKM, BBCA stocks are the most expensive stock prices when viewed from the ratio of stock prices to earnings obtained during the 2016-2021 period. And TKIM, ITMG, INKP, ADRO, PGAS shares are the cheapest stock prices when viewed from the ratio of stock prices to company profits for the 2016-2021 period. So this will be a consideration for investors in choosing the best stock portfolio for stock investment on the Exchange.

REFERENCES


Wahyudiono, B. (2014). Mudah Membaca Laporan Keuangan (Raih Asa Sukses (ed.)).
