



## The Effect of Financial Information on Decision Making to Purchase Shares Using the TOPSIS Method (Technique for Order Preference by Similarity to Ideal Solution)

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**ABSTRACT:** In making stock investment decisions, it is important for investors to perform certain calculations and analyzes in order to be able to assess how well the performance of the issuer (company), with the aim of getting the expected rate of *return* and being able to minimize investment risk. This study was conducted to find out how the decisions that will be made by investors on buying shares on the Indonesia Stock Exchange using fundamental analysis. The difference between this study and previous research is that it adds a *Positive Ideal Solution (PIS)* and a *Negative Ideal Solution (NIS)* from financial information indicators ( *Dept to Equity Ratio, Return on Equity, Net Profit Margin, Return On Assets, Earning Per Share, Price Earning Ratio* ), and *Price Book Value* ) using the TOPSIS method. The sample in this study uses *securities* listed on the Indonesia Stock Exchange as many as 94 *securities*. The results showed that the *Dept to Equity Ratio, Return On Assets, Earning Per Share, Price Earning Ratio, and Price Book Value* had a significant effect on stock purchase decisions, while *Return on Equity* and *Net Profit Margin* had no effect on stock purchase decisions.

**KEYWORDS:** Financial Information, Negative Ideal Solution (NIS), Positive Ideal Solution (PIS), TOPSIS, Share Purchase Decision Making.

### I. INTRODUCTION

Based on the *Katadata Insight Center*, stocks are the most purchased financial securities by Millennial Investors in the last two years. This is evidenced by the results of a survey of 806 stock investors and 613 mutual fund investors. Based on research that has been done by PT. The Indonesian Central Securities Depository (KSEI) also shows that in the last two years the number of capital market investors registered as *Single Investor Identification (SID)* has increased rapidly. Initially only 2,484,354 in 2019, then increased to 3,880,753 (56.21%) in 2020 and 5,597,760 (44.24%) in 2021. Furthermore, in June 2021 KSEI has set a new record, namely as many as 58.39% of investors are under 30 years old with total assets of Rp. 35.77 T. Millennial investors are a crucial population group in Indonesia and have a productive nature and are strongly tied to social media (State & Febrianto, 2020). In making stock investment decisions, it is important for investors to carry out certain calculations and analyzes in order to be able to assess how well the issuer (company) is performing, with the aim of getting the expected rate of *return* and being able to minimize investment risk (Devaki, 2017).

One of the analyzes that can be used in making trading decisions is fundamental analysis. Fundamental analysis examines the movement of a company's stock price based on historical financial and accounting data. Seven fundamental signals that are considered more efficient by financial analysts in predicting stock returns are *Dept to Equity Ratio Information, Return on Equity Information, Net Profit Margin Information, Return On Asset Information, Earning Per Share Information, Price Earning Ratio Information, and Price Book Information Values*. When choosing a featured stock for investment, many factors are conflicting and need to be investigated properly to achieve the desired results. Thus, evaluating the company's financial performance on the stock market will be considered as *Multi-Criteria Decision-Making (MCDM)*. The MCDM method is a general approach for compiling information and evaluating decisions on a variety of issues with multiple and conflicting objectives. MCDM techniques are generally divided into *Multi-Objective Decision Making (MODM)* and *Multi-Attribute Decision Making (MADM)* techniques. MODM uses mathematical programming methods with a theoretical framework, while MADM takes part in various actual situations. Many MADM techniques have been developed by researchers. However, the TOPSIS method introduced by Hwang & Yoon (1981) is a simple and high flexibility computational method that is best used to solve MADM problems.



Research by Mohanram et al. (2018) show that a fundamental analysis-based approach can provide useful insights for analyzing stock purchases. The difference between this study and previous research is that it adds *Positive Ideal Solution* (PIS) and *Negative Ideal Solution* (NIS) from financial information indicators ( *Debt to Equity Ratio, Return on Equity Information, Net Profit Margin, Return On Assets, Earning Per Share, Price Earning Ratio, and Price Book Value* ) using the TOPSIS method in formulating well to have an infinitive choice or a large number of alternatives, the best of which must meet the *Decision Making* (DM) restrictions. The choice of making stock purchase decisions using fundamental analysis on the Indonesia Stock Exchange needs further research, this is due to the various types and objectives of investors in Indonesia who also have different decision making in buying shares. Therefore, researchers want to know how investors will make decisions on buying shares on the Indonesia Stock Exchange using fundamental analysis.

## II. LITERATURE REVIEW

### A. Agency Theory

Agency theory explains the relationship between principals (investors) and agents (managers). Agency problems often arise when both parties have asymmetric information and different interests. This conflict of interest is an agency problem that arises because of the information asymmetry between the principal and the agent. Judging from the agency theory in minimizing conflict, investors and management enter into an employment contract agreement by regulating the proportion of their respective rights and obligations in order to achieve the expected utility. Naufa & Lantara (2018) states that in the agreement both parties benefit from each other based on the company's performance.

### B. Prospect Theory

Prospect theory is a theory that explains how a person makes decisions in uncertain conditions. In prospect theory, it is revealed that someone will seek information first and then several " *decision frames* " or decision concepts will be made. Kahneman & Tversky (1979) put forward prospect theory explaining that every investor has a different reaction to risk. Prospect theory also shows that investor psychology determines investment decisions that are mined, this is because investors do not always behave rationally under uncertainty.

### C. Share

Shares are a sign of the capital participation of a person or party (business entity) in a company or limited liability company. There are several advantages of stock investment, namely stocks are very easy to trade, stocks are liquid and transparent, stock transactions can be done anywhere, investment capital is relatively small, investment returns are relatively high, administration and taxes are easy, can be done until old age and can be inherited (Suprasta & MN, 2020) . Shares are often interpreted as securities that indicate the ownership of a person or legal entity to the company issuing the shares. The stock price is the price that occurs on the stock market at a certain time determined by market participants. This market value is determined by the demand and supply of the relevant shares in the stock market. The stock market price is formed through the mechanism of supply and demand in the capital market. So, stock prices are price formations that occur in the capital market which are determined by the perpetrators (Kurniawan, 2019) .

### D. Financial Information

Fundamental analysis utilizes various information related to company finances, company management, competitors, and the market situation of the company's products/services (Baresa et al., 2013) . Fundamental analysis is based on that over time the stock price will deviate from its intrinsic value, if the stock price is below its intrinsic value then the stock is said to be *undervalued* so it is worth buying, otherwise if the stock price is above its intrinsic value then the stock is said to be *overvalued* so it is worth selling (Prastio & Muhani, 2022). ) . Zhu & Niu (2016) stated that financial information is very important for investors in assessing a company that will *go public* .

Financial information is contained in the financial statements of a company. Financial information consists of ratios containing the company's financial condition. Basically the analysis conducted by the company's management using financial statements can provide some information about the weaknesses and strengths of the company based on the results of the comparison of financial ratios, such as liquidity ratios, solvency ratios, activity ratios and profitability ratios. The information obtained has described the situation and condition of one management's performance in managing company finances (Fiador, 2013) .



**E. Decision-making**

Financial decision making has been widely recognized as one of the important factors in finance and financial well-being. Decision making is able to identify factors that are significantly related to financial decisions is one of the important issues to be used as a basis for individuals to make financial decisions (Suprasta & MN, 2020) . An investment decision is a policy or decision taken to invest in one or more assets in order to gain profits in the future. Investment decisions are related to sales decisions that consider the realization of returns (Fauziah et al. 2020) .

**F. TOPSIS method**

TOPSIS is an assessment method that is interpreted to provide an evaluation of the value of each object specifically (X. Zhu et al. 2014) . The TOPSIS method first presented by Yoon & Hwang (1995) is a simple and efficient criterion method for identifying solutions from a set of several alternatives based on simultaneous minimization of the ideal point distance and also maximizing the distance from the lowest point (Xu et al. 2015) . Olson (2004) states that this method uses distance as a reference to make comparisons and consider the distance to the positive ideal solution and the distance to the negative ideal solution simultaneously. Based on the alternatives that have been ranked, the optimal solution is then taken. The optimal solution that has been taken will be used as a reference for the decisions to be chosen. There are several procedures in the TOPSIS method including the following (Jhora et al. 2017) :

1. Build a decision matrix
2. Creating a normalized decision matrix using the equation:

$$r_{ij} = \frac{x_{ij}}{\sqrt{\sum_{i=1}^m x_{ij}^2}}$$

3. Create a weighted normalized decision matrix with the equation:

$$v_{ij} = w_j r_{ij}$$

4. Determine the positive ideal solution matrix and negative ideal solution with the equation:

$$A^+ = \{(max v_{ij} | j \in J), (max v_{ij} | j \in J'), i = 1, 2, 3, \dots, m\}$$

$$= \{v_1^+, v_2^+, v_3^+, \dots, v_n^+\}$$

$$A^- = \{(min v_{ij} | j \in J), (min v_{ij} | j \in J'), i = 1, 2, 3, \dots, m\}$$

$$= \{v_1^-, v_2^-, v_3^-, \dots, v_n^-\}$$

5. Calculate the positive ideal solution and negative ideal solution using the equation:

$$S_i^+ = \sqrt{\sum_{j=1}^n (v_{ij} - v_j^+)^2}, \text{ dengan } i = 1, 2, 3, \dots, m$$

$$S_i^- = \sqrt{\sum_{j=1}^n (v_{ij} - v_j^-)^2}, \text{ dengan } i = 1, 2, 3, \dots, m$$

6. Calculating the relative closeness to the positive ideal solution using the equation:

$$c_i^+ = \frac{S_i^-}{(S_i^- + S_i^+)}, 0 \leq c_i^+ \leq 1$$

7. Ranking the alternatives

**III. RESEARCH METHODOLOGY**

Researchers want to know the effect of independent variables, namely financial information consisting of Dept to Equity Ratio, Return on Equity Net Profit Margin Return On Asset Earning Per Share, Price Earning Ratio and Price Book Value on the dependent variable is the decision to buy shares in companies listed on the Indonesia Stock Exchange using the TOPSIS method. This type of research is causality research. This causality study seeks to examine one or more important variables related to the research problem.

The population used in this study are all companies that have been listed on the Indonesia Stock Exchange (IDX) in the period of 2022, the sample of this research is non-banking financial companies ( *securitas* ) that have been listed on the Indonesia



Stock Exchange in the period of 2022. Reasons for selecting the sample The research is that investors can only transact the purchase and sale of shares with *securities intermediaries*. The number of *securities* listed on the Indonesia Stock Exchange is as many as 94 *securities* that are sampled in this study.

The source of data in this study is primary data. The primary data sources referred to in this study are individual respondents who provide information to researchers regarding the problems that occur. Data retrieval using *google forms*. After collecting data using *google form*, the researcher will group the results of the questionnaire into *Microsoft excel* and then TOPSIS is carried out as a medium for processing data using Eviews.

**A. Operational Research Variable**

The independent and dependent variables in this study are as follows:

Variable	Indicator	Scale	Source
Decision Making (Y)	The TOPSIS method is a multi-criteria method used to identify solutions from a set of alternatives based on simultaneous minimization of the ideal point distance and also maximizing the distance from the lowest point. TOPSIS can incorporate the relative weights of important criteria.	Likert	(Olson, 2004) .
Financial Information (X)	a. Dept to Equity Ratio (DER) = $\frac{\text{Total Hutang}}{\text{Modal Sendiri}}$ b. Net Profit Margin (NPM) = $\frac{\text{Net Sales} - \text{Cost Of God Sold}}{\text{Sales}}$ c. Return on Asset (ROA) = $\frac{\text{Earning after interest and tax}}{\text{Total Assets}}$ d. Return on Equity (ROE) = $\frac{\text{Earning after interest and tax}}{\text{Total Equity}}$ e. Earnings Per Share (EPS) = $\frac{\text{Net Income}}{\text{Number Of Shares Outstanding}}$ f. Price Earning Ratio (PER) = $\frac{\text{Harga Saham}}{\text{Earning per lembar saham}}$ g. Information Price Book Value (PBV) = $\frac{\text{Harga Saham}}{\text{Nilai buku per lembar saham}}$	Likert	(Herawati & Son, 2018)

**B. Analysis Method**

The analytical method used in this research is multiple linear regression analysis method; The data obtained will be processed and analyzed so that the data can be utilized. The data can be used as a basis for decision making. The purpose of this analytical method is to provide interpretation and interest. The data that has been collected in this study will be analyzed using quantitative analysis methods using the Eviews program. In order for the regression model of this study to be consistent and unbiased, several classical assumption tests were carried out, namely normality test, multicollinearity test, and heteroscedasticity test. The analysis model in this study uses multiple linear regression with the equation:

$$PK : \alpha + \alpha_1 \text{DER} + \alpha_2 \text{NPM} + \alpha_3 \text{ROA} + \alpha_4 \text{ROE} + \alpha_5 \text{EPS} + \alpha_6 \text{PER} + \alpha_7 \text{PBV} + e$$

Information:

- Y : Decision Making
- $\alpha_0$  : Constant
- $\alpha_1, \alpha_2, \alpha_3, \alpha_4, \alpha_5, \alpha_6, \alpha_7$  : Regression coefficient
- DER : Information *Dept to Equity Ratio* (DER)
- NPM : *Net Profit Margin* (NPM)
- ROA : *Return on Assets* (ROA)
- ROE : *Return on Equity* (ROE)



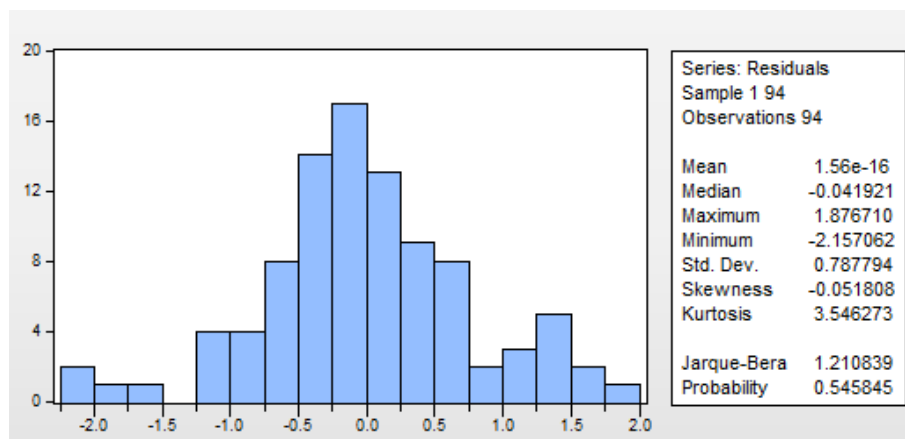
EPS : Earnings Per Share (EPS)  
 PER : Price Earning Ratio (PER)  
 PBV : Price Information Book Value (PBV)  
 e : Error term

**C. Hypothesis Testing Design**

After the regression model used in this study is confirmed to be in accordance with the requirements of the classical assumption test, then hypothesis testing can then be carried out. The process of testing the hypothesis will be decided whether the research hypothesis will be accepted or rejected.

**IV. RESEARCH RESULT**

**A. Normality test**



Based on the results of the normality test, it is known that the significance value is  $0.545 > 0.05$ , so it can be concluded that the residual value is normally distributed.

**B. Multilinearity Test**

	X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>	X <sub>4</sub>	X <sub>5</sub>	X <sub>6</sub>	X <sub>7</sub>
X <sub>1</sub>	<b>1.0000000</b>	0.830590	0.852687	0.831761	0.870981	0.847037	0.872928
X <sub>2</sub>	0.830590	<b>1.0000000</b>	0.850794	0.820262	0.884669	0.850972	0.822605
X <sub>3</sub>	0.852687	0.850794	<b>1.0000000</b>	0.914630	0.823861	0.801764	0.889355
X <sub>4</sub>	0.831761	0.820262	0.814630	<b>1.0000000</b>	0.898094	0.865053	0.848600
X <sub>5</sub>	0.870981	0.884669	0.823861	0.898094	<b>1.0000000</b>	0.806014	0.900147
X <sub>6</sub>	0.847037	0.850972	0.801764	0.865053	0.806014	<b>1.0000000</b>	0.886975
X <sub>7</sub>	0.872928	0.822605	0.889355	0.848600	0.801147	0.886975	<b>1.0000000</b>

The correlation value between DER Information, ROE Information, NPM Information, ROA Information, EPS Information, PER Information, and PBV Information is  $< 0.90$ , so there is no multicollinearity problem.

**C. Heteroscedasticity Test**

F-statistics	2.390299	Prob. F(1.91)	0.1256
Obs*R-squared	2.380309	Prob. Chi-Square(1)	0.1229

Prob value. Chi-Square is  $0.1229 > 0.05$ , so there is no heteroscedasticity problem.



**D. Correlation Test**

Variable	Coefficient	Std. Error	t-Statistic	Prob.	Conclusion	Information
C	-1.114706	0.322064	-3.461136	0.0008		
DER Information	0.157806	0.061343	2.572522	0.0118	< 0.05	Significantly positive effect
ROE Information	0.069710	0.067109	1.038752	0.3018	> 0.05	No significant effect
NPM Information	0.087016	0.076368	1.139431	0.2577	> 0.05	No significant effect
ROA Information	0.367101	0.064606	5.682179	0.0000	< 0.05	Significantly positive effect
EPS Information	0.152509	0.076372	1.996928	0.0490	< 0.05	Significantly positive effect
PER information	-0.174571	0.062548	-2.790993	0.0065	< 0.05	Significantly negative effect
PBV Information	0.447881	0.077047	5.813105	0.0000	< 0.05	Significantly positive effect

**E. TOPSIS method**

1. Share purchase decision matrix

Alternative	Dept. to Equity Ratio	Return on Assets	Earning Per Share	Price Earning Ratio	Price Book Value
A	8	8.33	5	8	7.00
B	7.67	8.67	4.33	8.00	7.00
C	7.33	7.67	7	8.00	7.00
D	7.33	7.67	7.33	8.00	7.00
E	7.33	8.67	5.33	8.00	7.00
F	8.33	8.67	4	8.00	7.00
G	7.33	8.33	5.33	8.00	7.00
Divider	20,183	21,949	14,814	21.166	18,520

2. Create a normalized decision matrix for stock purchases

Alternative	Dept. to Equity Ratio	Weight	Return on Assets	Weight	Earning Per Share	Weight	Price Earning Ratio	Weight	Price Book Value	Weight
A	0.396	7,333	0.380	8,667	0.338	6,333	0.396	8,000	0.304	7,000
B	0.380		0.395		0.293		0.396		0.334	
C	0.363		0.349		0.473		0.396		0.334	
D	0.363		0.349		0.495		0.396		0.319	
E	0.363		0.395		0.360		0.396		0.319	
F	0.413		0.395		0.270		0.396		0.319	
G	0.363		0.380		0.360		0.396		0.319	

3. Create a weighted normalized decision matrix for stock purchases

Alternative	Dept. to Equity Ratio	Return on Assets	Earning Per Share	Price Earning Ratio	Price Book Value
A	2,907	3,290	2,138	2,907	2,632
B	2,786	3,422	1,853	2,907	2,896
C	2,665	3,027	2,993	2,907	2,896
D	2,665	3,027	3,135	2,907	2,764
E	2,665	3,422	2,280	2,907	2,764
F	3,028	3,422	1,710	2,907	2,764
G	2,665	3,290	2,280	2,907	2,764





4. Determine the matrix of positive ideal solutions and negative ideal solutions, as well as the distance between alternatives and the ideal solution for making stock purchase decisions

Alternative	Dept. to Equity Ratio	Return on Assets	Earning Per Share	Price Earning Ratio	Price Book Value
Positive (A <sup>+</sup> )	3.028	3,422	3,135	2,907	2,896
A	0.015	0.017	0.995	0.015	0.624
B	0.059	0	1,645	0.015	0.277163
C	0.132	0.156	0.020	0.015	0.277
D	0.132	0.156	0	0.015	0.433
E	0.132	0	0.731	0.015	0.433067
F	0.000	0	2.031	0.014669	0.433067
G	0.132	0.017	0.731	0.015	0.433
Negative (A <sup>-</sup> )	2,665	3,027	1,710	2,907	2,632
A	0.059	0.069	0.183	0.059	0.156
B	0.015	0.156	0.020	0.059	0.017
C	0	0	1,645	0.058677	0.017323
D	0	0	2.031	0.058677	0.069291
E	0	0.156	0.325	0.058677	0.069
F	0.132	0.156	0	0.059	0.069
G	0	0.069	0.325	0.058677	0.069

5. Calculating the relative proximity to the ideal solution and ranking the alternatives for making stock purchase decisions

Alternative	Positive (Si <sup>+</sup> )	Negative (Si <sup>-</sup> )	Preferences (Ci <sup>+</sup> )	Rank
A	1,291	0.725	2.015	0.360
B	1.413	0.517	1,929	0.268
C	0.775	1.312	2,087	0.629
D	0.858	1,469	2,327	0.631
E	1.145	0.780	1,925	0.405
F	1,574	0.645	2,219	0.291
G	1,152	0.723	1,875	0.385

## V. DISCUSSION

### A. The effect of Dept to Equity Ratio Information on Stock Purchase Decision Making

Based on the results of the first hypothesis (H1), it states that there is an influence between the Information *Dept. to Equity Ratio* on stock purchase decisions. The results of the p value shows 0.0118, which is <0.05, it can be concluded that the Information *Dept. to Equity Ratio* has a significant influence on stock purchase decisions. The level of information on *Debt to Equity Ratio* (DER) affects investors' decisions to invest in companies. The results of this study are in line with Hertina & Saudi (2019) which shows that high DER information reflects high company risk so that investors will decide to sell company shares because the higher DER information, the lower the stock return received by investors.

### B. The effect of Return on Equity Information on Decision Making to Purchase Shares

Based on the results of the second hypothesis (H2), it states that there is no influence between *Return on Equity Information* on stock purchase decisions. The results of this study indicate that the *Return on Equity Information* has no influence on the decision to purchase shares. Where the result of the p value of 0.2577 is > 0.05, it can be concluded that Information *Return on Equity* does not have a significant effect on share purchase decisions. The results of this study are in line with Rahmadewi & Abundanti (2018)



which show that ROE information has a negative and significant effect on stock prices. That is, investors do not see ROE as one of the reasons for making stock purchase decisions.

### **C. The effect of Net Profit Margin Information on Decision Making to Purchase Shares**

Based on the results of the third hypothesis (H<sub>3</sub>), it states that there is no influence between *Net Profit Margin information* on stock purchase decisions. The result of the p value of  $0.3018 > 0.05$  shows the information on *Net Profit Margin* does not have a significant effect on share purchase decisions. Low *Net Profit Margin* information indicates that sales are too low for a certain level of costs, or costs that are too high for a certain level of sales, or a combination of both. In general, a low ratio can indicate management inefficiency. The results of this study are in line with the research of Pratama & Erawati (2016) which states that relatively small company data cannot have a significant influence on stock prices.

### **D. The effect of Return on Asset Information on Decision Making to Purchase Shares**

Based on the results of the fourth hypothesis (H<sub>4</sub>), it states that there is an influence between *Return on Assets information* on stock purchase decisions. The results of the p value of  $0.0000 < 0.05$ , indicating that the *Return on Asset . information* has a significant influence on stock purchase decisions. Low ROA can result from a conscious decision to use a lot of debt, in this case a high interest expense will cause net income to be relatively low. The results of this study are in line with Husna & Satria's research (2019) showing that ROA has an effect on stock purchase decisions. High profits provide an indication of the company's good prospects so that it can trigger investors to participate in increasing the demand for shares.

### **E. The effect of Earning Per Share Information on Share Purchase Decision Making**

Based on the results of the fifth hypothesis (H<sub>5</sub>), it states that there is an influence between *Earning Per Share information* on stock purchase decisions. The result of the p value of  $0.0490 < 0.05$  indicates that the *Earning Per Share information* has a significant influence on stock purchase decisions. The results of this study are in line with Kumar's research (2017) which states *Earning Per Share* be a very strong value of the market price of a particular company's stock. *Earning Per Share* is a major reflector in the performance of stock market prices. Based on the change and direction of the *Earning Per Share ratio* can help existing and potential investors to make stock purchase decisions.

### **F. The effect of Price Book Value Information on Share Purchase Decision Making**

Based on the results of the sixth hypothesis (H<sub>6</sub>) states that there is an influence between *Price Book Value information* on stock purchase decisions. The results of the p value of  $0.0065 < 0.05$ , it can be concluded that the *Price Book Value* information has a significant influence on stock purchase decisions. Chairini Ibrahim & Patuan Panjaitan (2020) stated that *Price to Book Value* is a measure that serves to see whether a company's shares can be said to be expensive or cheap. The greater the PBV ratio, the higher the company is valued by investors relative to the funds that have been invested in the company. The results of this study are in line with the research of Andamari et al. (2021) which shows that PBV simultaneously has a significant effect on stock prices.

### **G. The effect of Price Earning Ratio Information on Stock Purchase Decision Making**

Based on the results of the seventh hypothesis (H<sub>7</sub>) states that there is an influence between *Price Earning Ratio information* on stock purchase decisions. The result of the p value of  $0.0000 < 0.05$  indicates that the *Price Earning Ratio information* has a significant influence on stock purchase decisions. Putra et al. (2019) states that the PER approach will help investors calculate how many times ( *multiplier* ) the value of *earnings* is reflected in the price of a stock. The results of this study are in line with Desiana's research (2018) which states that there is an influence between PER on stock prices. Investment decision-making using the PER approach is done after knowing the results of the intrinsic value compared to the market price to determine whether the stock is *undervalued* or *overvalued* .

## VI. CONCLUSION

Based on the results of the study, it can be concluded that:

1. Information from the *Debt to Equity Ratio* has an effect on making decisions to purchase shares listed on the Indonesia Stock Exchange.
2. Information on *Return on Equity* has no effect on Decision Making to Purchase Shares listed on the Indonesia Stock Exchange.





3. Information on *Net Profit Margin* has no effect on Decision Making to Purchase Shares listed on the Indonesia Stock Exchange.
4. Information on *Return on Assets* influences the decision to purchase shares listed on the Indonesia Stock Exchange.
5. Information on *Earning Per Share* has an effect on making decisions to purchase shares listed on the Indonesia Stock Exchange.
6. Information on *Price Earning Ratio* has an effect on making decisions to purchase shares listed on the Indonesia Stock Exchange.
7. *Price Book Value* information affects the decision to purchase shares listed on the Indonesia Stock Exchange.

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