

## Conference Paper

# The Effect of Earning Per Share (EPS), Price Earning Ratio (PER) and Price Book Value (PBV) Against the Stock Price of Telecommunications Sector Company Included in the Indonesian Islamic Stock Index (ISSI)

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**Abstract**

**Objective** - This study aims to analyze the effect of Earning Per Share (EPS), Price Earning Ratio (PER) and Price Book Value (PBV) on Stock Prices in Telecommunications Sector Companies Included in the Indonesian Syariah Stock Index (ISSI) for the period 2013 - 2017.

This research method uses secondary data, namely data sources do not directly provide data to the author, for example through other people or documents. The sampling technique is purposive sampling. Of the population of 6 Telecommunications companies listed on the Indonesian Syariah Stock Index, 4 companies that met the sample criteria were telecommunication sector companies that were registered in the calculation of the Indonesian Syariah Stock Index (ISSI) in 2013-2017, telecommunications companies that experienced 2 years of delisting -according to the calculation of the 2013-2017 Indonesian Sharia Stock Index (ISSI), and telecommunications companies that submit their financial statements regularly in 2013-2017. The analytical method used is the classical assumption (normality test, multicollinearity test, heteroscedasticity test and autocorrelation test), multiple linear regression, coefficient of determination, partial test hypothesis (t test) and simultaneous test (F test).

**Results** - The results of the study show that the results of partial hypothesis testing (t test) Earning Per Share (EPS) do not have an effect and are not significant on stock prices with a significance level of ( $0.152 > 0.05$ ) and t-count smaller than t-table ( $-1,505 < 2,120$ ). Price Earning Ratio (PER) has no effect and is not significant on stock prices with a significance level of ( $0.908 > 0.05$ ) and t-count is smaller than t-table ( $-0.117 < 2.120$ ). Price Book Value (PBV) has a significant effect on stock prices with a significance level of ( $0.001 < 0.05$ ) and t-count is greater than t-table ( $3.988 > 2.120$ ).

**Discussion** - It is hoped that this research can become a reference for expanding population coverage and research samples at Telecommunications companies. Add variables and observation periods for further research.

**Keywords:** Earning Per Share (EPS), Price Earning Ratio (PER), Price Book Value (PBV) and Stock Prices

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## 1. Introduction

The dynamic development of the international economy is very influential on the policies issued by the Indonesian government. The government policy made economic conditions in Indonesia fluctuate or less stable. This made people, private companies and government-owned companies worried about this development.

This phenomenon raises awareness for the people of Indonesia to have other income outside of their fixed income in the form of salaries or profits from other businesses. The types of businesses can be various, which essentially is done in order to get extra income or can be called an investment activity.

In this day and age, shares are already familiar to the public. Not a few people have invested in stocks. The stock itself is a proof of equity participation in the company and with proof of participation, the shareholder has the right to obtain a share of the proceeds from the company.

The number of Indonesian capital market investors has exceeded 1 million. This figure is obtained from data from the Indonesian Central Securities Depository (KSEI) as of June 7, 2017 which reached a consolidated number of 1 million SID, consisting of investors owning shares, bonds, mutual funds, state securities (SBN) and other securities recorded at KSEI [ 1,2].

While sharia shares are stocks that have characteristics in accordance with Islamic sharia or better known as shariah compliant. The Indonesian Syariah Stock Index (ISSI) is one of the stock indices that is on the Indonesia Stock Exchange (IDX). Where these shares have been carefully selected and free from the element of usury or are in accordance with sharia. The development of the current stock value is very volatile. Stock prices will generally fluctuate, either positive (up) or negative (down). This stock price fluctuation is caused by several internal and external factors.

Before investing, investors should not only look at the company's net income, but also analyze the issuer's financial statements. For example, telecommunication service companies in Indonesia, which telecommunication companies attract investors because many people need telecommunications in line with the times.

It cannot be denied that at present no one does not need communication in everything, both in education, economic activities, politics and others, of course, requires communication. Therefore, the emergence of telecommunications services that are currently certainly needed by all people, therefore in this research the sub sector used is a telecommunications service company.

Therefore, there are telecommunication services currently needed by everyone, for example the largest telecommunications services company in Indonesia, namely PT Telekomunikasi Indonesia, PT Indosat, PT XL Axiata and PT Smartfren Telecom. In the following table listed the closing prices of shares from 2013-2017 for each company:

TABLE 1: Telecommunication Company Stock Prices for the 2013-2017 Period.

Company	Stock Prices (IDR)				
	2013	2014	2015	2016	2017
PT Telekomunikasi Indonesia	2150	2865	3105	3980	4440
PT Indosat	4150	4050	5500	6450	4800
PT XL Axiata	5200	4865	3650	2310	2960
PT Smartfren Telecom	54	91	51	53	50

Source: [www.idx.co.id](http://www.idx.co.id) (data processed)

The development of this stock price shows that the share price of a telecommunications company still has a good success rate to attract investors. In general there are various factors that influence stock prices, namely external influences (supply and demand, a country's inflation rate, tax rate, level of risk and the level of capital market efficiency), issuer's financial performance and investor behavior.

Viewed from the investor's point of view, one of the important indicators for assessing company prospects in the future is to see the extent of the company's growth. To measure the level of success of the company in investment activities there is a ratio analysis, including liquidity ratios, solvability ratios, activity ratios, profitability ratios, and market ratios. The ratio that is most often used as a reference for a prospective investor is the profitability ratio. This indicator is very important to note to find out the extent to which investments that investors will make in a company can provide a return that is in accordance with the rate of return required by investors.

Profitability ratios include gross profit margin, net profit margin, total asset / investment return and Earning Per Share (EPS). The ratio most often considered before investing is earnings per share or EPS as well as Price Book Value (PBV). This number shown from EPS is often published regarding the performance of companies that sell their shares to the public (go public), because investors and potential investors are of the view that EPS contains important information to predict the level of stock prices in the future, and EPS is also relevant for assess the effectiveness of the company's financial management.

Price Book Value (PBV) is the ratio of stock prices to the book value of a company. This ratio shows the level of the company's ability. This ratio shows the level of ability of the company to create value relative to the capital invested. A high PBV reflects a

high share price compared to the book value per share. The higher the stock the more successful the company creates value for shareholders. In addition, there is also an analysis of Price Earning Ratio or price ratio to profit (PER). PER is used to measure the amount of money to be paid by investors for every rupiah of company income. The higher the PER, the greater the investor's trust in the company's future.

## 2. Literature Review

### 2.1. Share Prices

According to Jogiyanto the notion of stock prices is "The price of a stock that occurs on the stock market at a certain time determined by market participants and is determined by demand and supply of contested shares in the capital market". [3] Whereas according to Darmadji and Fakhrudin [4] share prices occur on the stock at certain times. Stock prices can change up or down in such a fast time. Stock prices can change in minutes and can even change in seconds. This is possible because it depends on demand and supply between buyers of shares with sellers of shares. A stock has value or price and can be divided into three, namely:

#### 1. Nominal Price

The nominal price is the value stated on the stock sheet whose amount is determined in the articles of association of the company. The nominal price is largely a low estimated price, which is arbitrarily imposed on the company's shares. This price is useful for determining the price of shares issued. The amount of the nominal price gives the importance of the stock because the minimum dividend is usually set based on the nominal value.

#### 2. Prime Prices

This price is the price recorded on the stock exchange. Stock prices on the primary market are usually set by underwriters and issuers. Thus it will be known how much the share price of the issuer will be sold to the public.

#### 3. Market price

This price is the price set on the stock exchange for public company shares or estimated prices for companies that do not own shares. In the stock market, this number changes every day in response to the actual results as reflected in the stock market index. This also shows that management's goal is to ensure the best possible price under any conditions.

According to Fahmi [5] there are several conditions in the situation that determine a stock business will experience fluctuations, namely:

- a) Micro and macro economic conditions.
- b) The company's policy in deciding to expand (business expansion), such as opening a branch office, a sub-branch office that is opened both at home and abroad.
  - i. Sudden change of directors.
  - ii. The presence of directors or commissioners of companies involved in criminal acts and the case has been entered into court.
  - iii. The company's performance continues to decline in every time.
  - iv. Systematic risk, which is a form of risk that occurs thoroughly and causes the company to get involved.
  - v. The effects of market psychology were able to suppress the technical conditions of buying and selling shares.

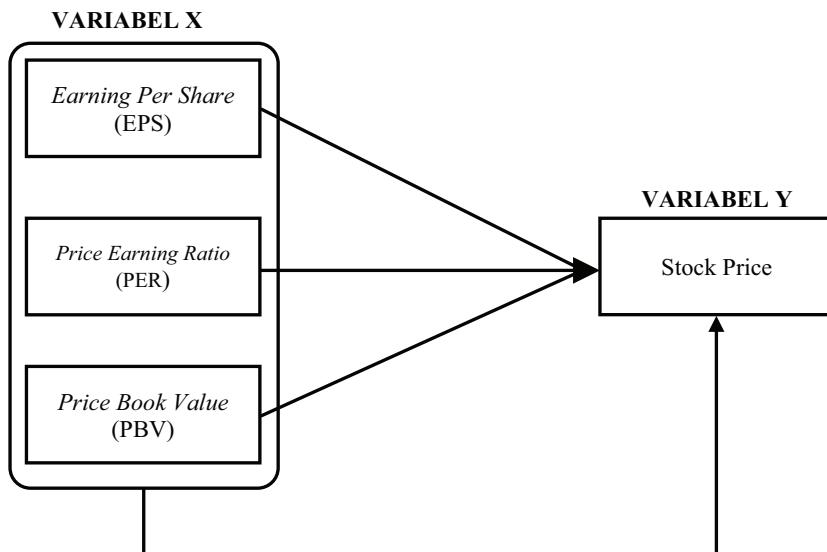
## 2.2. The Dow Theory

Dow Theory seeks to investigate how trends are happening in the stock market, both individual and overall stocks. The shift includes the primary movement, namely the long-term trend of the capital market, the second movement (secondary movement), namely the trend that only occurs a few months and this movement does not change the direction of the first move but only corrects stock prices, third movement (tertiary movement) is a trend that shows the daily fluctuations of the price of the stock price [8]. In this study, researchers want to know in terms of financial statements and are limited to Earning Per Share, Price Earning Ratio, and Price Book Value.

## 2.3. Measurement Ratio

In this study the author will only discuss Earning Per Share (EPS), Price Earning Ratio (PER) and Price to Book Value (PBV).

1. Earning Per Share (EPS) is a ratio to measure management success in achieving profit for shareholders, according to Kasmir. [5] The higher the EPS value, of course, encourages shareholders because the greater the profit provided to shareholders. The profit ratio shows the combined impact of liquidity and management of assets and liabilities on a company's ability to generate profits. So, it can be concluded



**Figure 1:** Framework.

that EPS is a ratio that shows the amount of profit earned from each share. The formula for Earning Per Share (EPS) is:

$$EPS = \frac{\text{Net Profit}}{\text{Shares}}$$

H1: There is the effect of Earning Per Share (EPS) on the Stock Price.

2. Hery [6] also says that the price ratio of earnings (Price Earnings Ratio) is a ratio that shows the results of a comparison between market prices per share with earnings per share. Through this ratio, the price of an issuer's stock is compared to the net profit generated by the issuer in a year. By knowing the magnitude of the PER, potential investors can find out whether the price of a stock is reasonable or not (in real terms) according to current conditions rather than based on future estimates. This ratio is often used by stock analysts to assess stock prices. The Price Earnings Ratio formula is:

$$PER = \frac{\text{Market Price Per Share}}{\text{Earning Per Share}}$$

H2: There is the effect of Price Earnings Ratio (PER) on the Stock Price.

3. Price Book Value (PBV) according to Fahmi [7], "This ratio measures how much the stock price in the market is compared to the book value of its shares. The higher the ratio, the more trusted the company is, meaning that the value of the company is higher." The Price Book Value (PBV) formula is:

$$PBV = \frac{\text{Stock Price Per Share}}{\text{Share Book Value}}$$

H3: There is an influence of Price Book Value (PBV) on Stock Prices.

H4: There is the effect of Earning Per Share (EPS), Price Earning Ratio (PER) and Price Book Value (PBV) on the Stock Price.

### 3. Research Methodology

#### 3.1. Research design

This research is associative quantitative, which means finding a relationship between two or more variables by processing data in the form of numbers by carrying out the classical assumption test, the method of multiple linear regression analysis and hypothesis testing.

The type of data used in this study is secondary data, by looking at financial statements and stock price lists of telecommunications companies listed on the IDX (Indonesian Stock Exchange) which are included in the ISSI during the 2013-2017 period which is on the IDX official website, [www.idx.co.id](http://www.idx.co.id).

#### 3.2. Data Sources, Places and Times of Research

Based on the source, the data is divided into primary data sources and secondary data sources. Sugiyono [8] states that primary sources are data sources that directly provide data to data collectors, and secondary sources are sources that do not directly provide data to data collectors, for example through other people or through documents.

The data sources used in this study are secondary data sources, namely the source of data obtained from library literature such as books, articles, newspapers, internet and other sources relating to this research material, in the form of incoming telecommunications companies' financial statements. in the Islamic Sharia Stock Index list of Indonesia through downloading on the website [www.idx.co.id](http://www.idx.co.id) and the website of each company, as well as from various literatures such as previous research and books relating to the problem under study.

This research was conducted at a telecommunications service company listed on the Indonesian Syariah Stock Index (ISSI) which was accessed through the Indonesia Stock Exchange (IDX) website [www.idx.co.id](http://www.idx.co.id), as well as the websites of each company. The research was conducted from November 2018 to February 2019.

### 3.3. Population and Samples

The sampling technique according to Sugiyono [9] can be grouped into two namely probability sampling and nonprobability sampling.

Probability sampling is a sampling technique that provides equal opportunities for each element (member) of the population to be selected as members of the sample. Whereas nonprobability sampling is a sampling technique that does not provide equal opportunity or opportunity for each element or member of the population to be selected as a sample.

The sampling technique used in this study is nonprobability sampling with purposive sampling technique. Purposive sampling is a technique of sampling data sources with certain considerations. The criteria that meet to be sampled in this study are as follows:

1. Telecommunication sector companies registered in the calculation of the Indonesian Syariah Stock Index (ISSI) in 2013-2017
2. Telecommunication companies that experienced delisting 2 years in a row from the calculation of the 2013-2017 Indonesian Syariah Stock Index (ISSI)
3. Telecommunication companies that submit their financial statements regularly in 2013-2017.

### 3.4. Data Collection Method

The data in this study were collected by the documentation method, which is to obtain data from documents in the form of financial statements and stock price reports that come from:

1. Annual report of each company
2. [www.idx.co.id](http://www.idx.co.id)

The type of data used in this study is secondary data, time series obtained from the audited financial statements of telecommunications sector companies that are listed on the IDX during 2013 to 2017 and the data are quantitative data, namely data with numbers which are then processed and interpreted to obtain meaning from the data.

## 4. Data Analysis Method

The sampling technique used in this study is nonprobability sampling with purposive sampling technique. Purposive sampling is a technique of sampling data sources with certain considerations. The criteria that meet to be sampled in this study are as follows:

1. Telecommunication sector companies registered in the calculation of the Indonesian Syariah Stock Index (ISSI) in 2013-2017.
2. Telecommunication companies that experienced delisting 2 years in a row from the calculation of the 2013-2017 Indonesian Syariah Stock Index (ISSI).
3. Telecommunication companies that submit their financial statements regularly in 2013-2017.

With those points in mind, therefore the samples that were chosen are:

TABLE 2: Research Sample List.

No.	Code	Company
1.	TLKM	PT Telekomunikasi Indonesia
2.	ISAT	PT Indosat
3.	EXCL	PT XL Axiata
4.	FREN	PT Smartfren Telecom

Calculation of Earning Per Share (EPS), Price Earning Ratio (PER) and Price to Book Value (PBV), and stock prices use excel which then data is processed using the SPSS application.

## 5. Result

### 5.1. Normality Test

In Image 2 the normal P-Plot graph shows the distribution of data (points) spread following and approaching the diagonal line. So it can be concluded that the regression model is normally distributed and meets the assumptions of normality.

From table 3 the results of the normality test of Kolmogorov-Smirnov value are 0.236 with the value of Asymp. Sig for 0.121 > 0.05. This shows that the data is normally distributed.

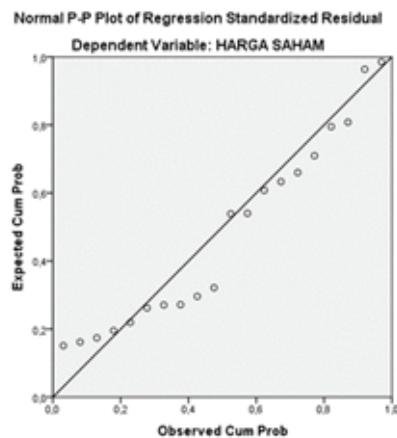
**Figure 2:** Normal P-Plot.

TABLE 3: One-Sample Kolmogorov-Smirnov Test.

		<b>Unstandardized Residual</b>
N		10
Normal Parameters <sup>a,b</sup>	Mean	,0000000
	Std. Deviation	,00003800
Most Extreme Differences	Absolute	,236
	Positive	,236
	Negative	-,155
Test Statistic		,236
Asymp. Sig. (2-tailed)		,121 <sup>c</sup>

a. Test distribution is Normal.  
 b. Calculated from data.  
 c. Lilliefors Significance Correction.

## 5.2. Multicollinearity Test

TABLE 4: Multicollinearity Test.

Model	Coefficients <sup>a</sup>	
	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
EARNING PER SHARE	,741	1,349
PRICE EARNING RATIO	,992	1,008
PRICE BOOK VALUE	,743	1,346

a. Dependent Variable: HARGA SAHAM

From table 4, it can be seen that the data in this study did not have multicollinearity or there was no relationship between the independent variables. This can be seen from the VIF value of all the independent variables below 10, which are respectively 1,349 for EPS, 1,008 for PER and 1,346 for PBV. In addition, the Tolerance values for each variable are above 0.1, which is 0.741 for EPS, 0.992 for PER and 0.743 for PBV, respectively. Therefore, it can be concluded that the independent variables used in the regression model of this study are free from multicollinearity.

### 5.3. Heteroscedasticity Test

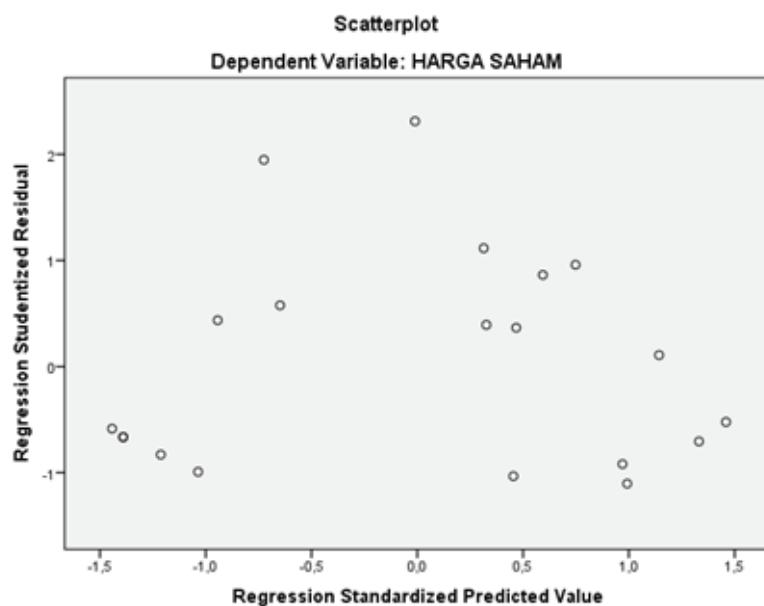


Figure 3: Heteroscedasticity Test.

From Figure 3, it can be seen that the data points spread above and below or around the number 0 (zero), and also the spread of points does not form a particular pattern, it can be concluded that there is no heteroscedasticity in the regression model. So that the regression model is feasible to use in testing.

### 5.4. Autocorrelation Test

From table 5 the results of the autocorrelation test above, can be seen in the Durbin-Watson (DW) column that the value is 0.370 or greater than -2 and smaller than +2 (-2 < 0.370 <+2). Then it can be concluded that the regression model does not occur autocorrelation.

TABLE 5: Autocorrelation Test.

Model Summary <sup>b</sup>	
Model	Durbin-Watson
1	,370
a. Predictors: (Constant), PRICE BOOK VALUE, PRICE EARNING RATIO, EARNING PER SHARE	
b. Dependent Variable: HARGA SAHAM	

## 5.5. Multiple Linear Regression

TABLE 6: Multiple Linear Regression.

Coefficients <sup>a</sup>			
Model		Unstandardized Coefficients	
		B	Std. Error
1	(Constant)	107,464	812,226
	EARNING PER SHARE	-3,189	2,120
	PRICE EARNING RATIO	-0,152	1,295
	PRICE BOOK VALUE	1444,856	362,296
a. Dependent Variable: HARGA SAHAM			

$$Y = \alpha + b_1 X_1 + b_2 X_2 + b_3 X_3 + \epsilon$$

$$\text{Stock Prices} = 107,464 - 3,189 \text{EPS} - 0,152 \text{PER} + 1444,856 \text{PBV} + \epsilon$$

From the regression equation above, the regression estimation results can be described as follows:

1)  $\alpha$  (constant) = 107,464

The constant value of 107.464 shows a positive number which means that if the independent variable is EPS, PER and PBV is zero, then the stock price is 107.464.

2) Earning Per Share (EPS)

The regression coefficient value on EPS shows a negative influence on the share price of telecommunications companies in ISSI, which can be interpreted that any increase in EPS, then the stock price will decline.

3) Price Earnings Ratio (PER)

The regression coefficient value in PER shows a negative influence on the share price of telecommunication companies in ISSI, which can be interpreted that every increase in PER, then the stock price will decline.

#### 4) Price Book Value (PBV)

The regression coefficient value on PBV shows that there is an increase in PBV, then the stock price will also increase.

### 5.6. Coefficient of Determination Analysis

TABLE 7: Coefficient of Determination Analysis.

Model Summary <sup>b</sup>		
Model	R	R Square
1	,711 <sup>a</sup>	,506

a. Predictors: (Constant), PRICE BOOK VALUE, PRICE EARNING RATIO, EARNING PER SHARE  
b. Dependent Variable: HARGA SAHAM

Based on table 5.5 above, it is obtained the number  $R^2$  (R Square) of 0.506 or (50.6%). This shows that the contribution percentage of the influence of the independent variables (EPS, PER and PBV) on the dependent variable (Stock Price) is 50.6%. Or variations in the independent variables used in the model (EPS, PER and PBV) are able to explain 50.6% of the variation of the dependent variable (Stock Price). While the remaining 49.4% is influenced or explained by other variables not included in this research model.

### 5.7. Partial Test

TABLE 8: Partial Test.

Coefficients <sup>a</sup>			
Model		t	Sig.
1	(Constant)	,132	,896
	EARNING PER SHARE	-1,505	,152
	PRICE EARNING RATIO	-,117	,908
	PRICE BOOK VALUE	3,988	,001

a. Dependent Variable: HARGA SAHAM

From the results of the output, the following conclusions can be drawn:

a) Effect of Earning Per Share (EPS) on stock prices.

Based on the results of testing the table 4.14 EPS variable has a t-count of -1.505 < table 2.120 with a significant value EPS variable 0.152 greater than 0.05 or 5%, it can be

concluded that  $H_0$  is accepted and  $H_a$  is rejected, which means the Earning Per Share (EPS) variable does not affect the share price of telecommunications companies at ISSI.

b) Effect of Price Earning Ratio (PER) on stock prices.

Based on the results of testing the table 4.14 PER variable has a tcount of  $-0.117 < t$  table 2.120 with a significant value PER variable of 0.908 greater than 0.05 or 5%, it can be concluded that  $H_0$  is accepted and  $H_a$  is rejected, which means variable Price Earning Ratio (PER) does not affect the share price of telecommunications companies at ISSI.

c) Effect of Price Book Value (PBV) on stock prices.

Based on the results of testing 4.14 the PBV variable has a tcount of  $3.988 > t$  table 2.120 with a significant value PBV variable of 0.001 smaller than 0.05 or 5%, it can be concluded that  $H_0$  is rejected and  $H_a$  is accepted, which means the Price Book Value (PBV) variable affect the stock price of telecommunications companies at ISSI.

## 5.8. Simultaneous Test

TABLE 9: Simultaneous Test.

ANOVA <sup>a</sup>		
Model	F	Sig.
1      Regression	5,462	,009 <sup>b</sup>
Residual		
Total		

a. Dependent Variable: HARGA SAHAM

b. Predictors: (Constant), PRICE BOOK VALUE, PRICE EARNING RATIO, EARNING PER S

The results of SPSS calculations in table 4.16 obtained a value of  $5.462 > F$  table 3.24 and a significance value of 0.009 less than 0.05 or 5%. Thus it can be concluded that  $H_0$  is rejected and  $H_a$  is accepted, which means there is an influence between the variables Earning Per Share (EPS), Price Earning Ratio (PER) and Price Book Value (PBV) together on the share price of telecommunications companies in the ISSI.

## 6. Conclusion

on research data that has been processed, it can be concluded that:

1. Variable Earning Per Share (EPS) by multiple regression shows a negative effect and from the results of the partial t test, there is no effect of Earning Per Share (EPS) on the share price of the telecommunications sector company listed on the Indonesian Syariah Stock Index (ISSI).
2. Price Earning Ratio (PER) variable by multiple regression shows a negative effect and from the results of the partial t test, there is no effect of Price Earning Ratio (PER) on the share price of the telecommunications sector company listed on the Indonesian Syariah Stock Index (ISSI).
3. Price Book Value Variable (PBV) by multiple regression shows a positive effect and from the results of the partial t test, there is the effect of Price Book Value (PBV) on the share price of the telecommunications sector company that is listed on the Indonesian Syariah Stock Index (ISSI).
4. The results of the F test simultaneously, there is the effect of Earning Per Share (EPS), Price Earning Ratio (PER) and Price Book Value (PBV) on the share price of the telecommunications sector companies listed on the Indonesian Syariah Stock Index (ISSI).

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