The Effect of Return on Investment, Basic Earning Power and Investment Opportunity Set on Dividend Payout Ratio (Study of Infrastructure Firm Listed at Indonesia Stock Exchange In 2017- 2021)

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ARTICLE INFORMATION

ABSTRACT

The aim of this research is to find out how influential the of Return on Investment (ROI), Basic Earning Power (BEP) and Investment Opportunity Set (IOS) on the Dividend Payout Ratio (DPR) of infrastructure companies listed in Indonesia Stock Exchange in the periode 2017-2021. The sample used in this study was 7 companies that had been selected using the purposive sampling technique. The method used in this study is descriptive and associative research methods with a quantitative. The data analysis technique used multiple linear regression through the SPSS version 16 application. Simultaneously, from the researches showed that Return on Investment, Basic Earning Power and Investment Opportunity Set with proxy Market to Book Value of Equity Ratio did not significantly affect on the Dividend Payout Ratio. Based on the coefficient of determination test is 0.372, it can be interpreted that the effect of Return on Investment (ROI), Basic Earning Power (BEP) and Investment Opportunity Set (IOS) on the Dividend Payout Ratio (DPR) is 13.83%. The remaining 86.17% was influenced by other factors that were not addressed in this study.

Keywords: Return on Investment, Basic Earning Power, Investment Opportunity Set, Dividend Payout Ratio.

INTRODUCTION

Indonesia is in a strategic location that makes Indonesia a connecting route for world economic activity. Indonesia is also a maritime country where the Indonesian government empowers this situation for equitable distribution of the Indonesian economy (Republika.co.id, 2021). Indonesia could still be said to be a country with minimal economic development because it could be seen from the Gross Domestic Product (GDP) which has decreased in the past few years. When the country's economy is weak, the infrastructure is not running smoothly. Some the existence of infrastructure could encourage activities that are able to improve the economic problems of a country (Kemenkeu.go.id, 2021). One of them is the existence of investment which will become capital to assist in infrastructure development and in increasing economic development which causes an increase in income or return on investment.

For investors, the profit growth of a company is the key to their investment activities. If the ability of company to earn profit is well. Then there will also a great opportunity for the company to get a chance to be invested. The return on investment could be in the form of dividends or capital gains. The majority of investors tend to choose a return in the form of cash or cash dividends which could be measured through the Dividend Payout Ratio. The greater the value of the Dividend Payout Ratio, the greater the cash dividends distributed by the company to shareholders (Meiliani & Amboningtyas, 2017).

One of the ratios that could measure how capable a company is in generating dividends through profit is Basic Earning Power. Basic Earning Power is used to see the company's ability to generate returns on assets that have been used. If the BEP value of company is high, it will reflect the ability of company to earn profit. (Herdiana & Rusdiana, 2017). The better the company's ability to attract the attention of investors, the greater the company's opening up investment opportunities that could be measured through the Investment Opportunity Set. The greater the IOS value of a company, the greater the opportunity for investors to invest their capital which could provide opportunities for the company to generate returns or profits that investor want in the form of dividends (Fatmawati, 2016).

For 5 years from 2017-2021, the development of cash dividend distribution to infrastructure sector companies has decreased. Throughout the beginning of 2020, the company's performance in distributing cash dividends decreased. This is because the Covid-19 pandemic has been found in Indonesia in early or mid-March. Besides that, the cause of the decrease in cash dividend distribution is suspected to be a decrease in company profits.

LITERATURE REVIEW

Financial Management
Financial management is very important in everyday life. For example, it could be applied in the world of work such as in banking, insurance, or as a financial manager. According to (Sugeng, 2017) financial management is a technique or way a company uses, allocates, and distributes funds from company income to achieve its goals as a target for increasing company value.
Financial Statements

"Analysis of financial statements is a breakdown of a subject into its numerous pieces and a study of the parts themselves, as well as the interaction between the parts, to acquire the appropriate comprehension and understanding of the meaning of the whole,"

Prastowo (Aldila Septiana, 2018). Meanwhile, Kasmir (Nurillah Sopian, Nor Norisanti, 2020) argued that the results of financial statement analysis could offer important information regarding the company's flaws and strengths.

Financial Ratio
Purnomo's perspective on financial ratio analysis is that it is "an analysis carried out by looking for particular correlations among items in the balance sheet, or items in profit and loss, or items in the balance sheet connected with losses." (Andri Marfiana, 2019). The closely linked financial gain.

Capital Market
According to (Tandelilin, 2017) capital market is as an object for the meeting between parties who need each other or people who need capital with people who have excess capital for transact long-term securities such as stocks, bonds, mutual funds etc. The purpose of the capital market that is to provide broad opportunities for the community to raise funds to increase economic growth and to invest so that people can get their own profit. (Eko Sudarmanto, Fastabiqul Khairad et al., 2021).

Dividend Payout Ratio
Dividend Payout Ratio (Rostina, 2020) is the amount of profit that will be allocated in cash to each shareholder of a corporation as a percentage. The financial health of a corporation and investment decisions are affected by this DPR. DPR is a comparison between earnings per share (EPS) and dividends per share (DPS). The percentage of retained earnings in the corporation used as a return on investment for future investments decreases as the DPR ratio increases. The Dividend Payout Ratio can be calculated using the following formula (Pangalila et al., 2019):

$$\text{DPR} = \frac{Dividend\ Per\ Share}{Earning\ Per\ Share}$$

Return On Investment
The concept of return on investment is a calculation or ratio used to determine the amount of profit or return on investment activities. (Hantono, 2018). According to Annas (Indah Budiarti Sawitri, 2020), the Return on Investment is a tool used to assess a company's success in terms of producing net revenue from the management of corporate assets. Fajariyanti (2018) provided the following formula to calculate this ratio. (Fajariyanti, 2018):

$$\text{ROI} = \frac{Earning\ After\ Tax}{Total\ Asset}\ x\ 100\%$$

Basic Earning Power
Basic Earning Power in Atmaja's perspective (Rachdian & Achadiyah, 2019) One indicator for profitability which could be used to gauge a company's capacity for profit generation is basic earnings power. Operating/operating profit is divided by total assets to arrive at Basic Earnings Power. According to Husnan dan Pudjiastuti (Sintya et al., 2018), economic profitability, or BEP, is "a ratio that assesses the ability of a company's assets to produce a profit from the company's activities since the outcomes of operations you want to measure, profit before interest and taxes are utilized."The formula for estimating basic earning power is as follows Pudjiastuti (Sintya et al., 2018):

$$\text{BEP} = \frac{Earning\ Before\ Tax}{Total\ Asset}\ x100\%$$

Investment Opportunity Set
The amount of investment opportunities the company obtains to decide what investments it will make in the future is defined by Sindhu (Masruroh et al., 2019)"The amount of investment opportunities which is influenced by the management's perspective on the company's financial condition and also its prospects for future company growth." Market To Book Value of Equity, one of the proxies in IOS, describes how the market evaluates future returns or returns on investment activities in relation to the expected return on the usage of company equity. The return in the form of cash dividends that will be paid to shareholders will be smaller the higher the IOS ratio. The Market to Book Value of Equity proxy can be used to determine the Investment Opportunity Set using the following calculation. (Hidayah, 2017):

$$\text{MVBVE} = \frac{(Number\ of\ shares\ outstanding\ x\ Closing\ Price)}{Total\ Equity}$$

Variable Operational Framework
According to the theoretical basis and research method used, then, the operational framework of the variables in this study is:
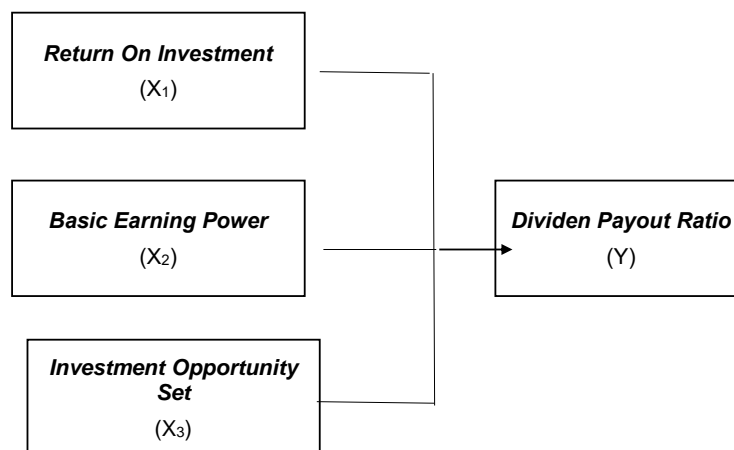

Figure 1. Variable Operational Framework

Hypothesis
The hypotheses of this research are:
H1: There is an effect of Return on Investment, Basic Earning Power, and Investment Opportunity Set on the Dividend Payout Ratio in infrastructure sector companies listed on the Indonesia Stock Exchange in 2017-2021.

RESEARCH METHOD

This study uses descriptive and associative research types, namely to determine the position of one variable and the correlation between the independent variable and the dependent variable. This research data is processed using a quantitative approach obtained from audited financial statements. The location of this research is the infrastructure sector companies listed on the Indonesia Stock Exchange which are accessed through the Indonesia Stock Exchange website (www.idx.com).

The population or the entirety of the subject used in this study observed are all companies in the infrastructure sector listed on the Indonesia Stock Exchange from 2017-2021. A total of 48 companies and after the selection of samples, 7 companies were obtained as research samples.

In the selection of samples or a part of the study population in this study uses purposive sampling techniques that uses criteria - criteria to be used as research samples. The criteria used are as follows:

1.	The company was listed and listed on the Indonesia Stock Exchange (IDX) before December 31, 2016, and was not delisted during the 2017-2021 observation period.

2.	The company publishes its financial reports continuously in the 2017-2021 period.

3.	Companies that distribute dividends in the 2017-2021 period.

The independent variable (Y) of this study is the Dividend Payout Ratio by comparing dividends per share and earnings per share. The dependent variable is Return on Investment (X1) by comparing net profit after tax and total assets, Basic Earning Power (X2) by comparing net profit before tax and total assets, and investment opportunity set (IOS) using the Market to Book Value of Equity (MVBVE) proxy by comparing the multiplication between the number of shares outstanding and the closing price with total equity. The researcher uses multiple linear analysis to complete this research with use the formula (Sugiyono, 2017):

$$Y^* = a + b_1 X_1 + b_2 X_2 + b_3 X_3$$

Description:
Y*	= Dependent variable (Dividend Payout Ratio)
X1,2,3 = Independent variable (Return on Investment, Basic Earning Power, Investment Opportunity Set)
a	= Constant
b	= Regression coefficient of the dependent variable

RESULTS

Classic Assumption Test Results
Normality Test

Table 1. Normality Test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		26
Normal Parameters[a]	Mean	.0000000
	Std. Deviation	.77926539
Most Extreme Differences	Absolute	.211
	Positive	.211
	Negative	-.138
Kolmogorov-Smirnov Z		1.074
Asymp. Sig. (2-tailed)		.199

a. Test distribution is Normal.

Based on the results of the normality test, indicates that the processed data is normally distributed because the results show the value of Asymp. Sig (2-tailed) of 0.199 which is the value greater than the significance level of 0,05.

Correlation Analysis
Table 2. Correlation analysis

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.372[a]	.138	.055	4.01323	1.852

a. Predictors: (Constant), X3, X2, X1

b. Dependent Variable: Y

Source: Data processed by researchers, 2022

According on the results of the correlation analysis, the value of the correlation coefficient is 0.372, which means that there is a correlation between Return on Investment, Basic Earning Power and Investment Opportunity Set on the Dividend Payout Ratio. The following table of criteria according to (Sugiyono, 2021) to see the close correlation of these variables:

Table 3. Correlation Coefficient Criteria

Coefficient Interval	Level of Relationships
0,00-0,199	Very Low
0,20-0,399	Low
0,40-0,599	Medium
0,60-0,799	Strong
0,80-1,000	Very Strong

Source: (Sugiyono, 2021)

Based on the above criteria, the correlation test value is between 0.20-0.399, which is 0.372, which means the correlation level between variables is low.

Coefficient of Determination
Table 4. Coefficient of Determination

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.372^a	.138	.055	4.01323	1.852

a. Predictors: (Constant), X3, X2, X1

b. Dependent Variable: Y

Source: Data processed by researchers, 2022

To find out the effect of the independent variable on the dependent variable could be calculated using the following formula:

$$Kd = r^2 x 100\%$$

Kd = Coefficient determine
r2 = Coefficient correlation

Based on the table above, the R value is 0.372 so the coefficient of determination Kd = (0.372)2 x 100% = 13.83%. It means, 13.83% return on investment, basic earning power and investment opportunity set are able to have an effect on dividend payout ratio. The remaining 86.17% is not influenced by these variables or is influenced by variables.

Multiple Linear Regression
Table 5. Multiple Linear Regression

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.725	1.228		.590	.559		
	X1	1.270	.778	.445	1.632	.113	.374	2.674
	X2	-.165	.107	-.295	-1.534	.135	.753	1.328
	X3	-.143	.532	-.067	-.269	.790	.452	2.214

a. Dependent Variable: Y

Source: Data processed by researchers, 2022

Based on the results of the table above, the following multiple linear regression equation is obtained:

$$DPR\ (Y) = 0,725 + 1,270\ (ROI) - 0,165\ (BEP) + 0,143\ (IOS)$$

1.   The result of the constant value (a) is 0.725, which means the value of the independent variables Return On Investment (X1), Basic Earning Power (X2), and Investment Opportunity Set X3 = 0, then the value of the dependent variable Dividend Payout Ratio (Y) is 0.725.
2.   The X1 regression value or Return On Investment is 1.270 which states that the effect is unidirectional or positive, meaning that if the ROI value is increased by one unit, it will increase the DPR value by 0.725.
3.   The X2 regression value or Basic Earning Power of -0.165 states that the effect is not unidirectional or negative, meaning that if the BEP value is increased by one unit, it will decrease the DPR value by 0.165.
4.   The X3 regression value or Investment Opportunity Set is 0.143 which states that the effect is not unidirectional or negative, meaning that if the IOS value is increased by one unit, it will decrease the DPR value by 0.143

Simultaneous Test (F Test)
Table 7. Simultaneous Test

ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	80.211	3	26.737	1.660	.196[a]
	Residual	499.288	31	16.106		
	Total	579.499	34			

a. Predictors: (Constant), X3, X2, X1

b. Dependent Variable: Y

Source: Data processed by researchers, 2022

The table above shows the results of Fcount of 1.660 and with a significance level of 0.196, it could be concluded that Fcount 1.660 < Ftable 2.901 and Sig 0.198 > 0.005 means simultaneously the variables Return on Investment, Basic Earning Power and Investment Opportunity Set are not significantly influenced the Dividend Payout Ratio in infrastructure sector companies listed on the Indonesia Stock Exchange in 2017-2021.

CONCLUSION

According to the results of simultaneous calculations (Test F) the Return on Investment, Basic Earning Power and Investment Opportunity Set variables on the Dividend Payout Ratio have no significant effect on infrastructure companies listed on the Indonesia Stock Exchange in 2017-2021. According to the results of simultaneous tests, Fcount < Ftable and significant value > 0,05, then H1 rejected.

LIMITATION
During the research, there were several limitations or the deficiency experienced and should be avoided for further research. The limitations experienced in this study are on the number of variables in the study using only 3 variables. Besides that, the number of samples taken is only 35 data which in testing the hypothesis produces no effect on the Dividend Payout Ratio. Future researchers are expected to have additional variables that

have not been studied in this study So that it may other variables can give an effect and is expected to increase the total sample that increase data accuracy.

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