

## EFFECT OF INVESTMENT OPPORTUNITY SET (IOS), LEVEL OF LEVERAGE AND RETURN TO RETURN STOCK MARKET COMPANY IN INDONESIA STOCK EXCHANGE

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**Abstract:** *This study aimed to analyze the influence of investment opportunity set, the level of leverage and the return of stock market returns. Selection factors or independent variables were based on agency theory and signaling theory which suggests that the shareholders aim to maximize the value of the company is characterized by an increased share price stretcher companies in the capital market.*

*To support this analysis, so in this study used secondary data in a timeframe of ten years by selecting a sample of 20 companies classified as the most active companies traded shares in brackets the last six months or August 2015 until January 2016.*

*The analytical method used is the statistical approach through a linear regression model. The results of this study found that investent opportunity set that is produced as growth in assets, capital expenditure, and the ratio of investment to earnings, the effect turns negative and significantly the effect on stock returns. This study uses a model be some analysis, and the results are consistent, so it can be stated that the policy of adding asset management and capital expenditure does not affect the decision invetor in stock transactions in the capital market. Variable levels of leverage and market return variable and seginifikan positive effect on stock returns, so that changes in these variables will trigger the growth of stock prices or increase stock returns.*

**Keyword:** *Agency Theory, Signalling Theory and the Capital Asset Pricing Model.*

### INTRODUCTION

Stock returns based perusahaan.menjadi share price development center of attention, especially the part of investors, owners or shareholders, and corporate management. Investors tend to buy and sell stocks for speculative interests with a view to obtaining the gain or the gain of the difference between the purchase price and the sale of these shares. Owner of the company or shareholders are marked with a stake of long-term objectives with a view to obtaining dividends, develop the company and maintain operational continuity.

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Myres (1997) stated that the investment opportunity set (IOS) is the extent to which firm value depends on future discretionary expenditures by the firm, which translates 'the investment opportunity set is the extent to which the value of the company depends on the discretionary spending of the future'. While Bodie, Kane, and Marcus (2008, p. 158) states that the investment opportunity set (IOS) illustrates the growth in the future. IOS is the availability of alternative investments in the future for the company (Hartono, 1999). IOS is a value as the choices of companies to make investments in the future (Myres, 1997). This is supported also by Kallapur and Trombley (1999) which states that IOS can not be observed outside the company. According Gaver and Gaver (1993), the investment opportunity set (IOS) the value of the company whose magnitude depends on the expenses of fund management is set to come.

Based on the above description, then that becomes a problem in this research is how much influence the variable Investment Opportunity Set or IOS, variable levels of leverage and market return variable to changes in the company's stock price is observed.

Several previous studies that dilakuka by Assagaf (2015), Wibowo (2013), Ibrahim, Gul, Mudessar, Nawz, Sanaullah (2012), and Grace (2009), placing the stock return or  $R_i$  as the dependent variable.

Baskin (1989) and Adedeji (1998) found that the dividend has a positive impact on financial leverage. Instead Allen (1993) found that dividends have a negative impact on financial leverage. Hartono (1999) found that leverage the company's dividend policy affect positively, but does not affect dividend policy.

### **Agency Theory**

The company aims to maximize the value that can be measured in other ways with the company's stock price. In achieving these objectives the company managers have conflicting objectives with shareholders' objectives. The manager wants memaksimalkan receipt of compensation, while shareholders want to maximize dividend income or earnings per share Pershare. The contradiction is what causes konflik between shareholders to the manager mentioned as agency theory. The agency theory developed by Michael C. Jensen and William H. Meckling 1976 (Wibowo, 2013), in which the manager as agent and shareholders as the owner or principal.

Jensen (1995) states that debt management can reduce the flexibility to use free cash flow to activities that are non maximizing value. The larger the company's cash flow, the more likely to avoid waste managers do, so it requires a high level of debt to control the actions of managers who tend to be non maximizing value.

Companies with investment opportunity set (IOS) typically has a value lower free cash flow is high, because the company no longer has the potential for expansion. It can be concluded, companies with high free cash flow will be followed by a low value because IOS reflects the growth opportunities of a company.

### **Signalling Theory**

Miller-Modigliani or MM assumes that investors have the same information with internal enterprise managers about the prospects of the company, but in fact in economics and finance shows that internal managers have better information and more up to date about the condition of the company than investors as in Muhayatsyah (2006). Thus the conditions of asymmetric information impacting the part of investors in assessing the condition of the company, especially with regard to the value of the company. Given these conditions then generally results in low ratings on the stock investors companies mentioned as a pooling equilibrium, because the company's assessed pool for the entire company, which resulted in the company of high value integrated with a company whose value is low. Investment Opportunity Set or IOS as Myers (1997) in Hidayah (2015), is an investment decision on the various assets and alternative investments in the future based on the net present value or net present value that would affect the value of the company. While Gaver (1993) in Hidayah (2015) argued that the value of the company is affected by the amount of expenditures that come in the future at the moment is still the alternative investments that will generate decent returns coming future.

Several previous studies using this variable as an independent variable for analyzing influence on stock returns and listed companies as practiced by Wibowo (2013); Anugrah (2009); Hidayah (2015); Wulandari (2010); Rosdini (2009); and Martani (2007). IOS variable usage as an independent variable is also used to measure its impact on other dependent variables such as dividend policy, the cost of equity capital and earnings management, which among other things made by Ayu (2013); Daughter (2012); Martazela, Marletza (2010); Ahmad (2009); Nofi, Zahro (2009); Herminingsih (2012); and Assih, Baridwan, Kusuma, Gudono (2006).

## **RESEARCH AND METHODOLOGY**

### **Data Research**

The data used is a listed company as the company LQ 45 for the period August 2015 until January 2016, by selecting the companies listed on the Indonesia Stock Exchange since the period of 2003, with a view to analyze for mutations in 10 years, or until 2014. Movements observation that see the changes between the

periods with the previous period, so it can take 11 years. However, because keterbatasan financial statement or information provided over the past ten years or 2005-2014, so that the data dioleh for the purposes of this analysis was 9 years old mutation financial statements, but does not diminish the interest of analysis for the period has been qualified as time series data to obtain a picture of the relationship between the dependent variable with the independent variable.

Based on the stock price fluctuations, changes in JCI, the company's internal conditions of the change of assets and debts, then the selected variables considered most relevant to do with changes in the company's stock price on the Stock Exchange.

### **Model Analysis**

This study used a statistical approach with a linear regression model to analyze the influence of the independent variable investment opportunity set or IOS, the level of leverage or DTA and return  $R_m$  market or to return stock or  $R_i$ . IOS variables used in this study consisted of (a) a variable asset growth or TAG, (b) a variable capital expenditure or CAPBVA and (c) of the variable investment earnings or ITE. Each variable IOS are used interchangeably in the regression equation along with other independent variables. that is :

#### **Model 1**

The regression equation, using IOS variables that proxy for asset growth or TAG, as follows:

$$R_i = b_0 + b_1 X1\_TAG + b_4 + b_5 X4\_DTA X5\_R_m + e \quad (1)$$

Where :

- R<sub>i</sub>: return stock
- X1\_TAG: asset growth
- X4\_DTA: the level of leverage
- X5\_R<sub>m</sub>: return market
- e: error
- b<sub>0</sub>: constants
- b<sub>1</sub> .... b<sub>4</sub>: coefficient directions

#### **Model 2**

The regression equation, using IOS variables that proxy for capital expenditure, as follows:

$$R_i = b_0 + b_2 X_{2\_CAPBVA} + b_4 X_{4\_DTA} + b_5 X_{5\_Rm} + e... \quad (2)$$

Where :

$X_{2\_CAPBVA}$  : capital expenditure

Model 3

The regression equation, using IOS variables that proxy for investment to net income as follows:

$$R_i = b_0 + b_3 X_{3\_ITE} + b_4 X_{4\_DTA} + b_5 X_{5\_Rm} + e \quad (3)$$

Where:  $X_{3\_ITE}$ : Investment on net income

Model 4

The regression equation, specifically using the independent variable degree of leverage or DTA and return market or  $R_m$  as follows:

$$R_i = b_0 + b_4 X_{4\_DTA} + b_5 X_{5\_Rm} + e \quad (4)$$

Regression model was used to analyze the data the overall study (n = 180) using the model 1 to model 4. While the analysis of partial data using model 1 up to 3 models with observations 9 period against 20 companies, so that this partial analysis obtained 60 equation regression.

Measurement of Variable Return stock ( $R_i$ ) was measured with a formula, namely: the stock price a particular period or  $P(t)$  minus the stock price prior periods or  $P(t-1)$  earlier, then divided by the share price of the period (t-1) or:

$$R_i = \frac{P(t) - P(t-1)}{P(t-1)}$$

Measurement variable stock return ( $R_i$ )

The use of variable stock return ( $R_i$ ) mainly because of the ease to compare one company with another company. When using stock prices, it is difficult to generalize because there used to stock prices is difficult to compare with each other., Namely

$$R_i = \frac{P_i(t) - P_i(t-1)}{P_i(t-1)} \quad (5)$$

Roi Where is the stock return,  $P(t)$  is the stock price observation period and  $P_i(t-1)$  is the stock price of the previous period.

Measurement Variable Variable IOS IOS investment opportunity set or a proxy using six variables that are grouped as a proxy for the price-based and proxy-based investment, as was done by Kumalahadi (2004) and Hartono (1999) in Hermaningsih (2012). IOS-based proxy price consists of (a) market-to-book ratio of total assets or the market value of assets on its book value or (the book value of debt + market value of shares outstanding) divided by total assets; (B) market-to-book ratio of total equity or market value of equity to book value (the market value of shares outstanding divided by total equity); (C) the price earning ratio (PER), or the ratio of stock price to earnings per share (market price per share divided by earnings per share). Proxi IOS-based investment consists of (a) investment to sales or the ratio of investment to sales (total tangible fixed assets divided by net sales); (B) investment to earnings or investments to earnings ratio (total assets divided by tangible net income); (C) investment to total assets or capital expenditure ratio of the book value of total assets (changes in fixed assets divided by total book value of assets).

The use of proxy IOS conducted by Gaver (1993); Jones and Sharma (2001); Kallapur and Trombley (2001); and Hidayah (2015) as the Hidayah (2015) consists of three groups include price-based proxie, investment-based proxie, and variance measure. Each group consisted of some kind of proxy measurements.

Martani (2007) using proxy variables IOS based pertumbuhan Total Asset Company (Total assets at period t / Total assets at period t-1) and by growth in fixed assets (fixed assets in the period t / fixed assets in period t-1).

To measure stock returns in 2005 can be measured by the difference between the stock price in 2006 with the previous year aau 2005. Thus, in this study there are 9 observation period for the years 2005 - 2014. Measurement of IOS variable in this study is formulated as in,

(A) Growth of total assets (X1\_TAG) companies measured by the formula, namely: Total Asset period (t) minus the Total Assets of the period (t-1) or the previous period, and then divided by Total Assets period (t-1) or:

$$X1\_TAG = \frac{TA(t) - TA(t-1)}{TA(t-1)} \quad (6)$$

(B) Measurement of variable capital expenditure (X2 CAPBVA) derived from changes in fixed assets divided by total assets, or by the following formula:

$$X2\_CAPBVA = \frac{Fixed\ assets(t) - fixed\ assets(t-1)}{Total\ Assets} \quad (7)$$

(C) Measurement of investment variables to total earnings (X3 ITE) is obtained from the comparison between the value of the investment or the total assets divided by net income, or with a formula like this: the

$$X3\_ITE = \frac{\text{Total aktiva}}{\text{net profit}} \quad (8)$$

Measurement of variable degree of leverage (X4\_DTA) Leverage shows an indicator of the use of debt used in the company's capital structure. The higher use of debt in the capital structure of the company, financial leverage will also be higher. Thus sebaliknya, the lower the use of debt in its capital structure, the more rendah also leverage keuangannya. Measurement of financial leverage (Brigham, Daves, 2002, and Herminingsih, 2012) formulated: (a) debt to total assets or total liabilities divided by total assets, and (b) total debt to equity ratio or long-term debt divided by equity. In this study, the measurement of variable levels of leverage (X4\_DTA) is formulated as follows:

$$X4\_DTA = \frac{\text{Total Debt}}{\text{Total Asset}} \quad (9)$$

Where, total debt consists of current debt and panang term debt recorded in the financial statements by the end of the year. Total assets consist of current assets and non-current assets in the same period.

Measurement of market return variable (X5\_Rm) In the concept of capital asset pricing model was used variable Rm return to mempreksi market or stock returns. Measurement of market return variable formulated as JCI period t minus JCI period t-1, then divided JCI period t-1. JCI is a composite index based on the stock price at the close of the stock market in Indonesia Stock Exchange at the end of the observation period (Assagaf, 2015), as follows:

$$X5\_Rm = \frac{IHSG(t) - IHSG(t-1)}{IHSG(t-1)} \quad (10)$$

## **RESULT AND DISCUSSION**

Based on the problems and hypotheses of this study, the data obtained will be analyzed as a whole company into sampael this study with the number of observations of 180 consisting of 20 companies within the group of companies that are categorized as LQ45 period August 2015 - January 2016.

The determination is based on a sample of 20 periods ranging from 2004 listed separately meet the number of observations as much as 10 years (2005 -2014) with

mutations between periods of 9 years. To be more specific for each company off is, then dilakukan partial analysis of each company were observed using model 1, model 2 and model 3 may be variations between koefiseien and trends of the relationship between these variables.

#### A. Analysis of overall

In the first stage used models 1 to 4 models to analyze the overall effect of the independent variable ISO, the level of leverage and return the market to the stock return following bleak.

##### (1) Regression Equations - Model 1

$$R_i = b_0 + b_1 X_{1\_TAG} + b_4 X_{4\_DTA} + b_5 X_{5\_Rm} + e$$

By using a regression equation model 1 and based on data obtained from this study, the simulation results obtained as SPSS in Table Model Summary, ANOVA and Coefficicnts below.

**Model Summary**

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Estimate</i>
1	,279 <sup>a</sup>	,078	,062	,33605

a. Predictors : (Constant), X1\_TAG, X4\_DTA, X5\_Rm

Adjusted R Square of 0.078 relatively small which indicates that this regression is not patterned linearly because the behavior of the stock market is not only influenced by the company's fundamentals but is strongly influenced by external conditions. Even in the causal relationship there are a large number of risks faced by the investor-oriented stocks gain or speculation opportunity to earn the price difference transaction dipiih shares.

**ANOVA<sup>a</sup>**

<i>Model</i>		<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
1	Regressio	1,677	3	,559	4,950	,003 <sup>b</sup>
	Residual	19,875	176	,113		
	Total	21,552	179			

In the relationship between a dependent variable and independent variables stock return IOS, leverage and return market simultaneously signifika particularly a great relationship, as the table ANOVA or analysis of variance with statistical values  $F = 4.95$  and level sig = 0.003 or 0.3%. From figure residual mentioned above indicate the existence of market behavior beyond the observed variables that affect



the level of market return, that reflects the amount of risk that must be considered by decision-makers in determining the choice of investing in stocks, so the technical analysis and fundamental analysis needs to be supported again by the analysis of risk with regard external opportunities and threats that affect the company's performance and detected by the market that could affect the company's stock price fluctuations. Statistically they relate to the residual amount of the adjusted R Square or adj-R2 in Table Model Summary. The R2 is formulated with: "A minus (Sum of Squares divided Residual Total Sum of Squares" or:

$$R \text{ Square} = 1 - \frac{\text{Sum of Square Residual}}{\text{Sum of Square Total}}$$

The results obtained according to the formulations and Table Model Summary, namely:

$$R \text{ Square} = 1 - (19,875/21,552) = 0,078$$

Based on residual formulation linkages and R2 shows that the amount of residual height will reduce the amount of R2. Residual obtained from the sum  $e_i^2$ , where  $e_i = (Y_i - Y_i \text{ estimate})$ . With this formula, the residual high as the results of this study are automatically decreases the value of R2. Residual high that reflects the magnitude of the difference between the observed data to estimate dependent variable dependent variable corresponding multiplication result of the regression equation with observational data independent variable.

The grounds of measurement accuracy, then adjustments formulations R2 or adjusted R Square (adjusted-R2) with the formula:

$$\text{Adjusted R Square} = 1 - \frac{(1 - R2)(n - 1)}{(n - k - 1)}$$

The results obtained according to the formulations and Table Model Summary, namely:

$$\text{Adjusted R Square} = 1 - \{(1-0,077) (180-1) / (180-3-1)\} = 0.06$$

In relation to the signifikansi the relationship between independent variables ( $X_i$ ) with dependent variable ( $Y_i$ ) is characterized by a statistical test F exhibited significantly, it can be explained that F calculated based on the formula: "Mean square regression or average quadratic regression" divided by " mean square residual or average of squared errors or residual "or:

$$F \text{ count} = \frac{\text{Mean square regression}}{\text{Mean square residual}}$$

The results obtained in accordance formulation and ANOVA tables, namely:

$$F\text{-count} = 0,559 / 0,113 = 4.95$$

In this study turned out to be an average quadratic regression relatively high enough to produce F count larger or very significant, which means that the overall independent variables significantly influence the dependent variable. Furthermore, ANOVA table shows that the F count obtained sig level of 0.003 which means that the effect of simultaneous independent variable on the dependent variable or stock return is very significant at fault tarap 0.01%., Or:

$$t\text{ count} = \frac{\text{Unstandardized Coefficients } B}{\text{Std. Error}}$$

Or by calculation  $t_4 = 0.278 / 0.106 = 2.626$  and so on to  $t_5 = t_1 = 2.914$  and  $-0.420$  as in table coefficients SPSS simulation results.

The results of calculations with SPSS 22, however, can be written by the following equation:

Coefficients <sup>a</sup>						
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
Model	(Constant)	,186	,063		2,948	,004
	X4_DTA	,278	,106	,192	2,625	,009
	X5_Rm	,256	,088	,213	2,914	,004
	X1_TAG	-,006	,014	-,031	-,420	,675

a. Dependent Variable : Y

$$R_i = 0,186 - 0,006 X1\_TAG + 0,278 X4\_DTA + 0,256 X5\_Rm$$

(2,94) (-0,42) (2,62) (2,914)

Variable X1 TAG, Results obtained from the independent variable investment opportunity set that diproxy with the growth of total assets of the company or X1\_TAG, indicating a negative effect on stock returns were observed, but the effect is not significant as the UJIA t statistic obtained t count relatively small or 0 , 42 and the level of sig = 0.675 or 67.5% achieve fault tolerance. This is mainly due to the increase of assets does not directly impact the return of the same period, even add to the burden ivestasi and loan interest expense that affect the rate of return during the period. Added assets perceived benefits, especially in the period to come good in the medium and long term, due to the increase of assets for expansion to obtain the return or the expected results from the addition of these assets, it

needs some period in the future for both construction, production, marketing and effectiveness optimal utilization of expansion capacity. Therefore, secondary market assesses that the asset accretion does not significantly influence the level of return the company changes.

Variable X4\_DTA Vavriabel X4\_DTA show tigtat leverage or debt in the composition of the company's operations and investments. This variable regression coefficient of 0.278 with a t statistic of 2.62 or 0.009 sig level or degree of error of 0.09%, which means that the variable X4\_DTA has pernan important in affecting the rate of return the company's shares on the Stock Exchange. This occurs due to the increase of debt and the use of funds for operating activities external advisors and investment will further increase the return that will be owned by its shareholders, because of the greater operating capacity while ownership is not increased. , Another thing that causes that influence is when the cost of capital debt is lower than the cost of capital stock diproxi with the dividend, the more use of debt will have positive impact on increasing return Pershare, thus responded postifi the secondary market which caused the stock price increases or stock return ride.

Variable Variable X5\_Rm X5\_Rm as the market returns reflect changes JCI measured from the difference between JCI JCI is a period in the previous period. The calculations show regression coefficient = 0.256, t = 2.914 and statisti sig = 0.004 level which means that the variable is very significant effect on stock returns. Improved market returns characterized by increased JCI, then stock returns will increase marked with pningkatan company's stock price on the stock exchange.

The regression equation - Model 2

$$R_i = b_0 + b_2 X_{2\_CAPBVA} + b_4 X_{4\_DTA} + b_5 X_{5\_Rm} + e$$

In this regression equation using the variable investment opportunity set or IOS diproxi with capital expenditure to total aasset or X2\_CAPBVA, while others remain independent varaibel using X4\_DTA or the level of leverage and X5\_Rm or return market.

$$R_i = 0,201 - 0,555 X_{2\_CAPBVA} + 0,266 X_{4\_DTA} + 0,254 X_{5\_Rm}$$

(3,01) (-0,54) (2,52) (2,91)

The independent variable X2 CAPBVA was not responded to by changes in stock returns significantly since the stock market that the capital ekspenditure long-term influence on the performance of the company, so that the current stock price is precisely assess capital ekspenditr tend to incur expenses that undermine the performance of the company's profitability, so that trends negative effect although the effect is not significant. When examined partially then the variable is

varied effect on stock returns or  $R_i$ , depending on the type of business or industry as an attachment 4. Some companies indicate that the positive effect on the variable  $X2\_CAPBVA$   $R_i$  as the company with the code AALI, CPIN, GGRM, LPKR, etc. which means expenditure capital gain will increase the company's return. Instead, there are several companies that have shown that these variables negatively affect  $R_i$ , which means that the increase of the capital expenditure will lead to deterioration in the level of  $R_i$  as the company with the code AKRA, ASII, BMTR, INCO, and so on. Results of regression calculations presented in the format Model Summary, ANOVA and Coefficients as follows:

#### Model Summary

Model	R	R Square	Adjusted R Square	Estimate
1	,280 <sup>a</sup>	,078	,063	,33593

a. Predictors: (Constant),  $X2\_CAPBVA$ ,  $X5\_Rm$ ,  $X4\_DTA$

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1.	Regressio	1,691	3	,564	4,994	,002 <sup>b</sup>
	Residual	19,861	176	,113		
	Total	21,552	179			

a. Dependent Variable : Y

b. Predictors : (Constant),  $X2\_CAPBVA$ ,  $X5\_Rm$ ,  $X4\_DTA$

#### Coefficients<sup>a</sup>

		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
Model	(Constant)	,201	,067		3,014	,003
	$X4\_DTA$	,266	,105	,184	2,527	,012
	$X5\_Rm$	,254	,087	,212	2,915	,004
	$X1\_CAPBVA$	-,555	1,016	-,040	-,546	,586

a. Dependent Variable : Y

(1) The regression equation - Model 3

$$R_i = b_0 + b_3 X_{3\_ITE} + b_4 X_{4\_DTA} + b_5 X_{5\_Rm} + e$$

Variable investment opportunity set or a proxy IOS in the comparison between investment with earnings or  $X3\_ITE$ . This study uses a variable  $X3\_ITE$  and other

independent variables namely X4\_DTA and X5\_Rm to be combined with the regression equation using IOS. Varel is proxied by the independent variable and X2\_CAPBVA X1\_TAG. The result of the calculation in accordance with the table Coefficients regression equation as follows:

$$R_i = 0,189 - 0,000027 X3\_CAPBVA + 0,273 X4\_DTA + 0,250 X5\_Rm$$

(3,00) (-0,10) (2,59) (2,86)

The results of this study found that the variable X 3 ITE negative effect on stock returns, which means that the increase of this variable will lower the price of the stock which means that also will reduce the level of company stock returns are concerned. This is according to the conditions empiris that the proportion of the increase of investments or assets to increase net income greater can provide a signal to investors that the company has a condition that has not optimal utilization of its assets, but if this happens in the long run, it can be assumed that the company experienced permasalah efficiency and poor performance.

**Model Summary**

Model	R	R Square	Adjusted R Square	Estimate
1	,277 <sup>a</sup>	,077	,061	,33620

a. Predictors: (Constant), X3\_ITE, X5\_Rm, X4\_DTA

Simultaneous effect of independent variables on the dependent variable Ri shows the F-count = 4.891 and sig = 0,003 level, which means that the effect is very significant with an error rate of about 0.3%.

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1.	Regressio	1,658	3	,563	4,891	,003 <sup>b</sup>
	Residual	19,894	176	,113		
	Total	21,552	179			

a. Dependent Variable : Y

b. Predictors : (Constant), X3\_ITE, X5\_Rm, X4\_DTA

Partially each independent variable influence on stock returns or Ri showed that variables do not have significant influence X3\_ITE with the acquisition of t-count = 0.107 and tingkat sig = 0.915. While other independent variables very significant influence on Ri, respectively for the acquisition X4\_DTA t-test = 2.592 and sig = 0.010 and for the acquisition X5\_Rm t-test = 2.868 and sig = 0.005.

		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
Model	(Constant)	,189	,063		3,005	,003
	X4_DTA	,273	,105	,188	2,592	,010
	X5_Rm	,250	,087	,208	2,868	,005
	X3_ITE	-2,708E-05	,000	-,008	-,107	,915

a. Dependent Variable : Y

(1) The regression equation - Model 4

$$R_i = b_0 + b_4 X_{4\_DTA} + b_5 X_{5\_Rm} + e$$

Model see the consistency of the measurement results of regression coefficients, a significance level of independent variable influence on the dependent variable then performed separately between IOS variables with other variables. X4\_DTA variables and variables in the equation X5\_Rm calculated separately on its own or with a variable ISO. Results of regression calculation is still relevant and consistent with the calculation in the previous regression equation Coefficients as the table below, which is the independent variable and X5\_Rm X4\_DTA positive and significant effect on stock return or Ri.

		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
Model	(Constant)	,188	,063		3,012	,003
	X4_DTA	,272	,105	,188	2,599	,010
	X5_Rm	,250	,087	,209	2,891	,004

a. Dependent Variable : Y

According to the table coefficients, the regression equation as follows:

$$R_i = 0,180 + 0,272 X_{4\_DTA} + 0,250 X_{5\_Rm}$$

(3,01)      (2,59)                      (2,89)

IOS independent variables are used interchangeably, it turns out none of the variable significant effect on stock returns or Ri. This means that internal policies for development investment or asset (X1\_TAG), adding capital expenditure (X2\_CAPBVA) and the ratio of investment to the level of profitability (X3\_ITE), did not respond significantly by the stock market.

#### A. Analysis of partial

The next stage do individually or separate analysis of each company with model 1 up to 3 models, so it can be explained more specifically each company observed. This is important because the overall analysis of a general nature or generalizations, but the analysis is partially the result varies depending on the type of industry or their respective businesses, although some are likely to approach the result mainly of the significance levels and trends of influence negatively or positively the dependent variable.

(1) The regression equation - Model 1

$$R_i = b_0 + b_1 X_{1\_TAG} + b_4 X_{4\_DTA} + b_5 X_{5\_Rm} + e$$

By using a variable growth of total assets (X1 TAG) as a proxy variable investment opportunity set, the results of each company shows that this variable varied influence on stock return as presented in Table 3. In the company code or Issuer PWON or PakuwonJatiTbk, showed that signifikan asset growth effect on stock returns, because this company as the company propoerti field of real estate, so it is unrealistic to asset growth affect the stock price, and a positive influence. There are 10 companies or issuers menunjukka that this X1\_TAG variable positive effect, and some negative effect, but the effect is not significant. The same thing happened to the variable level of leverage (X4\_DTA) and variable market returns (X5\_Rm). There are variations in the level of significance of these two variables influence the market return. The regression equation - Model 2

$$R_i = b_0 + b_2 X_{2\_CAPBVA} + b_4 X_{4\_DTA} + b_5 X_{5\_Rm} + e$$

Variable capital expenditure or X2 CAPBVA as a proxy of investment opportunity or IOS showed that only issuers with PWON code that have significant coefficients influence on stock returns, while others indicate that this variable has no significant effect on stock returns, as presented in Table 4. In Generally this is in line with the overall calculation of the variable signifikan X2\_CAPBVA no effect on stock returns. Variable X5\_Rm show that there are three companies that have shown that these variables are positive and significant effect on stock returns. While other companies showed that the variables X5\_Rm not significant effect on stock returns

(1) The regression equation - Model 3

$$R_i = b_0 + b_3 X_{3\_ITE} + b_4 X_{4\_DTA} + b_5 X_{5\_Rm} + e$$

Variable ratio of investment to profit or X3\_ITE as a proxy variable investment opportunity set or IOS, indicates that there are two companies that have kofisien positive influence signifikan to return stock, the issuer with the code INTTP or

Indocement and PTBA or Tambang Batu Bara Bukit Asam Tbk, as presented in Table 5. It shows that the increase in variable X3\_ITE will cause an increase in the perusahaan stock returns. While issuerslinnya indicates that the variable X3\_ITE signifikan no influence on the company's stock returns.

## CONCLUSION AND RECOMMENDATION

### Conclusion

Based on your permasalahan and regression analysis results can be summarized as follows:

- (a) Variable investment opportunity set or a proxy IOS in three independent variables are growth assets (X1\_TAG), capital expenditure (X2\_CAPBVA), and investment towards earning (X3\_ITE). Those variables are used interchangeably in the regression equation along with other independent variables. The results show that these three variables did not significantly the impact on stock returns  $R_i$  Tau. This occurs due to the growth of assets, capital expenditure or capital expenditure and investment towards earning comparisons less response by investors to make decisions, so as not significant influence on stock prices at the Stock Exchange. Stock returns occurs because of changes in stock prices, while the change in the stock price will fluctuate when changes are independent variables. In case there is no significant relationship as variable IOS then changes up or down does not have a significant impact on stock returns. Decision investors are generally short term to obtain the gain, so that the company's decision in connection with IOS variables that impact the long-term future to come, it is less attractive for investors attention. Investors tend to pay more attention to changes in other variables, because the internal decisions relating IOS variables considered are not necessarily generate decent profitability in the short term.
- (b) IOS variables that influence in the proxy as the increase of assets and capital expenditure berpenaruhnagtif, because the stock market tends to decline in several companies within the company LQ45 observed, so that the assets and capital expenditure growth turns negative impact and no significant effect on stock returns. This happens, as investors assess the contrary that the company experienced declining performance tends to increase its investment through additional assets or increase the amount of capital expenditure, so that in the short term has not been able to generate returns mamadai. In the theory of signaling, such measures provide an indication that the company experienced a decline in performance, so the stock prices or stock returns tend to decrease.



- (c) While IOS proxy variables as investment ratio to earnings, negative effect shows that in terms of the profitability of these variables responded negatively, which means getting down the comparison value then return stock will rise. This is because the drop in earnings ratio of investment to provide a signal company more productive or efficient in generating returns. The efficiency because of growth in smaller investment than earnings growth, or at the same level of investment but a greater level of earnings. This variable is negative and not significant influence on changes in stock prices or stock returns.
- (d) The variable degree of leverage or X4\_DTA positive and significant effect on stock returns. It was evident in the measurement model 1, model 2, model 3 and 4 the results are consistently model almost the same as the model, although used interchangeably IOS variables of each proxy and without the use of proxy variables. Variable levels of leverage gives a signal to potential investors that the company obtained additional loans from banks shows that the company has a viable investment prospects and have been comprehensively analyzed by all relevant parties. In addition, the additional use of debt for investment will increase earnings Per share because of the level of profitability is only enjoyed by existing shareholders without increasing the number of shareholders. This is what causes this variable will respond positively and significantly by investors led to changes in stock prices or rising stock returns.
- (e) Return to variable market or X5\_Rm show consistency effect on stock returns, as the result of the calculation model 1, model, model 3 and 4. The effect of this variable models consistently exhibited significantly positive effect on stock returns. This happens because the market return is the variable that most attention by investors in making investment decisions in the stock market. Return market has a very strong signal that responded very quickly by investors, since this variable reflects the overall condition of the companies listed on the capital market and its relation to macroeconomic variables such as macro-economic conditions, political or government policy, social, cultural, and environmental industry. When economic conditions are likely to improve then return the market to rise, and this means that the capital markets will also diwatnai with an increase in stock prices of companies that stock returns are also increasing. Conversely, when the economic downturn, the decision of investors will use those signals as the basis for its investment-determination against the company's stock. Some companies aka decreased mainly are directly impacted by the economic downturn, but for the particular company or industry will experience the opposite,

namely as an opportunity for profit, and its share price will increase which cause stock returns is growing.

### **Recommendation**

Based on the description above, the study suggested as follows:

- (a) Wisdom company associated with the variable investment opportunity set or IOS to be published by the company management in order not responded negatively by investors, as the impact of signaling theory that reading is negative that the company is performing down will increase investment. Through disclosure by management about the prospects of future profitability will be achieved upon the addition of the assets or capital expenditures, the investor no longer rely on the signal but grounded accurate information from company management.
- (b) Manajemn company policy that memperharhatikan optimal capital structure, as investors concerned about the earnings Pershare. Therefore, the policy of the use of debt to finance investments hedaknya informed in a transparent manner to the public that such a policy in a rational response by investors. In the case of the use of debt at the level of the debt cost of capital is lower than the investment return or cost of capital than equity, it will increase the dividend Pershare and this can boost the company's stock price. Conversely if the debt cost of capital higher than the investment return or cost of capital out of equity, then the use of the share capital to finance the investment will increase stock returns. Capital structure policies vary, depending on the policy management and decision of general meeting of shareholders.
- (c) Return market is very significant effect on stock returns, but not all companies return the shares affected positively by the market return. Where the importance prospective investors pay attention not only on technical analysis but also fundamentally company. For the management of the company, should be able to anticipate the possibility of internal policies to mitigate the economic downturn, so that the economic downturn does not affect the company's profitability and sutainability.

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