EFFECTS OF INVESTMENT OPPORTUNITY SET, COMPANY SIZE AND REAL ACTIVITY MANIPULATION OF ISSUERS IN INDONESIA STOCK EXCHANGE ON STOCK PRICE IN INDONESIA

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Abstract: *The objective of the present research was to determine simultaneous effects of investment opportunity set, company size and real activity manipulation on stock price. The type of investigation in this research was causal studies. The year data were manufacturing companies listed on Indonesia Stock Exchange in the period 2010-2014. The research variables used were investment opportunity, company size, and real activity manipulation as independent variables, and stock price as the dependent variable. The results demonstrate that investment opportunity set, company size and real activity manipulation simultaneously affect stock price. It shows the proxy growth of a company contains information that can be used by investors in the capital market as a signal in opportunities to predict stock price and earn return, particularly regarding events or publication of financial statements.*

Keywords: *Stock Price, Investment Opportunity Set, Company Size and Real Activity Manipulation.*

1. BACKGROUND

The rapidly-growing capital markets today highly capture the attention of investors and capital owners to invest in capital market. It is characterized by the improvement in the Indonesian economy with the increasing number of issuers. The improvement in Indonesian economy will bring a better direction for parties in interest, such as companies that can easily gain capital, and investors who will obtain return from the stock invested, both in the form of dividends and capital gains. Nonetheless, investing

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in stock also has a high risk in accordance with the principle of investment, namely low risk low return, high risk high return, thereby, accurate and transparent information is needed. Several factors that may affect stock purchase include stock price, level of benefits gained, risk level, corporate performance and corporate action undertaken by the company.

Thrisye and Nicodemus (2013) empirically explored the total asset turnover, which represents the activity ratio of the state-owned mining companies on stock returns and found that the activity ratio have insignificant effect on stock returns. This finding contradicted to earlier study by Nuryana (2013), who documented that the total assets of LQ45 group companies had affected significantly the companies' stock returns. In their studies, Herlambang and Rachmad (2003), Hermi and Ary (2011), Farkhan and Ika (2012) and Yuliantari (2014) documented that the market ratio has positively and significantly affected stock returns. Lutfi and Arshita (2016) empirically explored the Total Assets and Debt to Equity have significant effects to the Price Earning Ratio on the shares registered in Jakarta Islamic Index. Meanwhile, the Dividend Payout Ratio has no effect to Price Earning Ratio on the shares registered in Jakarta Islamic Index. In predicting stock prices, there are basic approaches, i.e. fundamental analysis and technical analysis. Simatupang (2010) illustrates that the fundamental analysis is based on price behavior pattern determined by variable variation in basic behavior of the company's performance. The company's performance will serve as a benchmark on the extent of risks borne by the investor, whereas technical analysis is stock purchase in the form of speculating activities (Husnan, 2003). A number of things can support the company's performance in terms of profit growth in developing business besides maintaining the business main core of the company. The investment opportunity of the company thereby can affect the growth rate of the company. A company that possesses investment opportunities in the future will have greater opportunities to grow. Investment opportunity set shows investment decision in the form of a combination of owned assets and grow option in the future (Myers, 1976). Investment in the future is not simply shown with the presence of activities supported by research and development, but also with the company's ability to exploit the opportunity to take advantage compared to other equal companies in the industry groups. Gul, *et al.* (2000), describes the managers of companies with high growth use more management to mark their information on the company's growth opportunities in the future.

Another factor that is able to affect the stock price is company size. The company size of a company indicates the experience, abilities and risk level in managing the investment given by the investor. Juniarti (2005) states large companies are expected to avoid overly drastic fluctuations in profits, as drastic increase in profits will lead to increased taxes. In contrast, drastic decreases in profits will leave the company in unfavorable condition that may affect investors' reaction to the financial condition of the company in concerned in the capital market.

Furthermore, profit management practices can also affect the company's stock price. The tendency of investors who pay more focus on profit information encourages

the management to pull profit manipulation stunts intended to generate profits deemed to be normal for the company. Such condition leads the management as the management company to eventually garner more information than the company's shareholders, which will result in asymmetry of information that encourages the management to practice earnings manipulation. At the beginning, the managers tend to use accrual to transform the company's profit information. The disclosure of Enron case has brought awareness to public that the risk of fraud is very likely carried out by the company, so that the public distrust the company. Therefore, the US government created the Sarbanes-Oxley Act (SOX) in order to restore investors' trust. SOX regulations have made the accrual profit management easily detected by the watchdog, hence limiting the flexibility of the company when it will conduct accrual profits management. Therefore, management tends to use real activity manipulation in order to able to keep manipulating profits with detected risk level lower than accrual profit management. The global economic crisis brings major impact to Indonesia on every sector, with no exception of growth in the manufacturing sector. The manufacturing industry which grew up to 4.7% in 2007 slowed down by 2.1% in 2009. The non-oil manufacturing industry which grew 5.1% in 2007 slowed down to 2.5% in 2010. The food and beverage subsector became one of the sectors which also decreased due to the crisis in 2010, and is estimated from 8.84% to 2.73%. On the other hand, food and beverage sub-sector has an important role in the development of the industrial sector by maintaining the profit. However, increasingly expensive raw material costs and high production cost results in the high selling price of the product. If seen from the result of the average stock return in entire companies each year, the most declining stock return occurred in 2011 up to 0.29% from 2010, which is 0.63%.

For investors, the stock price is one parameter to assess the extent of advantage in a stock. Investors will invest in the stock market will firstly view which is the most profitable company by assessing the performance of the company concerned. Companies having a good performance will be selected by investors because they will buy stock in accordance with the current performance and prospects of companies in the future. As for the questions in research is:

Do the investment opportunity set, company size and real activity manipulation simultaneously affect stock price?

2. CONCEPTUAL FRAMEWORK

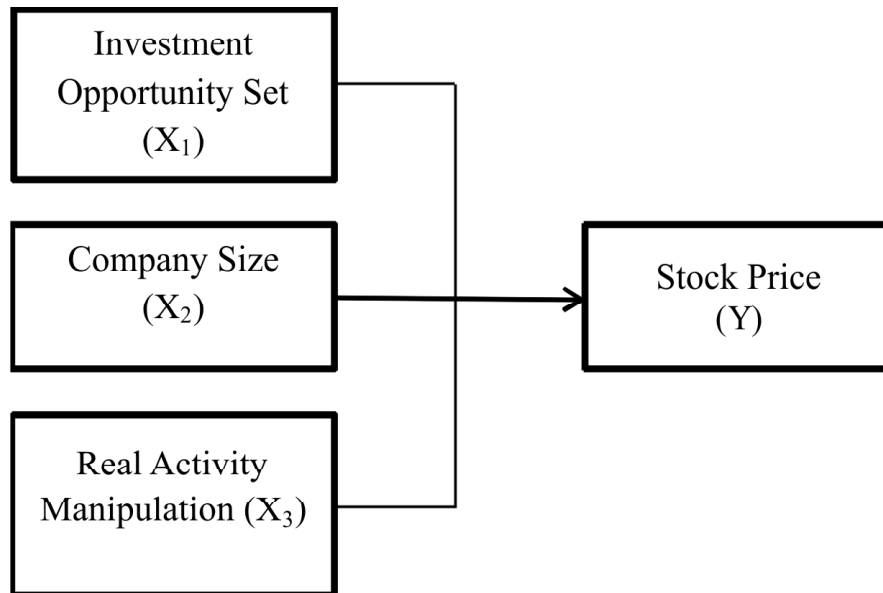The framework model is presented as follows:

Figure 1 : Conceptual Framework

3. RESEARCH METHODS

3.1. Research Design

The type of investigation in this research was Causal Study. The present research was aimed to test effects of independent variables (investment opportunity set, the company size and real activity manipulation on stock price).

3.2. Research Population and Sample

Based on the criteria above, then the process of sample determination is shown in Table 1 :

Table 1
Sample Selection Criteria

No	Sample Criteria	Total
1.	The year data of manufacturing companies listed on IDX in the period 2010-2014	677
2.	The year data of companies Data which do not report financial statements consistently in the period 2010-2014	(86)
3.	The year data of companies which do not issue financial statements in Rupiah	(79)
4.	Incomplete companies' year data	(152)
	Sample	360

Source: Secondary data in the period 2010-2014 (processed).

3.3. The Definition of Variable Operation

Table 2
Variable Operationalization

Variable	Definition of Operation	Measurement
Stock price(Y) Financial Leverage (X_1)	Stock price from time to time The use of a number of assets or funds by a company in which the use of the funds or assets must incur fixed costs. The use of the asset is eventually intended to increase the potential profit for shareholders.	$= \dfrac{Total\,Debt}{Total\,Asset}$
Company Size (X_2)	Describes the size of a company represented by total assets, number of sales, average selling rate and average total assets	Size = log. total assets
Real Activity Manipulation (X_3)	management actions deviating from normal operating decisions of company with the main objective to achieve the target profit	CFO_t/A_{t-1} $= \alpha_0$ $+ \alpha_1\,(1/A_{t-1})$ $+ \alpha_2\,(S_t/A_{t-1})$ $+ \alpha_3\,(\Delta S_t/A_{t-1})$ $+ \varepsilon_t$

3.4. Testing Design

The data analysis technique used was multiple linear regression analysis by combining all cross section data and time series. The classical assumption testing conducted included heteroscedasticity, multicollinearity test and autocorrelation test (Ghozali, 2011). The model data were then estimated using multiple regression analysis models with SPSS test equipment. The regression equation used in this research is as follows:

$$Y = a + b_1\,x_1 + b_2 x_2 + b_3 x_3 + e$$

Description:

Y	=	Stock Price
a	=	Constant
b_1, b_2, b_3	=	Regression Coefficients
x_1	=	Investment Opportunity Set
x_2	=	Company Size
x_3	=	Real Activity Manipulation
e	=	epsilon (*error term*)

4. RESULTS

4.1. Descriptive Statistics

The descriptive statistics in the research is below:

Table 3
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
SPI	360	-,01	28,32	1,9164	2,32635
UP	360	9,27	19,28	14,1180	1,60908
MAR	360	-1,17	,94	-,0093	,15549
HS	360	50,00	740000,00	14006,7361	58702,76496
Valid N (listwise)	360				

Source: Results of the Researcher's Processed Data (2016).

The output shown in variable of investment opportunity set for the entire observation indicates an average value of 1.916. The maximum value of 28.324 and minimum value of -0.008. The variable of company size shows the descriptive results with an average value of 14.118 with a minimum value of 9.267. The descriptive result of variable of real activity manipulation indicates the average value of -0.009, with a minimum value and a maximum in overall by -1.172. Stock price variable with an average value indicates 14006.7361. The minimum value of 50 is Indo Acitama Tbk and maximum value of 740000

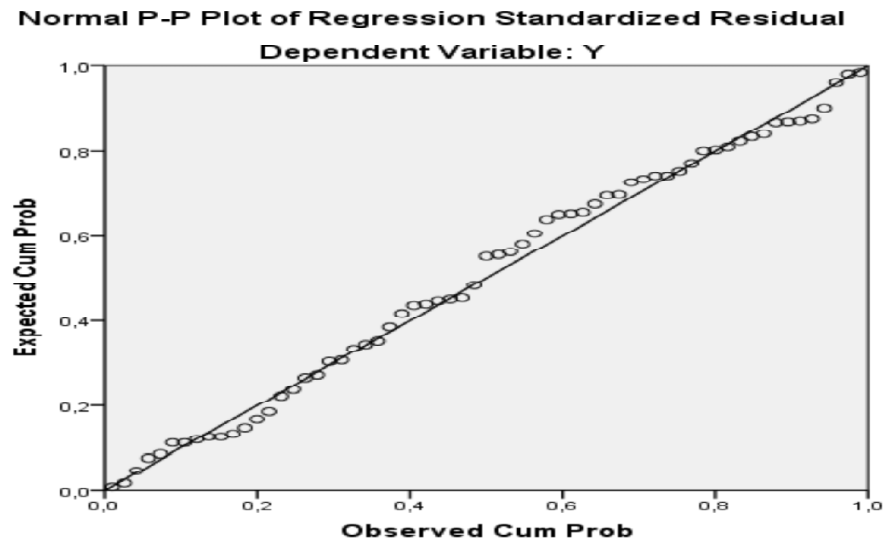## 4.2. Classical Assumption Test

4.2.1. Normality Test

Figure 2 : Normality Test

Based on the graphic image, the model used shows normal indication.

4.2.2. Heteroscedasticity

The test Heteroscedasticity result is below:

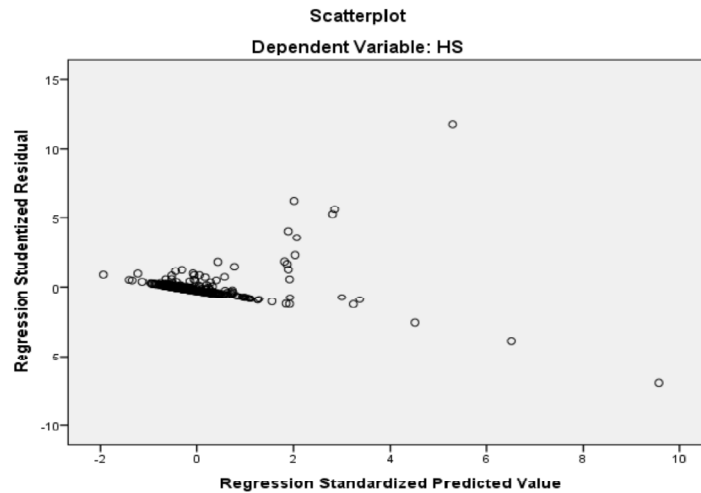**Scatterplot**
Dependent Variable: HS

Figure 3 : Heteroscedasticity Test

The figure shows that the points spread above and below 0, axis Y, but there are some points forming a pattern, hence it can be concluded that Heteroskidastity does not happen to the data.

4.2.3. Multicollinearity Test

Below shows the multicollinearity test :

Table 4
Multicollinearity Test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	52516,649	24716,499		2,125	,034		
	SPI	10491,875	1358,965	,416	7,720	,000	,743	1,347
	UP	-4115,535	1764,489	-,113	-2,332	,020	,921	1,086
	MAR	55256,141	20036,774	,146	2,758	,006	,765	1,308

a. Dependent Variable: HS
Source: Results of the Researcher's Processed Data (2016).

The testing result demonstrates VIF value and the tolerance value of each variable are investment opportunity set, company size and real activity manipulation. Tolerance value of all variables shows values greater than 0.10 and VIF value is smaller than 10. Based on the result, it can be seen that the regression model is free from multicoloniarity between independent variables.

4.2.4. Autocorrelation Test

Below shows the autocorrelation test.

Table 5
Autocorrelation Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,483[a]	,233	,227	51615,88582	1,899

a. Predictors: (Constant), MAR, UP, SPI
b. Dependent Variable: HS
Source: Results of the Researcher's Processed Data (2016).

The result shows that at a significance level of 5% for the sample of 360 (n) the value du = 1.84389 and 4-du = 2.15611. The Durbin Watson value is 1,89, thus is greater than the limit (du) and smaller than (4-du), i.e. (1.84389 <1.899 <2.15611), thus it can be concluded that there is no autocorrelation in the data.

4.3. Hypothesis Testing Results

4.3.1. The Coefficient of Determination (R^2)

Table 6
Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,483[a]	,233	,227	51615,88582	1,899

a. Predictors: (Constant), MAR, UP, SPI
b. Dependent Variable: HS
Source: Results of the Researcher's Processed Data (2016).

Based on Table 6, the variables of investment opportunity set, company size and the real activity manipulation affect stock prices and the coefficient of determination of 0.233 or 23.3%. It identifies that 23.3% of transformations in the stock price change are explained by the independent variables simultaneously.

4.3.2. F Test

Table 7
F Test Result

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	288664164283,47	3	96221388094,49	36,116	,000[b]
	Residual	948455082258,45	356	2664199669,265		
	Total	1237119246541,9	359			

a. Dependent Variable: HS
b. Predictors: (Constant), MAR, UP, SPI
Source: Results of the Researcher's Processed Data (2016).

Table 7 shows that the significance value is 0.000. Therefore, by using a significance level of 5%, it can be concluded that all independent variables (investment opportunity set, company size and real activity manipulation) significantly affect the dependent variable (stock price).

4.3.3. t Test

Table 8
t Test Result

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	52516,649	24716,499		2,125	,034
	SPI	10491,875	1358,965	,416	7,720	,000
	UP	-4115,535	1764,489	-,113	-2,332	,020
	MAR	55256,141	20036,774	,146	2,758	,006

a. Dependent Variable: HS
Source: Results of the Researcher's Processed Data (2016).

Multiple linear regression equation by measuring the stock price frequency obtained based on statistical calculation result as shown in Table 8 is:

$$Y = 52516,649 + 10491,875FL - 0,4115,535UP + 55256,141MAR + e$$

1) The investment opportunity set has regression coefficient unequal to 0 (0.416 ≠ 0) and a significance level below 5% (0.000 <0.05). That is, investment opportunity set significantly affects stock price.

2) The company size has a regression coefficient value unequal to 0 (-0.113 ≠ 0) and a significance level below 5% (0.020 <0.05). That is, the company size significantly affects stock price.

3) The manipulation of real activity has a regression coefficient value unequal to 0 (0.146 ≠ 0) and a significance level below 5% (0.006 <0.05). That is real activity manipulation significantly affects stock price.

5. DISCUSSIONS

5.1. Effects of Investment Opportunity Set on Stock Market

The results indicate that investment opportunity set has a regression coefficient of 0 (0.416 ≠ 0) and a significance level below 5% (0.000 <0.05). That is the investment opportunity set variable has a significant effect on stock price. It shows that proxy growth of a company contains information that can be used by investors in the capital market as a signal in opportunity to predict stock price and earn return, particularly regarding events or the publication of the financial statements. The results are consistent with research by Norpratiwi (2007) which states that the investment opportunity set affects the stock during financial reporting.

5.2. Effects of Company Size on Stock Market

The results show company size variable has a value of regression coefficient of 0 (-0.113 ≠ 0) and a significance level below 5% (0.020 <0.05). That is company size variable gives significant effect on stock price. It shows that the scale of the company's assets has already reflected that the company is more stable and better in generating profits. The results are consistent with the results of research done by Mentari (2012) and Gunarso (2014), showing the positive effects of company size on stock price.

5.3. Effects of Real Activity Manipulation on Stock Price

The results of real activity manipulation variable demonstrate that the regression coefficient is (0,146 '" 0) and a significance level is below 5% (0.006 <0.05). That is the variable of real activity manipulation provides significant positive effect on stock price. The research is based on the agency relationship in which conflicts of interest that occurs between parties who authorize (principal), and the party receiving authority (agent) and encouraging the agent to conduct deviating process in the process of financial statements preparation by increasing profits for to optimize investors' profits. Such deviation is committed by the agent to obtain a great compensation, hence it appears to be good in the view of investors. If the earning reports appear to be good, it will be to attract investors to invest in the company, hence the increasing demand for stocks. The results are consistent with the results of research done by Meiza (2011) and Smith (2012) which shows the positive effects of real activity manipulation on the stock price.

6. CONCLUSIONS AND SUGGESTIONS

6.1. Conclusions

Investment opportunity set, the company size and real activity manipulation simultaneously affect stock price. It shows that the proxy growth of a company contains information that can be used by investors in the capital market as a signal in the opportunity to predict stock price and earn return, particularly regarding events or the publication of the financial statements.

6.2. Suggestions

1. For the management of the company, they are expected to pay more attention to the company performance in increasing selling price of stocks to keep attracting investors to actively invest in the stock market.
2. This research expects the companies to be more open in conveying financial information to improve the investors' trust to the company in obtaining the rate of return expected by them.
3. Further research should expand more representative research samples, such as LQ45 Company which is being more actively traded on the stock exchange.

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