

Model Simultaneity Company Value and Stock Price in Securities Company in Indonesia

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ABSTRACT

Company value is the investor's perception of the level of success of the company that is often associated with stock prices. High stock prices make the value of the company also high and increase market confidence not only on the company's current performance but also on the company's prospects in the future, by increasing the value of the company, the welfare of the owners will also increase. This study aims to analyze how much the effect of profitability, dividend policy, capital structure, company size, sales growth, free cash flow on firm value and stock price. In this study, researchers used OLS (Ordinary Least Square) method, simultaneous/2SLS method (Two Stage Least Square) and panel regression method (Panel Regression). Which aims to analyze the effect of independent variables on the dependent variable in the short and medium term. Profitability, company size, free cash flow, stock prices have a positive and insignificant effect, capital structure has a positive and simultaneously significant effect on firm value. Profitability has a significant negative effect, capital structure has no significant negative effect, dividend policy, sales growth, firm value positive effect is not simultaneously significant towards stock prices.

Keywords: Company Value, Stock Price, Profitability, Dividend Policy, Capital Structure, Firm Size, Sales Growth, and Free Cash Flow, OLS, Simultaneous (2SLS) and Panel Regression.

INTRODUCTION

The company's value is the investor's perception of the company's success rate which is often associated with stock prices. The value of the company is an achievement

that is in accordance with the wishes of its owners, because by increasing the value of the company, the welfare of the owners will also increase. Price to Book Value is a ratio that can be used to measure the value of the company. The financial decisions taken by financial managers are intended to increase the prosperity of the company owners, which is demonstrated by the increasing value of the company.

Stock price is one of the most desirable investor capital market instruments because it provides an attractive level of profit. The shares can be considered as a sign of capital participation of one or one unilaterally (business entity) in a company or limited liability. By including the capital, the party has a claim on the company's opinion, claims for the company's assets and is entitled to the general Meeting of Shareholders (GMS).

There are many factors affecting company value and stock price. Its large profitability can be influential by the company's value and the stock price generated by the company. Profitability is an overview of the company's ability to generate profits. In addition to profit-generating capabilities, profitability also reflects management performance in managing the company. The higher the profitability ratio of a company, meaning that the company has good management. Profitability is one of the main aspects that investors will see before investing. The higher the profitability of a company will certainly make the company more attractive in the eyes of investors.

Company Value Development (PBV) IDX-listed Securities Company in 2012-2017

No	Company Name	PBV (X)					
		2012	2013	2014	2015	2016	2017
1	PT. Majapahit Inti Corpora Tbk.	-	1.60	1.58	1.39	1.33	2.71
2	PT. Kresna Graha Investama Tbk.	-	3.65	3.81	14.92	13.72	9.91
3	PT. Minna Padi Investama Tbk.	-	8.66	3.68	4.69	12.02	21.49
4	PT. Panin Sekuritas Tbk.	-	2.79	2.91	2.81	2.25	1.16
5	PT. Panca Global Securities Tbk.	-	1.11	0.75	0.70	0.66	1.12
6	PT. Reliance Securities Tbk.	-	1.68	1.79	0.95	0.97	0.96
7	PT. Trimegah Sekuritas Indonesia Tbk.	-	0.79	0.91	0.61	0.78	1.55
8	PT. Yulie Sekurindo Tbk.	-	0.52	0.65	0.41	0.37	8.97
	Average	0	2.60	2.01	3.31	4.01	5.98

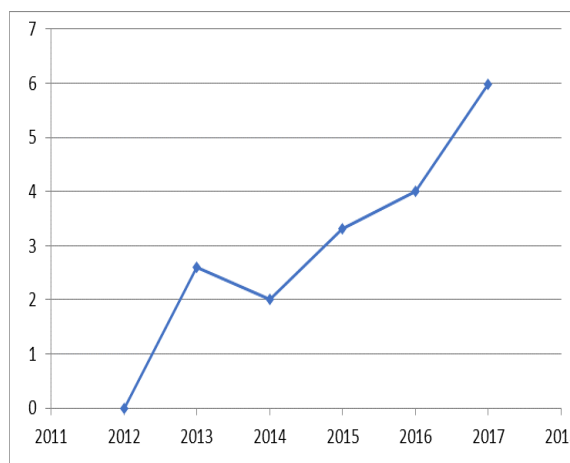
Source: www.idx.co.id (2020)

Data from the table above shows the value of PBV in some securities companies that have increased or decreased significantly. The average value of PBV in each year at the securities company is stable enough in 2013, 2.60 Times later in 2014, that is a decline of 2.01 times later in the year 2015 increased that is 3.31 times and continue to increase in the year 2016 which is as low as 4.01 times, and in 2017 also continue to have a rating of 5.98 times.

the value of assets owned by the company. The lower the value of the company then the company will not have good image.

Graph Development PBV

On the chart above is known average development value of the company in 2012-2017, where the average development value of the company decreased in the year 2014. The decline in company values can reflect



Stock price Development (PER) IDX-listed Securities Company in 2012-2017

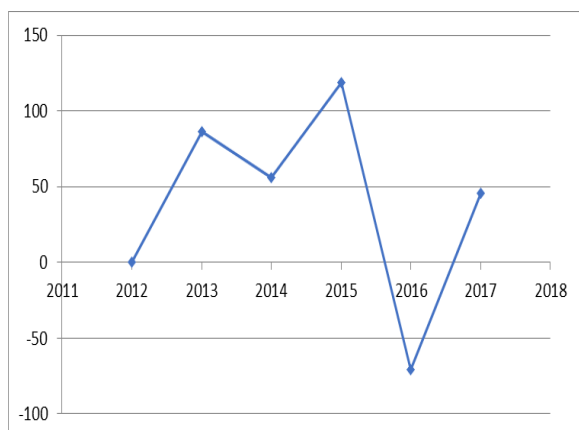
No	Company Name	PER (X)					
		2012	2013	2014	2015	2016	2017
1	PT. Majapahit Inti Corpora Tbk.	-	-47.27	172.94	18.16	22.56	16.72
2	PT. Kresna Graha Investama Tbk.	-	71.84	20.85	137.38	61.35	25.03
3	PT. Minna Padi Investama Tbk.	-	509.12	28.92	682.91	-677.32	233.62
4	PT. Panin Sekuritas Tbk.	-	15.08	9.74	46.72	8.48	8.11
5	PT. Panca Global Securities Tbk.	-	8.89	4.91	6.28	6.85	9.7
6	PT. Reliance Securities Tbk.	-	8.78	52.82	22.97	22.61	53.56
7	PT. Trimegah Sekuritas Indonesia Tbk.	-	113.73	21.26	10.92	10.48	19.52
8	PT. Yulie Sekurindo Tbk.	-	9.01	134.11	26.93	-20.75	-2.137
	Average	0	86.15	55.69	119.03	-70.72	45.51

Source: www.idx.co.id (2020)

Data from the table above shows the stock price value (PER) in some of the securities companies that have increased or decreased significantly. The average value PER year in the securities company was stable enough in 2013, 86.15 Times later in 2014, decreased to 55.69 times in the year 2015 has increased to 119.03 times but in 2016

decreased to -70.72 times later in the year 2017 back increased to 45.51 times.

Graph Development PER



On the chart above known average stock price development (PER) in the year 2012-2017, where the average share price decreases in the year 2016, decrease in the stock price has an impact on investors, because when the stock price is decreased then investors will suffer losses and decrease in the price of stocks also become a negative signal for investors.

LITERATURE REVIEW

Company Value

The financial goal is to maximize the value of the company. The higher the value of the company describing the more prosperous company owners. According to Sujoko and Soebiantoro in Sandang (2015) The value of the company is an investor's perception of the success rate of the company that is closely related to the price of shares of high stock prices make the company value is also high and increase market confidence not only to the current company's performance but also on future prospects of the company.

According to the experts the value of the company is measured using Price To Book Value (PBV) which is the ratio that compares between the price per share and the value of the book per share. The Price To Book Value (PBV) ratio gives an overview of how many times we pay a share with the company's book value. According to Brigham and Houston, in Hidayat (2013). The formula as follows:

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

Source: Brigham and Houston, in Hidayat (2013)

Share Price

According to Darmadji Fakhruddin (2011) stating that shares are a sign of inclusion or possession of a person or business entity in a limited company or company. A tangible share of a piece of paper explaining that the paper owner is the owner of the company that issued the securities. The portion of ownership is determined by how much inclusion is implanted in the company.

Price Earning Ratio can also be used to compare the performance between stocks or between sectors and even between markets on a regional or global scale. PER describes how the profit of the company or the issuer of the shares against its share price, indicating the magnitude of the rupiah to be paid by the investor to earn one dollar revenue of the company. The greater the Price Earning Ratio, the greater the ability of the company to grow so as to increase the value of the company.

Price Earning Ratio is calculated using the formula:

$$PER = \frac{\text{Market price per share}}{\text{Earnings per share}}$$

Source: (Rahardjo, 2009)

Conceptual Framework

The conceptual framework According to Rusiadi (2013) states that the concept framework will link theoretically between research variables i.e. independent variables with dependent variables.

In research there is its name conceptual framework. The conceptual framework is a reciprocal relationship between a variable with other variables in multiple linear analyses, simultaneous analysis and panel regression.

The conceptual framework in this study is to see the linkages between free variables to free variables against bound variables i.e. profitability, dividend policy, capital structure, company size, sales growth and

free cash flow. The same variables are company values and share prices.

1. OLS (Ordinary Least Square) with double linear analysis Model

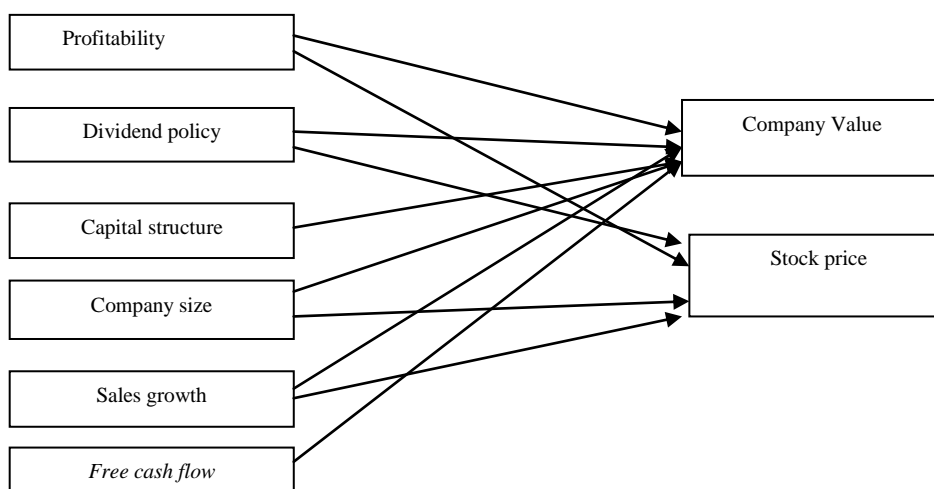


Figure: Conceptual Framework Multiple analysis

2. SLS (Two Stage Least Square) with simultaneous analysis models

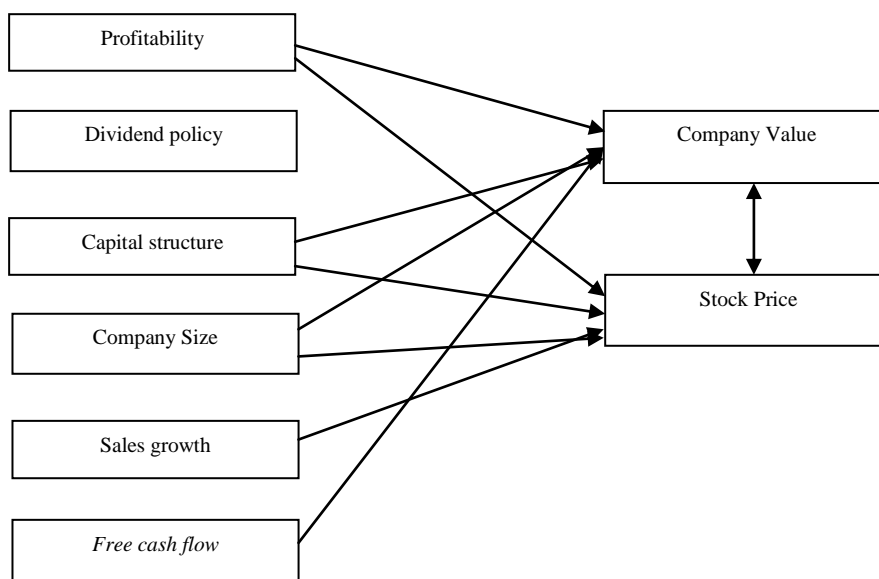


Figure: Conceptual Frame Mode Simultaneous analysis

METHOD

This research is quantitative with the support of multiple linear analysis models, regression panels, simultaneous regression. This research will use independent dependent and variable variables. Company value, share price as independent variable, and profitability, dividend policy, capital structure, company size, sales growth and Free Cash Flow as dependent variable.

The population of this research is the Securities company listed on the Indonesia

Stock Exchange (IDX) in the year 2012-2017. Based on these criteria, the company that used as the object of this research is:

Table 3.1 Research population

No	Code	Company Name
1	AKSI	PT. Majapahit Inti Corpora Tbk.
2	KREN	PT. Kresna Graha Investama Tbk.
3	PADI	PT. Minna Padi Investama Tbk.
4	PANS	PT. Panin Sekuritas Tbk
5	PEGE	PT. Panca Global Securities Tbk.
6	RELI	PT. Reliance Securities Tbk.
7	TRIM	PT. Trimegah Sekuritas Indonesia Tbk
8	YULE	PT. Yulie Sekurindo Tbk.

Based on the population criteria, samples were obtained in this study as many as 8 samples of Securities companies listed on the Indonesia stock Exchange (www.idx.co.id).

The analysis of the data used is a quantitative analysis expressed by the numbers and the calculations Menggunakan standard method. Adapaun data analysis techniques in this study, authors use EViews program. For data Analyiss using the analysis:

OLS (Ordinary Least Square) with double linear regression analysis Model

2SLS (Two Stage Least Square) with simultaneous analysis models

RESULT AND DISCUSSION

Data Analysis Results

Raw Data for variables on profitability, dividend policy, capital structure, company size, sales growth, Free Cash Flow, company value and stock price.

1. Interpretation of OLS (Ordinary Least Square)

Estimates for knowing the influence of variables separately are done using the Ordinary Least Square model. The result of an equal system estimation with Ordinary Least Square is shown in the table below.

OLS consensus estimates company value

OLS Estimation Table Company value				
Dependent Variable: NP				
Method: Least Squares				
Date: 02/07/19 Time: 22:55				
Sample: 1 48				
Included observations: 48				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.169686	0.239296	-0.709104	0.4823
PROF	0.219258	0.125091	1.752794	0.0871
KD	-0.225588	0.109200	-2.065829	0.0452
SM	-0.331738	0.145203	-2.284650	0.0276
UP	2.91E-07	1.05E-07	2.773846	0.0083
PP	-0.079030	0.100851	-0.783632	0.4378
FCF	0.031871	0.026644	1.196174	0.2385
R-squared	0.253684	Mean dependent var	0.286856	
Adjusted R-squared	0.144467	S.D. dependent var	0.422478	
S.E. of regression	0.390772	Akaike info criterion	1.092651	
Sum squared resid	6.260800	Schwarz criterion	1.365534	
Log likelihood	-19.22362	Hannan-Quinn criter.	1.195774	
F-statistic	2.322748	Durbin-Watson stat	1.054213	
Prob(F-statistic)	0.050604			

Based on the results of multiple linear regression known equations:

$$Y = 0.1696 + 0.2192\text{PROF} - 0.2255\text{KD} - 0.3317\text{SM} + 2.910\text{UP} - 0.0790\text{PP} + 0.2536\text{FCF} + \varepsilon$$

2. SLS (Two Stage Least Square) Interpretation

Simultaneous regression analysis:

Estimation to determine the influence of variables in 2 simultaneous equations is done with Two-Stage Least Square models shown in the table below. From the known tables 2 (two) equation model:

$$\text{LOG}(\text{NP}) = \text{C}(10) + \text{C}(11) * \text{LOG}(\text{PROF}) + \text{C}(12) * \text{LOG}(\text{SM}) + \text{C}(13) * \text{LOG}(\text{UP}) + \text{C}(14) * \text{LOG}(\text{FCF}) + \text{C}(15) * \text{LOG}(\text{HS}) + \varepsilon_1$$

$$\text{LOG}(\text{HS}) = \text{C}(20) + \text{C}(21) * \text{LOG}(\text{PROF}) + \text{C}(22) * \text{LOG}(\text{KD}) + \text{C}(23) * \text{LOG}(\text{SM}) + \text{C}(24) * \text{LOG}(\text{PP}) + \text{C}(25) * \text{LOG}(\text{NP}) + \varepsilon_2$$

SLS Results Table

System: YCM				
Estimation Method: Two-Stage Least Squares				
Date: 02/08/19 Time: 00:07				
Sample: 1 48				
Included observations: 48				
Total system (balanced) observations 96				
	Coefficient	Std. Error	t-Statistic	Prob.
C(10)	-7.616345	3.702581	-2.057037	0.0428
C(11)	0.372998	0.298129	1.251131	0.2144
C(12)	0.526833	0.251775	2.092473	0.0394
C(13)	3.532455	2.201729	1.604401	0.1124
C(14)	0.065863	0.301497	0.218453	0.8276
C(15)	1.016958	0.953681	1.066350	0.2893
C(20)	0.701130	0.523889	1.338317	0.1844
C(21)	-0.279475	0.154366	-1.810470	0.0738
C(22)	0.083077	0.183001	0.453972	0.6510
C(23)	-0.186080	0.134478	-1.383720	0.1701
C(24)	0.259095	0.155222	1.669190	0.0988
C(25)	0.269694	0.242225	1.113403	0.2687
Determinant residual covariance 0.224272				
Equation: LOG(NP)=C(10)+C(11)*LOG(PROF)+C(12)*LOG(SM)+C(13)*LOG(UP)+C(14)*LOG(FCF)+C(15)*LOG(HS)				
Instruments: C PROF KD SM UP PP FCF				
Observations: 48				
R-squared	-0.137911	Mean dependent var	-1.412636	
Adjusted R-squared	-0.273376	S.D. dependent var	1.090362	
S.E. of regression	1.230408	Sum squared resid	63.58398	
Durbin-Watson stat	1.450222			
Equation: LOG(HS)=C(20)+C(21)*LOG(PROF)+C(22)*LOG(KD)+C(23)*LOG(SM)+C(24)*LOG(PP)+C(25)*LOG(NP)				
Instruments: C PROF KD SM UP PP FCF				
Observations: 48				
R-squared	0.121737	Mean dependent var	0.055627	
Adjusted R-squared	0.017182	S.D. dependent var	0.670415	
S.E. of regression	0.664630	Sum squared resid	18.55280	
Durbin-Watson stat	2.011232			

CONCLUSION

Based on the results of the research that has been submitted in the previous chapters, it can be concluded as follows:

1. Conclusion OLS (Ordinary Least Square)

- a. Based on the interpretation results of OLS (Ordinary Least Square) The value of R-squared company value of 0.253 which indicates that the variable profitability, dividend policy, capital structure, company size, sales growth and free cash flow can affect the company's value variable by 25.3% while the remainder of the company's 74.7% value is influenced by other variables beyond the estimation of this model.
- b. Base on the interpretation results of OLS (Ordinary Least Square) R-squared stock price of 0.174 which indicates that the variable

profitability, dividend policy, company size and sales growth can affect the stock price variable by 17.4% while the remainder of 82.6% of the stock price is affected by other variables beyond this model estimate.

2. Conclusion 2SLS (Two Stage Least Square)

- a. Based on the interpretation of 2SLS (Two Stage Least Square) It is known that the variable profitability, company size, free cash flow and stock prices positively influential are not simultaneously significant to the value of the company. While the capital structure variables have a positive and significant effect simultaneously on the company's value.
- b. The variable profitability significantly simultaneously negatively affect the share price. The

dividend policy variables and the company's values positively influential are not significantly simultaneous against the stock price. Whereas the capital structure negative effect variables are not significantly simultaneous against the stock price. And sales growth variables have significant simultaneous positive effect on the stock price.

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