

# DER, ROE, Percentage Offering of Shares and their Influences to Initial Return in its Companies Doing IPO

(Empirical study on non-financial companies listed on BEI)

Lorina Siregar Sudjiman  
Economic Department  
Universitas Advent Indonesia  
Bandung, Indonesia  
lorina.sudjiman@unai.edu

Disman Disman, Rosmita Dewi  
Economic and Business Department  
Universitas Pendidikan Indonesia  
Bandung, Indonesia

**Abstract**—This research aims to find out the influence of return on equity, debt to equity ratio, and percentage of stock offering to initial return on nonfinancial companies. The study used data analysis using t test, F test, R 2 test, and two linear regression equations. Using the partial test (t test), the result showed that ROE, DER and Percentage Offering of Shares does not affect the initial return. The strength of the relationship of the three independent variables Return on Equity, Debt to Equity Ratio and Percentage of stock offer simultaneously with Initial return. Return on Equity, Debt to Equity Ratio and Percentage of stock offer have low relation with Initial return. DER generated can be minimized, the company is also expected to increase sales in each period with offset total assets owned. Variable percentage of stock offer does not affect the initial return. The significance criterion, if F-count is greater than F-table, then the multiple regression equation is significant. Which means jointly Return on Equity (ROE), Debt to Equity Ratio (DER) and Percentage of stock quotes effect on Initial return. Based on the results of multiple linear regression analysis conducted on companies conducting obtained the result that together Return on Equity (ROE), Debt to Equity Ratio (DER) and Percentage of stock offer no real effect on Initial return. Return on Equity (ROE), Debt to Equity Ratio (DER) and Percentage of stock offering simultaneously, Debt to Equity Ratio (DER) partially has no effect on Initial return and the percentage of partial share offerings has no effect on the Initial return.

**Keywords**—Return on Equity (ROE); Debt to Equity Ratio (DER); Percentage Share offer (PPS); initial return (IR)

## I. INTRODUCTION

The digital era has had a major impact and change in world trade in the future. Indonesia has considerable potential as a capital for digital economic development. Data in January 2016 states that the potential of Information and Communication Technology (ICT) infrastructure has covered around 90% of the population. In addition, the level of internet users has also reached 51.8% of the total population of Indonesia.

For the financial sector, digitalization can open new business opportunities and add traditional marketing channels

to direct to consumer, peer to peer, crowdfunding, and lending. The important problem faced by almost all companies is how to get capital to support its operational activities. The capital market becomes an alternative source of funds in addition to banks for financing the company's operations through the sale of shares and the issuance of bonds by companies that require funds. The presence of the capital market today is very important for companies and investors. Daljono states that there are several ways in which a company can increase its shareholding, among others, selling shares to shareholders through unshared dividends, selling shares directly to a single investor or offering to the public [1].

To invest in stocks, a rational investor will invest his funds by selecting efficient stocks, which can provide maximum returns with a certain level of risk or return with minimal risk [2]. Companies that perform well will be able to provide a more expected rate of return, therefore a performance appraisal is needed on companies that will be used as investment places. Fundamental factors can be measured from several aspects including Debt to Equity Ratio, Return on Equity, and Share Percentage Offer.

Chastina Yolana and Dwi Martani support the theory that ROE significantly positive effect on initial return [3]. Different results obtained from research Benny Kurniawan which states that ROE has a negative and significant effect on initial return [4]. DER shows the comparison between the leverage rate (the total use of debt) and the equity (capital of the company). This ratio is a measure of financial solvency of the business and shows dependence on the loan [5]. In his research, Afifah Wulandari suggests that DER has a positive and significant influence on underpricing (initial return) [6]. In contrast to Sri Hermuningsih who argued that DER had a negative and significant effect on initial return [7], while Made Indira Dwijayanti and Made Gede Wirakusuma in his research stated that DER has negative but not significant effect on the initial return of companies doing IPO [8]. Reasons for choosing DER because this ratio describes the source of funding company. Percentage of Share Offer (PPS) is the percentage of shares offered to the public during the IPO. PPS is chosen to be one of

the independent variables because it can show how much information is shared by the issuer about the condition of the company. Afifah Wulandari supports the theory that PPS has positive but not significant effect on initial return [6]. Different results obtained from research Rena Syafrita which states that PPS negative but not significant impact on initial return [9]. Based on some empirical evidence of underlying research and theories as described above, there is still a problem that connects profit / profit and solvency approach to initial return, so further research is needed on the stock of manufacturing industry group in Indonesia Stock Exchange period 2012-2015 period.

**II. METHOD**

*A. Data Analysis Technique*

Data analysis techniques used to test and analyze the variables in this study is by using multiple linear regression. Multiple linear regression analysis is used to determine the effect of independent variables on the dependent variable. Before using the technique, it is necessary to test the classical assumption.

*1) Classic assumption test:*

- Normality test
- Multicollinearity Test
- Test Autocorrelation
- Heteroscedasticity Test

*2) Hypothesis testing:*

- Multiple Linear Regression Analysis
- Test-t
- F-Test
- Coefficient of Determination (Adjusted)

To analyze the influence of Return on Equity (ROE), Debt to Equity Ratio (DER) and Percentage of stock offer to Initial return on Companies that conduct IPO in BEI in period 2012-2016 used multiple regression analysis technique. Regression coefficient calculation is done by using SPSS 22 software.

*3) Classical assumption testing:* Before the hypothesis testing using multiple linear regression analysis, it is necessary first to do a test to determine whether there is a violation of the classical assumptions. The independent variable used in this study is more than one (multiple regression).

**III. DISCUSSION**

In this research there are four assumptions tested are normality test, multicollinearity test (for multiple linear regression), and heteroscedasticity test

*A. Normality Test*

For data normality test used Kolmogorov-swirnov approach. Normality test aims to test whether in the regression model, residual variables have a normal distribution or not. The

result of the residual normality test from the estimation equation obtained using SPSS is as follows:

TABLE I. ONE-SAMPLE KOLMOGOROV-SMIRNOV TEST

		Unstandardized Residual
N		48
Normal Parameters <sup>a,b</sup>	Mean	0E-7
	Std. Deviation	42.91939753
Most Extreme Differences	Absolute	.142
	Positive	.142
	Negative	-.140
Kolmogorov-Smirnov Z		.986
Asymp. Sig. (2-tailed)		.285

<sup>a</sup>. Test distribution is normal  
<sup>b</sup>. Calculated from data

*B. Multicollinearity Test*

Multicollinearity shows the condition of independent variables in a perfectly correlated regression model. The way to test for the absence of Multicollinearity can be seen in the Tolerance Value or Variance Inflation Factor (VIF).

TABLE II. MULTICOLLINEARITY TEST RESULTS COEFFICIENTS<sup>c</sup>

Model	Collinearity Statistics		
	Tolerance	VIF	
1	ROE	.968	1.033
	DER	.964	1.037
	PPS	.976	1.024

<sup>c</sup>. Dependent Variable: IR

Table 2 above shows that the VIF value of the variable is less than the value of 10. Thus the regression model used does not occur multicollinearity.

*C. Test Assumptions Heteroscedasticity*

Heteroscedasticity test aims to test whether in the regression model there is a variant inequality of the residual one observation to another observation. In a good regression model the residual value variance of observations has homoteroscedasticity or no heteroscedasticity.

To detect the presence or absence of heteroscedasticity with statistical testing approach is done with Glejser Test that is by regressing each value of independent variable to residual absolute value. Heteroscedasticity with the Glejser Test approach is said not to occur if the regression value is not significant. The results of heteroscedasticity test can be seen in Table 3.

TABLE III. HETEROSCEDASTICITY TEST RESULTS

Variables	Regression	Test-t	Significance	Conclusion
ROE	-0.259	-0.854	0.398	There is no Heterocedasticity
DER	-0.047	-1.828	0.074	There is no Heterocedasticity
PPS	1.285	2.757	0.008	There is Heterocedasticity

Source: SPSS Output Appendix

The result of heteroscedasticity test with Glejser Test approach shows that the variance of the residual is not homogeneous (there is heteroscedasticity).

D. Hypothesis Testing

1) Multiple linear regression analysis: To answer the research problem proposed in this research, hypothesis testing is done to know the effect of Return on Equity (ROE), Debt to Equity Ratio (DER) and Percentage of stock offer to Initial return either simultaneously or partially using multiple linear regression analysis. Stages of testing the hypothesis of research using multiple linear correlation and regression analysis.

The result of multiple linear regression analysis to know the form of relationship of Return on Equity (ROE), Debt to Equity Ratio (DER) and Percentage of stock offer to Initial return is obtained based on data processing using SPSS 20 for windows software as follows:

TABLE IV. RESULTS OF MULTIPLE LINEAR REGRESSION ANALYSIS COEFFICIENTS<sup>d</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	24.906	20.315		1.226	.227			
	ROE	-.444	.447		-.993	.326	-.190	-.148	-.141
	DER	-.046	.038		-1.214	.231	-.170	-.180	-.172
	PPS	1.137	.689		1.651	.106	.231	.242	.235

<sup>d</sup>. Dependent Variable: IR

Based on the results of data processing as presented in Table 4, it can be formed regression equation on Return on Equity (ROE), Debt to Equity Ratio (DER) and Percentage of Initial returns to stocks as follows:

$$Y = 24,906 - 0,444 X1 - 0,046X2 + 1,137 X3$$

Information:

Y = Initial return

X1 = Return on Equity (ROE)

X2 = Debt to Equity Ratio (DER)

X3 = Percentage of stock quotes

2) t-Test

a) Partial testing influence Return on Equity (ROE) to initial return: In the test of partial regression coefficient will be tested the influence of each independent variable to the dependent variable. The test statistic used in the partial test is t test. Partial test is done to prove whether there is significant influence of Return on Equity (ROE) to Initial return.

The value of t test statistic obtained on the influence test can be seen in table 4. The result of statistical test r on hypothesis test of influence on Return on Equity (ROE) (X1) is summarized in Table 5.

TABLE V. TEST RESULT RETURN ON EQUITY (ROE) (X1)

Hypothesis	t <sub>count</sub>	Sig (p)	t <sub>table</sub>	α	Decision	Description
H0 : β <sub>1</sub> = 0	-0,993	0,326	2,015	5%	H <sub>0</sub> not rejected	not significant

The result obtained from the comparison of t<sub>count</sub> with t<sub>table</sub> is t<sub>count</sub> between positive and negative t<sub>table</sub> (-2,015 < -0,993 < -

2,015) and seen from the significance value of 0.326 is greater than 0.05, so at the 5% error rate it is decided to Receive Ho which means Return on Equity (ROE) has no effect on Initial return.

b) Partial testing effect of Debt to Equity Ratio (DER) to initial return: Partial test is done to prove whether there is significant influence from Debt to Equity Ratio (DER) to Initial return.

TABLE VI. TEST RESULT T DEBT TO EQUITY RATIO (DER) (X2)

Hypothesis	t <sub>count</sub>	Sig (p)	t <sub>table</sub>	α	Decision	Description
H0 : β <sub>2</sub> = 0	-,214	0,231	2,015	5%	H0 is not rejected	not significant

Debt to Equity Ratio (DER) partially has no effect on Initial return.

c) Hypothesis testing partially influence percentage of stock offer to initial return: Hypothesis testing is conducted to prove whether there is a significant influence of the percentage of stock quotes against initial return.

TABLE VII. TEST RESULT PERCENTAGE OF SHARE OFFER (X3)

Hypothesis	t <sub>count</sub>	Sig (p)	t <sub>table</sub>	α	Decision	Description
H0 : β <sub>3</sub> = 0	1,651	0,106	2,015	5%	H0 is not rejected	not significant

Percentage of partial stock offer does not affect to Initial return.

3) *F-Test*: Hypothesis testing is done using the F test to determine the effect of independent variables on the dependent variable. F test is used to test the regression coefficient as a whole to know the significance of the relationship between independent variables and dependent variable.

TABLE VIII. ANAVA FOR SIGNIFICANCE TEST

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	10916.965	3	3638.988	1.849 <sup>e</sup>	.152 <sup>f</sup>
Residual	86577.510	44	1967.671		
Total		47			

<sup>e</sup>. Dependent Variable: IR

<sup>f</sup>. Predictors: (Constant), PPS, ROE, DER

The significance criterion, if F-count is greater than F-table, then the multiple regression equation is significant. Which means jointly Return on Equity (ROE), Debt to Equity Ratio (DER) and Percentage of stock quotes effect on Initial return.

4) *Coefficient of determination*: To see how much the variable Return on Equity (ROE), Debt to Equity Ratio (DER) and Percentage of share offerings together give effect to Initial return used Coefficient of determination (value R2). The value of R2 can be seen in Table 8 as follows:

TABLE IX. COEFFICIENT OF DETERMINATION RETURN ON EQUITY (ROE), DEBT TO EQUITY RATIO (DER) AND PERCENTAGE OF STOCK OFFER TO INITIAL RETURN

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.335 <sup>a</sup>	.112	.051	44.35843
a. Predictors: (Constant), PPS, ROE, DER				
b. Dependent Variable: IR				

The value of R Square means that Return on Equity (ROE), Debt to Equity Ratio (DER) and Percentage of stock offer simultaneously give contribution or influence of 11.2% to initial return on Companies that conduct IPO in BEI in period 2012-2015.

**IV. CONCLUSION**

Digital novation in finance continues to grow, reflecting the proliferation of emerging financial technology or fintech companies. This research aims to test the influence of financial and nonfinancial variables against Initial Return. The sample in this research are companies that conduct Go Public and Initial Public Offerings (IPO) in Indonesia in the period 2012-2015 which meets the characteristics of sampling. Based on the classical assumption test used by using multicollinearity test, and heteroscedasticity test can be concluded that all regression

models have fulfilled the classical assumption. Together Return on Equity, Debt to Equity Ratio and Percentage of stock offer no real effect on Initial return. Return on Equity (ROE), Debt to Equity Ratio (DER) and Percentage of stock offering simultaneously give contribution or influence of 11,2% to Initial return but Debt to Equity Ratio (DER) partially has no effect on Initial return. The percentage of partial share offerings has no effect on the Initial return.

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**REFERENCES**

- [1] D. Daljono, "Analysis of Factors Affecting Stock Initial Returns listing on the JSX in 1990-1997," National Symposium on Accounting III.
- [2] Budileksmana, Antariksa and B. Gunawan, "The Influence of Corporate Financial Ratio Indicators Price Earning Ratio (PER) and Price to Book Value (PBV) on the Return of the Stock Portfolio," Journal of Accounting and Investment, vol. 4, no. 2, 2003.
- [3] C. Yolana and D. Martini, "Variabel yang Mempengaruhi Underpricing pada Penawaran Saham Perdana di BEJ Tahun 1994-2001," Jurnal SNA 8, Solo September, 2005.
- [4] B. Kurniawan, Analisis Variabel Keuangan dan Non Keuangan Terhadap IPO dan Return 7 Hari Setelah IPO.
- [5] D. Razafindrambina and T. Kwan, "The Influence of Underwriter and Auditor Reputations on IPO Underpricing," European Journal of Business and Management, vol. 5, no. 2, 2013.
- [6] A. Wulandari, Analisis faktor-faktor yang Mempengaruhi Tingkat Underpricing pada Penawaran Umum Perdana (IPO) (Studi Kasus pada Perusahaan Go Publik yang Terdaftar di Bursa Efek Indonesia Tahun 2006-2010 [Online]. Fakultas Ekonomi Universitas Diponegoro Semarang. Retrieved from: <http://eprints.undip.ac.id/28957/1/Skripsi008.pdf>. Assessed on 29 November 2013.
- [7] S. Hermuningsih, "Pengaruh Rasio Keuangan Terhadap Initial Return Setelah Initial Public Offering (IPO) Pada Perusahaan Publik di Indonesia," Jurnal Universitas Paramadina, vol. 11, no. 3, Desember 2014.
- [8] M.I. Dwijayanti and M.G. Wirakusuma, Pengaruh Informasi Keuangan dan Non Keuangan pada Return Awal Perusahaan yang Melakukan IPO, 2015.
- [9] R. Syafrita, Pengaruh Leverage, Earning per Share, dan Prosentase Penawaran Saham terhadap Underpricing, Skripsi. Diterbitkan. Fakultas Ekonomi Universitas Negeri Padang, 2013.