

## Analysis of Factors Affecting Underpricing Company Stock Prices at the Initial Public Offering (IPO) on the Indonesia Stock Exchange

Yestina Beatrix Kutu, Nanik Sisharini\*  
Fakultas Ekonomi dan Bisnis, Universitas Merdeka Malang  
Jl. Terusan Dieng No. 62-64; Malang; 65115  
\*nanik.sisharini@unmer.ac.id

### Abstract

This research purposes to determine an effect of ROA, ROE, DER, DAR, and CR to underpricing the company's stock price at Initial Public Offering on the IDX. The analysis uses multiple regression with the dependent variable underpricing stock prices at the time of the IPO, while the independent variables are ROA, ROE, DER, DAR and CR. The population in this study were companies that haved underpricing during the 2015-2019 period, while the sample used was 30 companies with the largest underpricing difference. The results showed that the variables ROA, ROE and CR had a significant effect on underpricing, while the variables DER and DAR had no effect on underpricing stock prices at the time of the IPO. This means that to invest more investors consider the return and company liquidity. Debt owned by the company is not a consideration for investors to invest.

**Keywords :** CR, DAR, DER, ROA, ROE, Underpricing.

### Abstrak

*Penelitian ini bertujuan untuk mengetahui pengaruh ROA, ROE, DER, DAR, dan CR terhadap underpricing harga saham perusahaan pada saat Penawaran Umum Perdana di BEI. Analisis menggunakan regresi berganda dengan variabel dependen underpricing harga saham pada saat IPO, sedangkan variabel independennya adalah ROA, ROE, DER, DAR dan CR. Populasi dalam penelitian ini adalah perusahaan yang mengalami underpricing selama periode 2015-2019, sedangkan sampel yang digunakan adalah 30 perusahaan dengan selisih underpricing terbesar. Hasil penelitian menunjukkan bahwa variabel ROA, ROE dan CR berpengaruh signifikan terhadap underpricing, sedangkan variabel DER dan DAR tidak berpengaruh terhadap harga saham underpricing pada saat IPO. Artinya untuk berinvestasi investor lebih mempertimbangkan return dan likuiditas perusahaan. Hutang yang dimiliki perusahaan tidak menjadi pertimbangan bagi investor untuk berinvestasi.*

*Kata kunci:* CR, DAR, DER, ROA, ROE, Underpricing

### INTRODUCTION

The contribution offered by the company to the public through trading shares on the Stock Exchange is known as the go public process. The contribution of company shares provides many benefits, among others, to finance company development, pay

obligations, conduct business or acquisitions and further expand the company's value with the aim that the company has an ideal capital structure. Companies that have chosen to sell their ownership to the general public will have an impact on competition between companies to obtain investors for capital investment in go public companies through a phase called Initial Public Offering (IPO).

IPO is the first place a company's share of stocks or bonds offered to public. At the time of the IPO, underwriter and the issuing company agreed to determine the price of shares offered to public. At the time of the IPO, the company did not have insight into the capital market, while the underwriters had extensive experience and data in the capital market. From this it can be seen that there is an imbalance of information held, so the company will choose a guarantor to be given responsibility for the share offering made. In determining share prices, companies are often judged to be lower than the actual situation by the underwriters, this is done to reduce the risk to the shares offered. Circumstances like this lead to underpricing.

As Manurung (2013) assuming that the stock cost at the first sale of stock is lower than the end stock cost on the auxiliary market, it is called undervaluing. The public organizations in undervaluing isn't beneficial, in light of the fact that the assets acquired can't be ideal. However, this condition is beneficial for investors because it limits the risks, Setyowati and Suciningsih (2018). Underpricing must be avoided by companies, therefore companies need to know what variables can cause underpricing. The research results directed by Kristiantri (2013) show that the underwriter reputation, company size and the purpose of using funds for investment have a significant negative effect on underpricing. Meanwhile, the auditor reputation, company age, ROA, financial leverage, and type of industry proved to have no significant effect on the occurrence of underpricing. Wahyusari (2013), wanted to examine the effect of solvency, ROA, DER, company age, and underwriter reputation on underpricing. The results showed that solvency, DER, and firm age had a significant effect on underpricing, while ROA and underwriter reputation did not have impact on underpricing. In addition, the results of Pahlevi's research (2014) show that the financial leverage has a positive significant effect on underpricing, and the ROA, NPM, current ratio, company size, and company age have a negative significant effect on underpricing, while reputation underwriter, auditor reputation, offering stocks percentage to the public, and type of industry do not have a significant influence on underpricing. Due to the dissimilarity in the results of previous research, the researcher is interested in conducting a study entitled "Analysis of Factors Affecting Underpricing of Company Stock Prices During Initial Public Offering (IPO) on the Indonesia Stock Exchange".

Based on the above background, the research problems can be formulated as follows: 1) How effect of ROA, ROE, DER, DAR and CR on underpricing at the time of the IPO?, 2) Does the ROA have an effect on underpricing at the time of the IPO? 3) Does the ROE have an effect on underpricing at the time of the IPO? 4) Does the DER have an effect on underpricing at the time of the IPO?, 5) Does the DAR have an effect on underpricing at the time of the IPO? And 6) Does the CR have an effect on underpricing at the time of the IPO?

## LITERATURE REVIEW

### Underpricing

Underpricing is defined as the difference between the closing price on the first day at the secondary market and the IPO price. Thus, if the initial public offering price is lower than the closing price of the secondary market on the first day, Ratnasari and Hudiwinarsih (2013). Undervaluation is caused by differences in interests between the parties conducting the initial public offering. In the primary market the price of stocks sold is determined based on an agreement between the underwriter and the issuer, while in the secondary market the price of stocks is determined based on the supply and demand, (Pahlevi, 2014). Theories related to the underpricing phenomenon include:

### Asymmetric Information Theory

Asymmetric information is where heterogeneity or imbalance in the quality and quantity of information between information held by internal parties and external parties. asymmetry information according to Suwarjono (2014), is where management as a party has more control over information than investors or creditors. According to Hanafi dan Halim (2014) who asserts that the concepts of signaling and asymmetry information are closely related to the asymmetric theory, the view that business stakeholders do not have the same information about the development of a business, business expectations and risks, some parties have better information than outsiders. Asymmetry information occurs because managers have greater control over information than other parties (shareholders).

### Signalling Theory

Signaling theory suggests that companies that do not provide offering signals through IPO are in the form of positive or negative signals for investors. According to Jogiyanto (2014) signaling theory emphasizes the importance of information provided by the company to the investment decisions of parties outside the company. Information is an important factor for investors and traders because information is essentially a presentation of notes or descriptions of past conditions now and in the future.

### Underpricing Affecting Factors

#### 1. Auditor Reputation

Auditors have a responsibility to uphold public trust and maintain a good reputation for themselves and the KAP where the auditor works by providing opinions that are relevant to actual business conditions, Verdiana et al. (2013). Auditor credibility is measured by how often the auditor examines the issuer's financial statements.

#### 2. Company size

Company size can be classified in many types for example total assets, stock market and others. Company size is used as an indicator of uncertainty because big companies are generally better known to the public than small companies. The criteria for measuring company size are the sales products volume, capital and total assets (Kristiantari, 2013). Small companies have a high level of uncertainty

compared to large companies (Aini, 2013). Large companies will have complex information that the market can trust to increase the value of the company and minimize undervaluation. The size of the company is seen from the total assets of the issuer in the last period before the issuer made a stock offering in the primary market. The greater company's assets, the greater size of the company (Hastuti, 2015). According to Too et al. (2015) a larger company will lead to a lower risk because a bigger and older company can anticipate risk. Therefore, a lot of information in the hands of an investor it is possible to know how uncertain an investor is about the future of the business. Companies with large total assets are generally better known to the public than those with relatively low total assets.

3. Financial leverage

Financial leverage relates to the expectation of increasing earnings per share of common stock by using fixed-cost capital. Financial leverage shows the company's ability to pay debts with its own capital. If the financial leverage is high it also indicates that the business is high risk. Therefore, when investors making investment decisions naturally take into account information about financial leverage (Puspita, 2011). In this study, financial leverage uses the Det to Equity Ratio (DER) where Garrison et al. (2013) reveals that long-term creditors also pay attention to the company's ability to maintain a balance between debt and equity. Razafindrainina et al (2013) argue that this is an indication of the level of trust in a company in managing the company. This ratio is a measure of the company's ability to show dependence on debt and the det to assets ratio (DAR) uses a ratio that shows the amount of debt used to finance the company's assets.

4. Company age

The age of the company shows how long the company can survive, Puspita (2011). The older company the more information the public has about the company. Nugroho (2012) defines company age as the time when a company begins to carry out operational activities to be able to maintain its operations or maintain its existence in the business world. Harry (2011:) suggests that the company has an unlimited lifespan with the assumption of going concern. This means that the age of the business reflects the ability of the business to maintain its continuity. Based on some of the definitions above, it can be concluded that the age of the company shows that the company is still alive, able to compete in the business world and is able to maintain its continuity of operations.

5. Return On Assets (ROA)

Is a ratio that measures the company's ability to generate profits with assets owned. According to Sirait (2017: 12) the concept of ROA also known as return on earnings describes the company's ability to generate profits from available resources (assets). From the two definitions above, it can be concluded that ROA is a company's financial ratio that measures the company's strength to achieve profit with the investment made.

6. Return On Equity (ROE)

This ratio is used to assess the company's ability to return equity using the available resources, Fahmi (2013). The company's profitability is measured by net income divided total equity.

7. Underwriter Reputation

The nature of the financier is displayed through the most noteworthy business exchanges of the backer's portions offered, Syarofina (2012). The offer cost in the IPO is resolved in light of an understanding between the guarantor and the financier, while the offer cost in the auxiliary not entirely set in stone as per the market instrument (as indicated by the interest and supply of offers). Guarantor is a party who goes into an agreement with a backer to offer protections to the general population to help the guarantor with or without a commitment to buy the leftover unsold protections. The client for this situation gets better data about the guarantor's stock interest than the actual backer. In this manner, financial backers will utilize the data to agree with the guarantor. As well as going about as an endorsing delegate, it likewise has a warning capacity simultaneously an offer purchaser function and a financial backer showcasing capacity.

8. Share offering percentage

The number of shares offered to the public shows the percentage of capital that will be owned by the community, the higher number of shares offered, the greater potential for trading these shares on the stock exchange Fakhruddin et al, (2012: 72).

9. Industry type

Public companies listed on the Indonesian capital market can be classified into two main groups, Sari (2011), namely: a. Manufacturing companies is companies that make products, b. Non-manufacturing company is a company that does not manufacture products.

10. Earnings per share (EPS)

Earning Per Share (EPS) is the benefit of each offer given to investors, Fahmi (2013: 96). Data about the organization's capacity to create pay can assist financial backers with surveying the organization's capacity to produce great income later on.

11. Proceeds

When a company offers new shares there is a cash flow from the proceeds (income from issuing shares). Proceeds shows the size of the offer at the time of the IPO. Through the IPO, it is hoped that the company's prospects will improve along with the expansion or investment that will be made based on the results of the IPO. Therefore, it is assumed that the product is positively related to the stock market price because the higher the product, the lower the uncertainty, namely the higher stock price.

12. Current ratio

The meaning of the current ratio as per Kasmir (201:13) shows that the current ratio is a proportion that actions the organization's capacity to take care of momentary obligation or obligation that is expected soon. Razafindrimina et al (2013) contend that the current ratio is the capacity of an organization to reimburse its obligations for the time being. The current ratio can likewise be viewed as a proportion of how

protected (edge of security) a business is. The higher the organization's present proportion, the lower the danger that the organization will default on transient obligation.

### Previous Research

Research about discusses the factors that affect stock underpricing at the time of Initial Public Offering on the Indonesia Stock Exchange has been widely carried out by previous researchers with the dependent variable stock prices underpricing (UP), while the independent variable used is a variation of Auditor Reputation (ADR), Company Size (CS), Financial Leverage proxied by Debt to Equity Ratio (DER) and Debt to Total Assets (DAR), Company Age (CA), Return on Assets (ROA), Return on Equity (ROE), Underwriter Reputation (UR), Percentage of share offerings (% SO), Type of industry (TI), Earnings per share (EPS), Offer Size (OS) and Current Ratio, and Net Profit Margin. A summary of the results of research that has been carried out by previous researchers is shown in the following table.

Tabel 1. Previous Research

Researcher	Research Period	Sample	Dependent Variable	Independent Variable	Significant	Not Significant
Kristiantari (2013)	1997-2010	161	(UP)	(ADR), (CS), (DAR), (CA), (ROA), (UR), (TI), (OS)	(CS), (UR), (OS)	(ADR), (DAR), (CA), (ROA), (TI)
Wahyusari (2013)	2009-2012	9	(UP)	(DER), (DAR), (CA), (ROA), (UR)	(DER), (DAR), (CA)	(ROA), (UR)
Risqi dan Harto (2013)	2007-2011	71	(UP)	(ADR), (DER), (ROE), (UR)	(UR)	(ADR), (ROE), (DER)
Pahlevi (2014)	2000-2012	132	(UP)	(ADR), (DER), (CA), (ROA), (TI), (UR), (% SO), (NPM), (CR), (CS)	(DER), (ROA), (NPM), (CR), (CS), (CA)	(ADR), (UR), (% SO), (TI)
Kuncoro dan Suryaputri (2019)	2015-2017	59	(UP)	(DER), (ROE), (UR), (CS), (CA), (TI)	(UR), (ROE), (CS)	(DER), (CA), (TI)

Based on the results of previous research, the proposed hypothesis is as follows:

*H1: ROA affects the underpricing of the company's stock price at the time of IPO on the IDX.*

*H2: ROE affects the underpricing of the company's stock price at the time of IPO on the IDX.*

*H3: DER affects the underpricing of the company's stock price at the time of IPO on the IDX.*

H4: DAR affects the underpricing of the company's stock price at the time of IPO on the IDX.

H5: CR affects the underpricing of the company's stock price at the time of IPO on the IDX.

## RESEARCH METHODS

There are 5 independent variables in this study, namely ROA ( $X_1$ ), ROE ( $X_2$ ), DER ( $X_3$ ), DAR ( $X_4$ ) and CR ( $X_5$ ). The dependent variable in this study is underpricing ( $Y$ ) as measured by initial return (IR), which is the positive difference between the stock price on the first day of trading on the secondary market and the stock price at the time of the initial offering which is calculated using the formula:

$$IR = \frac{P_{t1} - P_{t0}}{P_{t0}} \times 100 \%$$

Description:

IR = Initial Return (Underpricing)

$P_{t0}$  = Initial Offering Price

$P_{t1}$  = Closing Stock Price on the first day of secondary market

The population in this study used 71 companies that had underpricing on the IDX for the 2015-2019 period. The sampling technique used was purposive sampling, with the criteria of 30 companies that had underpricing with the largest difference in the 2015-2019 period.

The data analysis technique uses Multiple Linear Regression with the following equation model:

$$Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + e$$

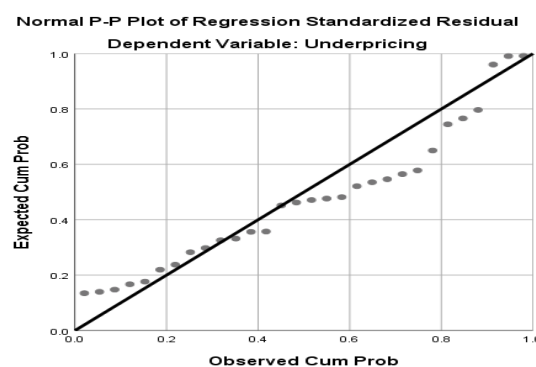
Hypothesis testing using the F test and t test with a significance level of 5%.

## RESULTS AND DISCUSSION

### Classical Assumption Test

#### Normality test

The results of the normality test can be seen in the following graph:



Graph 1 Normality Test Results

The results of the Normal P-P Plot of Regression Standardized Residual graph test show that the data is normally distributed where the points spread around the diagonal line.

**Multicollinearity Test**

The results of the multicollinearity test can be seen in table 2.

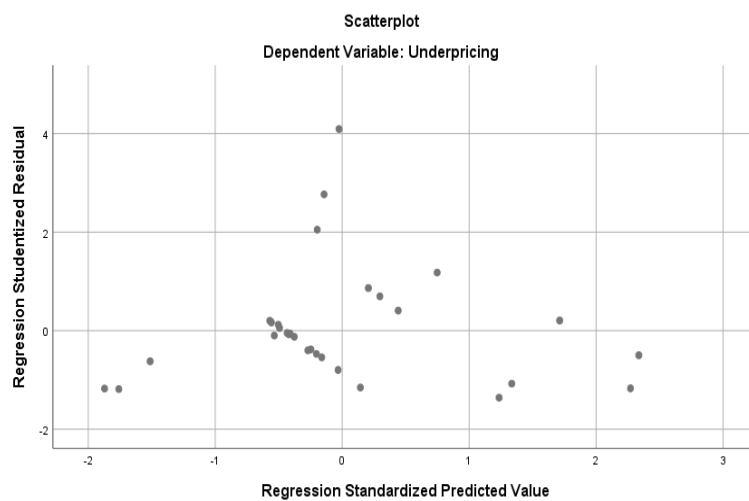
Table 2. Multicollinearity Test Results

Variable	Tolerance	VIF
ROA	0,218	4,580
ROE	0,112	8,945
DER	0,200	4,989
DAR	0,173	3,709
CR	0,179	5,578

Based on Table 2 above, the data shows no multicollinearity where all variables have tolerance value > 0.10 and VIF value < 10.

**Heteroscedasticity test**

The results of the heteroscedasticity test can be seen through the following Graph 2:



Graph 2. Heteroscedasticity test

From Graph 3 it shows an unclear pattern and the points spread above and below the number 0 on the Y axis, meaning that there is no heteroscedasticity.

**Autocorrelation test**

The results of the autocorrelation test were seen from the value of Durbin-Watson (DW), where the result was 2.336. Based on the Durbin-Watson (DW) table, the value of DU with K = 5 and N = 30 is 1.8326, then the 4-du value is obtained by 2.1674 so 1.8326



$<2,336 <2,1674$ . Thus the conclusion of regression model from this research is there is no autocorrelation.

### *Analysis of multiple linear regression*

Table 3 show the results of multiple linear regression tests:

Table 3. The results of multiple linear regression tests

Variable	Regression coefficient	Sig.
Constanta	14,309	0.022
ROA	0,006	0.001
ROE	-0,004	0.049
DER	-0,020	0.236
DAR	0,043	0.125
CR	0,440	0.026

Regression equation model can be written as below:

$$Y = 14,309 + 0,006X_1 - 0,004X_2 - 0,020X_3 + 0,043X_4 + 0,440X_5 + e$$

Test of coefficient determination (Adjusted R<sup>2</sup>)

The results of the coefficient test determination of this study indicate that the Adjusted R<sup>2</sup> value is 0.772 or 77.2%. That is, the ability of independent variables namely ROA, ROE, DER, DAR and CR in explaining the variation of the dependent variable, the underpricing is 77.2% while the remaining 22.8% is explained by other variables that are not researched in this study.

### *Hypothesis test*

F test results obtained by 0,000, with a significance rate of 5% this shows that the variables ROA (X1), ROE (X2), DER (X3), DAR (X4) and CR (X5) have a significant effect on underpricing (Y), because the significance produced is less than 5%. Partial test results indicate that 3 variables has a significant effect on underpricing (y) there are ROA (X1), ROE (X2) and CR (X5). The significant number of the three variables are ROA (X1) has a significant number of 0.001, ROE (X2) has a significant number of 0.049 and CR (X5) has a significant number of 0.026. While the DER (X3) and Dar (X4) variables have no significant effect where the significant number is 0.236 and 0.125 above than a significant level of 0.05 or 5%.

## DISCUSSION

### The Effect of ROA, ROE, DER, DAR AND CR against Underpricing

The test results for the first hypothesis (H1) show that all free variables have a positive and significant effect on underpricing, so that the first hypothesis in this study was received. The high value of ROA, ROE and CR obtained by the company will further make the company easier to get profit with the assets and the capital of the company

and is able to fulfill its short-term debt in good conditions. The higher the value of ROA, ROE and CR will reduce the risk of the company's underpricing at the IPO, so that the value of ROA, ROE and CR which is large will reduce stock uncertainty in the future and show a safe level of large investment, which means it will further reduce the value of the company's underpricing. This also increasingly encourages investors to pay more attention to ROA, ROE and CR. Whereas for the value of Der and Dar which is getting smaller there will be the greater the company's opportunity to be able to fulfill its long-term debt with capital and assets that have and attract the attention of investors to make it more observed. The results of this study support the results of research conducted by Kristiantri (2013), Wahyusari (2013), Harto and Risqi (2013), Agustin, et al (2013) and Pahlevi (2014) where there is a variable ROA, ROE, DER, DAR and CR Together with other variables in it simultaneously affect the company's underpricing.

### **ROA Influence on Underpricing**

The results of the hypothesis testing no 2 show that ROA has a significant positive effect on underpricing, this means that the 2nd hypothesis in this study was received. This shows the operational capabilities of the company to benefit with the assets owned can be measured by ROA. The higher ROA organization will lessen the degree of undervaluing where financial backers will evaluate the organization's exhibition better and able to purchase its first offers at a more exorbitant cost. High ROA shows that companies are able to generate profits with assets that are in good condition. This condition will provide a good signal and reduce uncertainty in the future, so the possibility of underpricing will be smaller. The high interest in investors will increase stock prices so that changes in stock prices among the smaller transactions. This finding does not support the findings obtained by Kristiantri (2013), Wahyusari (2013), which said ROA did not have a significant effect on underpricing. However, this finding supports the findings obtained by Pahlevi (2014) which states ROA has a significant effect on underpricing.

### **ROE Influence on Underpricing**

The results of 3rd hypothesis show that ROE has a significant negative effect on underpricing, this means that the hypothesis 3rd in this study was received. A high ROE value illustrates that the company has the ability to obtain profits in the future and profit is important for investors as a consideration of decisions in investing. The higher the ROE value will make the risk of a low IPO company, so that the value of the ROE is large will reduce stock uncertainty in the future and show a safe level of large investment, which means it will further reduce the value of the company's underpricing. This finding does not support the findings obtained by Harto and Rizqi (2013) which stated that ROE did not have a significant effect on the company's underpricing.

### **Effect of DER against Underpricing**

The results of 4th hypothesis show that DER has no significant effect on underpricing, this means that the 4th hypothesis in this study was rejected. DER shows

the amount of debt ratio owned by the company to own capital. From the results of this study it appears that regardless of the amount of der value will not affect investor interest to buy company stock prices. The small amount of debt comparisons owned by the company on capital itself is not the focus of the main concern of investors, as long as the company is able to produce high profits. According to investor perceptions, the risk of financial failure or the risk of default debt will be covered by the magnitude of the benefits obtained by the company. These findings support the results of research conducted by Kristiantri (2013), Harto and Risqi (2013) which stated that DER did not have a significant effect on underpricing, but the results of this study were terrible with the results of research conducted by Wahyusari (2013) and Pahlevi (2014 ) which states that DER has a significant effect on underpricing.

### **Effect of DAR on Underpricing**

The results of testing the 5th hypothesis indicate that DAR has no significant effect on underpricing, this means that the 5th hypothesis in this study is rejected. DAR is a proxy for solvency (financial leverage) which shows the company's ability to meet all obligations, both short-term and long-term liabilities based on the assets owned by the company. Similar to the DER ratio which has no significant effect on underpricing, the size of the ratio of the company's total debt to total assets is not the main focus of investors' attention, as long as the company is able to generate high profits. According to investors' perceptions, the risk of financial failure or the risk of default on debt will be covered by the amount of profit the company earns. So the level of company profitability is a more attractive thing for investors to be taken into consideration in determining the purchase of company shares at the time of the IPO, compared to looking at the debt ratio of the company. The results of this study support the results of research conducted by Kristiantri (2013), Harto and Risqi (2013) which states that DAR (financial leverage) has no significant effect on underpricing, and contradicts the results of research from Wahyusari (2013) and Pahlevi (2014) which states that DAR (solvability, financial leverage) has a significant effect on underpricing.

### **Effect of CR on Underpricing**

The results of testing the 6th hypothesis indicate that CR has a significant positive effect on underpricing, this means that the 6th hypothesis in this study is accepted. The greater CR of a company, the higher the level of underpricing of the company's stock price. The focus of investors is how the company's profitability level, if the company has a high CR, investors will perceive that many current assets are idle, so that the level of profitability is low. This finding supports the findings obtained by Pahlevi (2014) which states that CR has a significant effect on underpricing.

## **CONCLUSION**

ROA, ROE, DER, DAR and CR have an effect on underpricing, this shows that when a company conducts an IPO, investors are very concerned about the profits

generated by the company, the debt owned by the company and the company's ability to meet short-term obligations. The higher the value of ROA, ROE, CR and the smaller the value of DER and DAR will further reduce the level of underpricing of the company

ROA has a positive and significant effect on underpricing. Companies that have a high ROA will increase the rate of return on assets causing the company's performance to be higher so that investors confidently buy initial shares at high prices by observing the company's ROA. This is because investors expect high income in the future and are very concerned about the company's income at the time of the IPO

ROE has a negative and significant effect on underpricing. This means that the decrease and increase in ROE have an effect on underpricing. The company's ROE is the return obtained by the company where the higher the ROE, the higher the rate of return obtained by the company. Investors will pay close attention to the company's ROE in making investments.

DER has no significant effect on underpricing. The higher the DER value obtained by the company, the greater the risk of the company in fulfilling its long-term obligations. From this, investors do not seem to consider the risk of the high DER value. Behind the high risk shows that the return received by the company is getting higher.

DAR has no significant effect on underpricing. DAR has no effect on underpricing, indirectly explaining that in investing in the capital market, investors do not always pay attention to and analyze from a fundamental aspect only, but also from the potential to analyze through a technical perspective.

CR has positive and significant effect on underpricing. This is due to the company's goal to go public in the long term, so that the liquidity owned by the company will show the company's ability to meet short-term obligations, which is very important to investors in investing in the capital market.

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