

UNDERPRICING PHENOMENON ON INITIAL PUBLIC OFFERING ON THE INDONESIA STOCK EXCHANGE 2013-2017

Sofiati Khairunnisaa

Master of Management, Lambung Mangkurat University
Correspondensi author email: sofiatikhairunnisaa87@gmail.com

Meina Wulansari Yusniar

Master of Management, Lambung Mangkurat University
mwyusniar@ulm.ac.id

Asrid Juniar

Master of Management, Lambung Mangkurat University
asridjuniar@ulm.ac.id

Abstract

This study examines the phenomenon of underpricing in Initial Public Offering (IPO) on the Indonesia Stock Exchange for the period 2013-2017. This study uses a quantitative method with an exploratory approach, involving 59 companies selected through purposive sampling. The variables studied include Debt to Equity Ratio (DER), Return on Equity (ROE), auditor reputation, fractional holding, company age, company size, and proceeds. Data analysis was carried out through classical assumption tests and multiple linear regression. The results showed that only auditor reputation and fractional holding variables had a significant effect on underpricing. High auditor reputation gives investors confidence, while fractional holding affects information asymmetry between management and investors. Other variables, such as DER, ROE, company age, company size, and proceeds, do not have a significant effect. This study provides insights for issuers and investors to understand the factors that influence stock underpricing, and encourages further research by expanding the variables and study period.

Keywords: Underpricing, IPO, Debt to Equity, Return on Equity, Auditor Reputation

INTRODUCTION

Rapid business growth drives companies to enhance their capacity and productivity, but limited capital often hinders this progress. While privately owned companies rely on personal funds, expanding businesses require larger funding sources. These include internal funds like retained earnings and external funds, such as loans or public share distribution. The capital market offers a practical solution for companies to secure additional funding by selling ownership through shares. This process, known as going public, involves offering shares to the public. The first sale of shares in the primary market, called an IPO (Initial Public Offering), sets the share price through an agreement between the issuing company and the underwriter. In contrast,

the secondary market determines share prices based on supply and demand interactions.

Go public companies benefit from professional and transparent management due to non-private ownership, offering better access to funding for business expansion and profit maximization. They gain increased liquidity by adhering to capital market regulations and reporting obligations. However, going public also brings challenges, such as higher reporting costs and the need for quarterly and annual reports, which can strain smaller firms. Information disclosure often causes tension, as managers fear competitors exploiting data, and owners hesitate to reveal share ownership details that expose their wealth. Limited veto rights also make managers concerned about takeover risks.

The trend of companies conducting IPOs in Indonesia shows a positive movement, although not significant, due to various causes of the ups and downs of the number of issuers, such as economic, social and political conditions that affect the number of issuers listing on the IDX. According to www.idx.co.id, the following companies have been in the IPO stage from 2013 to 2017:

Table 1. Companies Conducting IPO

No.	Timeframe	Number of Companies
1	2013	31
2	2014	24
3	2015	18
4	2016	16
5	2017	37
Total		126

Source: Reprocessed Data, 2019

An Initial Public Offering (IPO) serves as a vital funding source for companies, while also attracting investors due to the belief that the launch share price is often set lower than its true value, making it a potentially profitable investment (Asnawi & Wijaya, 2005). The share price during an IPO is crucial in determining how much capital the company (issuer) will raise. It also reflects the risk faced by the underwriter. To maximize funds, issuers tend to set a higher price, while underwriters aim to lower the price to minimize risk and ensure all shares are sold.

Pricing shares during an Initial Public Offering (IPO) involves at least two main parties: the company or issuer and the seller, which in this context is the underwriter. The issuer wants to raise as much money as possible, while the underwriter wants to earn their fee and reputation. As the owner of the company's "fundamentals", the issuer must convince investors and underwriters. Therefore, a clear signal is needed

for investors as well as an effective strategy in marketing the shares (Asnawi and Wijaya, 2005: 151).

One of the common obstacles in the IPO process is the underpricing phenomenon. This phenomenon occurs when the price offered at the time of the IPO is below the prevailing price in the secondary market. This price difference includes two main conditions, namely underpricing and overpricing. Based on the findings of Kim, Krinsky, & Lee (1995), underpricing occurs when the share price set on the day of the IPO is far below the share price in the secondary market after trading begins.

Caster and Manaster (1990) explain that underpricing occurs when the share price in the main market is uncertain, often due to information asymmetry between issuers and underwriters. Issuers want high prices to raise more funds, while underwriters prefer lower prices to minimize risk. This imbalance in information leads to underpricing, where underwriters take advantage of the issuer's lack of knowledge. To avoid this, issuers must understand the market conditions. Underpricing leads to losses for companies going public because they can't raise the full amount of funds from the public. On the other hand, overpricing harms investors, as they won't receive initial returns, the difference between the purchase price in the primary market and the selling price in the secondary market. Company owners generally try to avoid underpricing, as it shifts profits that should go to them to investors (Beatty, 1989).

At the time of the IPO, the underwriter and the issuer must determine the price of the shares to be issued. This is due to the risk borne by the underwriter and the amount of funds that the issuer will get. Issuers can calculate the amount of funds to be obtained by multiplying the price per share and the number of shares offered. Therefore, the higher the price per share, the greater the amount of funds that will be received. To maximize their expected proceeds, issuers often set a high selling price for their shares in the primary market. As an underwriter, the underwriter tries to mitigate any adverse eventualities that may occur so that they do not lose the offered shares. This is especially true for full commitment underwriting, where the underwriter buys unsold shares (Ang, 1997). The full commitment underwriting mechanism causes the underpricing phenomenon in Indonesia. Full commitment underwriting means that if the shares marketed to investors are not sold out, the financier-also known as the underwriter-must take or buy the remaining unsold shares.

Kristiantari (2013) states that company prospectuses serve as a crucial source of information to evaluate companies intending to go public, aiming to reduce data gaps. The prospectus includes accounting and non-accounting data regarding the company's condition. Studies in Indonesia show that investors rely on prospectus information as a reference for investment decisions in the capital market. Both financial and non-financial information influence the underpricing of shares during the initial offering. Creating a prospectus is a requirement by Bapepam, including financial reports such as balance sheets, cash flow statements, income statements, and notes

to financial statements. Additionally, the prospectus contains non-financial information like data on underwriters, independent auditors, legal consultants, share offering prices, the proportion of shares released, company age, and other relevant aspects.

Widhiastina and Prihatni (2016) research shows that DER has a positive effect on underpricing. Contrary to this research, Witjaksono (2012) found that DER has no effect on underpricing. Yasa's (2002) research also shows that financial leverage has no effect on underpricing. Kim, Krinsky & Lee (1995) suggest that ROA has a significant negative effect on underpricing, this is also proven by Arman's research (2012) ROA has a significant negative effect on underpricing. The findings of Johnson (2013) taking 89 samples of 107 companies conducting IPOs on the IDX from 2003 and 2010 resulted in that underwriter reputation, fractional holding, and ROE showed negative coefficients and had no significant effect on the level of underpricing of initial shares. Only the auditor's reputation has a considerable impact on the level of underpricing, with a negative coefficient.

Risqi and Harto (2013) conducted research on the IDX on companies that conducted IPOs from 2007 to 2011. They found that underwriter reputation, return on equity, auditor reputation, and debt level all affect the underpricing variable (UND). Although the underwriter reputation variable has a negative impact on the level of underpricing disclosure, the auditor reputation variable, return on equity, and the level of leverage do not show a significant effect on the overall underpricing disclosure. Junaeni and Agustian' (2013) research on the IDX in the period 2006 - 2010 shows that underwriter reputation has a significant effect on the level of stock underpricing with a negative direction, while the financial leverage variable, industry type, and proceeds partially have no significant effect on the level of stock underpricing.

Based on previous studies that resulted in different conclusions, the researchers are interested in re-examining in order to obtain empirical evidence that can be utilized by all interested parties. This study uses financial variables, namely company profitability and financial leverage. As well as non-financial variables such as auditor reputation, underwriter reputation, company age, company size. The proceeds variable will also be added in this study to determine its effect on underpricing at the time of the Initial Public Offering (IPO), thus in this study the researchers raised the title "The Underpricing Phenomenon in Initial Stock Offerings on the Indonesia Stock Exchange in 2013-2017".

RESEARCH METHOD

The research explores the phenomenon of underpricing in initial public offerings (IPOs) on the Indonesia Stock Exchange (IDX) between 2013 and 2017, adopting a quantitative and exploratory research design. As defined by Sugiyono (2010), quantitative research aligns with the positivist philosophy, using statistical

tools to test hypotheses. This study particularly examines factors influencing underpricing, where the initial market share price is lower than its secondary market counterpart. Using purposive sampling, a total of 78 companies conducting IPOs from 2013 to 2017 were analyzed. These companies were selected based on specific criteria to ensure relevance to the research objectives. The data was sourced from the IDX's website, the Capital Market Reference Center, and the Indonesian Capital Market Directory.

The key variables investigated in the study include underpricing, Debt to Equity Ratio (DER), Return on Equity (ROE), auditor reputation, fractional holding, company age, company size, and proceeds. Underpricing is identified as the dependent variable, representing the discrepancy between the offering price in the primary market and the price in the secondary market. DER, a solvency ratio, evaluates a company's liabilities relative to its equity, while ROE measures profitability by comparing profit to equity, indicating the effectiveness of equity utilization. Auditor reputation is classified using a binary scale, distinguishing prestigious auditors (e.g., the "Big Four") from others. Fractional holding reflects the proportion of shares retained by the company during the IPO, suggesting optimism about future performance. Company age, measured by the time elapsed since its establishment, is used as a proxy for experience and competitiveness. Similarly, company size, represented by total assets, serves as an indicator of financial strength and attractiveness to investors. Proceeds denote the cash flow generated from IPO activities, intended to support business expansion.

The study applies several statistical techniques to analyze the data and test hypotheses. First, a classical assumption test is performed to ensure the validity of the regression model. This includes tests for normality, multicollinearity, heteroscedasticity, and autocorrelation. Normality tests, employing tools like histograms and probability plots, ensure that the data distribution aligns with a normal curve. Multicollinearity is assessed using the variance inflation factor (VIF) and tolerance values, confirming the absence of significant correlations among independent variables. Heteroscedasticity is evaluated through scatterplots to check for consistent variance across observations, while autocorrelation is tested using the Durbin-Watson statistic to identify relationships between residual errors.

The primary analytical method used is multiple regression analysis, which assesses the impact of independent variables (e.g., DER, ROE, auditor reputation) on the dependent variable, underpricing. The regression model is validated through significance testing, using t-tests to examine the partial effects of individual independent variables and an F-test to assess their combined influence. The hypothesis testing framework sets a significance threshold of 0.05. If the p-value of a variable is below this threshold, it indicates a significant effect on underpricing.

The study aims to provide insights into the determinants of underpricing in IPOs within the Indonesian capital market context. By investigating relationships between financial metrics, corporate characteristics, and underpricing, the research seeks to enhance understanding of IPO dynamics and investor behavior. The findings are expected to assist companies, investors, and regulators in making informed decisions regarding IPOs and capital market strategies.

RESULTS AND DISCUSSION

Classical Assumption Test

The classic assumption tests carried out include: normality test, heteroscedasticity test, multicollinearity test, and autocorrelation test. From the tests that have been carried out, it is obtained that there are no deviations from the classic assumption tests of normality, heteroscedasticity, multicollinearity, and autocorrelation. Tests of classical assumptions obtained the following results:

Normality Test

This test aims to test whether in the regression model, the residual data has a normal distribution. To test whether the data distribution is normal or not, there are two ways to detect it, namely by graph analysis and statistical tests, where in this study using the Kolmogorov-Smirnov one sample test. This test is used to produce more detailed numbers to determine whether the data in the regression model is normally distributed. Testing the normality of the data in this study using the Kolmogorov-Smirnov (K-S) non-parametric statistical test by making a hypothesis:

H₀: Residual data is normally distributed.

H₁: Residual data is not normally distributed.

H₀ is accepted if the significance value is greater than 0.05, while H₀ is rejected if the significance value is smaller than 0.05. Due to the calculation results of fractional holding variables, company size and proceeds are large and feared to cause errors, the variable is transformed into LN. The following is a one sample Kolmogorov-Smirnov test table:

Table 2. K-S Test

Description	Kolmogorov-Smirnov Z	Asymp. Sig. (2-tailed)	N	Conclusion
<i>Unstandardized Residual</i>	0,114	0,014	78	Not Normally Distributed

Source: Data Reprocessed 2019

The results of the study using the Kolmogorov-Smirnov one sample test method, show that the probability value of asymp.sig (2-tailed) < 0.05 , namely .014. This means that the residual data is not normally distributed because it is significantly smaller than 0.05. Even though the LN transformation has been carried out, the data is still not normal, so the researchers removed the outlier data with a boxplot, so that 19 data were removed whose values were too extreme (too low or too high). The results of the second normality test obtained appear in the K-S Test as follows:

Table 3. K-S Test After LN Transformation and Outlier Removal

Description	Kolmogorov-Smirnov Z	Asymp. Sig. (2-tailed)	N	Conclusion
<i>Unstandardized Residual</i>	0,106	0,097	59	Normally Distributed

Source: Reprocessed Data 2019

From the second test results, it shows that the data is normally distributed with an asymp.sig (2-tailed) probability value < 0.05 , namely .097. This means that the residual data is normally distributed because it is significantly greater than 0.05.

Multicollinearity Test

The multicollinearity test aims to test whether the regression model found a correlation between independent variables. A good correlation model should not have a correlation between the independent variables. The results of this test can be seen in table 4. below:

Table 4. Multicollinearity Test Results

Variables	Collinearity Statistics		Conclusion
	Tolerance	VIF	
<i>Debt to equity ratio</i>	0,826	1,210	No multicollinearity
<i>Return on Equity</i>	0,850	1,176	No multicollinearity
<i>Auditor Reputation</i>	0,933	1,072	No multicollinearity
<i>Company Age</i>	0,953	1,049	No multicollinearity

<i>Fractional</i>	0,945	1,058	No multicollinearity
<i>Company Size</i>	0.682	1,466	No multicollinearity
<i>Proceeds</i>	0,696	1,437	No multicollinearity

Source: Data Reprocessed 2019

The results of the tolerance calculation also show that no independent variable has a tolerance value of less than 0.10, which means that there is no correlation between the independent variables whose value is more than 95%. The results of the calculation of the Variance Inflation Factor (VIF) value also show the same thing, no independent variable has a VIF value of more than 10, so it can be concluded that there is no multicollinearity between the independent variables in the regression model.

Heteroscedasticity Test

The heteroscedasticity test aims to test whether in regression capital there is an inequality of variance from the residuals of one observation to another, if the variance of the residuals of one observation to another observation is constant, it is called homoscedasticity and if it is different it will be called heteroscedasticity. A good regression model is a model that does not occur heteroscedasticity (Ghozali, 2005). To determine heteroscedasticity, we can use the following Glejser Test:

Table 5. Glejser Test Results

Variables	Sig.	Conclusion
<i>Debt to equity ratio</i>	0,580	No heteroscedasticity
<i>Return on Equity</i>	0,179	No heteroscedasticity
<i>Age</i>	0,676	No heteroscedasticity
<i>Fractional Holding</i>	0,266	No heteroscedasticity
<i>Company Size</i>	0,929	No heteroscedasticity
<i>Proceeds</i>	0,232	No heteroscedasticity

Source: Data Reprocessed 2019

The coefficient for the beta parameter of the regression equation is not significant because the Sig. > 0.05. It can be concluded that there is no heteroscedasticity.

Autocorrelation Test

The autocorrelation test aims to test whether in a linear regression model there is a correlation between confounding errors in period t-1 (previous). A good regression model is a regression that is free from autocorrelation. The hypothesis to be tested is :

Ho: No autocorrelation ($r = 0$)

HA: There is autocorrelation ($r \neq 0$)

To determine whether or not there is autocorrelation we must look at the D-W test value with the following conditions:

Positive Autocorrelation Detection:

- 1) If $d < d_L$ then there is positive autocorrelation.
- 2) If $d > d_U$ then there is no positive autocorrelation.
- 3) If $d_L < d < d_U$ then the test is inconclusive or inconclusive.

Negative Autocorrelation Detection:

- 1) If $(4 - d) < d_L$ then there is negative autocorrelation.
- 2) If $(4 - d) > d_U$ then there is no negative autocorrelation.
- 3) If $d_L < (4 - d) < d_U$ then the test is inconclusive or inconclusive

Table 6 Durbin-Watson Test Results

Var. Dependent	Var. Independent	Adjusted R Square	Durbin-Watson	Conclusion
Underpricing	Debt to Equity Ratio	0,209	2,132	No Autocorrelation
	Return on Equity			
	Auditor Reputation			
	Fractional Holding			
	Company Age			
	Company Size			
	Proceeds			
N=59				

Source: Data Reprocessed 2019

Based on the results of the analysis, the calculated value of Durbin Watson is 2.132, the number of samples is 59, the number of independent variables is 7 ($k = 7$), the lower limit of Durbin-Watson (d_L) is 1.3272 and the upper limit of Durbin-Watson (d_U) is 1.8523

Positive Autocorrelation Detection:

$d (2.132) > d_U (1.8523)$, then there is no positive autocorrelation

Negative Autocorrelation Detection

$(4 - d) > d_U$

$(4 - 2,132) > 1,8523$

$1.868 > 1.8523$, then there is no negative autocorrelation

It can be concluded that in the regression analysis there is no positive and negative autocorrelation or it can be concluded that there is no autocorrelation (H_0 is accepted). The amount of adjusted R^2 is 0.209, this means that 20.9% of the

underpricing variable can be explained by variables from the seven independent variables Debt to Equity Ratio, Return on Equity, Auditor Reputation, Fractional Holding, Company Age, Company Size, Proceeds, while the rest is explained by other causes outside the model.

Multiple Regression Analysis

Based on the classical assumption test that has been carried out, it can be seen that the data in this study have met the classical assumption test, therefore the available data are eligible to use multiple regression models and use the Simultaneous Effect Test (F Test) analysis tool. The simultaneous influence test is used to determine whether the independent variables jointly or simultaneously affect the dependent variable. (Ghozali, 2013) can be seen in the following table:

Table 7. Simultaneous Effect Test Analysis Results (F Test)				
Var. Dependent	Var. Independent	F	Sig	Conclusion
<i>Underpring</i>	<i>Debt to Equity Ratio</i> <i>Return on Equity</i> <i>Auditor Reputation</i> <i>Fractional Holding</i> <i>Company Age</i> <i>Company Size</i> <i>Proceeds</i>	3,184	0,007	There is an influence
N=59				
Source: Data reprocessed, 2019				

Based on table 7. it is known that the significance value for the effect of Debt to Equity Ratio, Return on Equity, Auditor Reputation, Fractional Holding, Company Age, Company Size and Proceeds simultaneously on underpricing is $0.007 < 0.05$ so it can be concluded that there is a simultaneous influence on the 7 independent variables in this study on underpricing.

Statistical Test t

The results of the calculation of regression analysis to test the proposed hypotheses can be seen in table 8. as follows:

Table 8. Results of the t-test

<i>Debt to Equity Ratio</i>		2,111	0,061	1,718	0,092	No significant effect
<i>Return on Equity</i>		2,111	0,091	0,244	0,808	No significant effect
<i>Auditor Reputation</i>		2,111	-0,155	-2,014	0,049	Significant effect
<i>Company Age</i>	0,304	2,111	0,222	0,971	0,336	No significant effect
<i>Fractional Holding</i>		2,111	-0,043	-2,591	0,012	Significant effect
<i>Company Size</i>		2,111	-0,011	-0,507	0,614	No significant effect
<i>Proceeds</i>		2,111	-0,027	-1,265	0,212	No significant effect

Source: data reprocessed, 2019

In the regression analysis results in table 8. it appears that 2 independent variables, namely Auditor Reputation and Fractional Holding, have a significant effect on the dependent variable, namely underpricing, with a significance level of 0.049 and 0.012, while the variables Debt to Equity Ratio, Return on Equity, Company Age, Company Size and Proceeds have an insignificant effect on the underpricing variable, this is because the value of Debt to Equity Ratio, Return on Equity, Company Age, Company Size and Proceeds is 0.092, 0.808, 0.336, 0.614 and 0.212 greater than the significance level of 0.05. The t value also shows that only the Auditor Reputation and Fractional Holding variables are greater than 2 (two), so H_0 is rejected. In other words, the hypothesis is accepted. The regression equation from the t test results is as follows:

$$Y = 2,111 - 0,155X_1 - 0,043X_2 + e$$

Where:

Y = Underpricing variable

a = constant, the value of Y if X = 0

X₁ = variable Auditor Reputation

X₂ = Fractional Holding variable

e = Error term

CONCLUSION

This study aims to examine the variables that affect company underpricing, specifically debt to equity ratio, return on equity, auditor reputation, fractional holding, company age, company size, and proceeds. The method used in this research is purposive sampling method with 59 companies conducting initial public offering (IPO) on the Indonesia Stock Exchange for the period 2013-2017 used as samples. Based on the test results and analysis using multiple linear regression, the following conclusions are obtained:

- 1) The effect of the debt to equity ratio variable on the level of underpricing is not significant. This is due to the number of companies in the research sample that have a relatively low DER value, namely 32 companies out of a total of 59 research samples, so that the liquidity risk is small, besides that the cash flow entering the company from the debt carried out, investors cannot know for sure its allocation, so it has no effect on the underpricing phenomenon. DER shows the company's risk, because the higher the DER value, it illustrates that the condition of the company is more financed by its business activities from debt compared to its own capital, which will result in reduced shareholder acceptance of the company's profit growth and dividends, because the company will prioritize its obligation to pay off maturing debt rather than dividing its dividends to shareholders. This research found that during the research period 2013 - 2017 the Indomobil Multi Jasa Tbk Company had the highest value of 4.15 in terms of DER in 2013 and the Mahaka Radio Integra Tbk Company had the lowest value of 0.20 in terms of DER in 2016.
- 2) The effect of the variable return on equity on the level of underpricing is not significant. ROE is a reflection of the company's financial performance which is calculated from the shrewdness of a business to generate profits from the capital it has. Companies that have a large ROE value show their ability to manage their own capital efficiently and effectively to generate profits that will later be enjoyed by shareholders. The higher ROE means that the company is able to efficiently use its capital in its business activities. The lowest ROE in this study was 0.0006 in 2017, namely Cahayasakti Investindo Sukses Tbk Company and the highest ROE in 2014 was 0.2942, namely Impack Pratama Industri Tbk.
- 3) The effect of auditor reputation variables on the level of underpricing is significant. Prestigious auditor reputation inexplicitly makes investors feel secure about the audited company, considering that the audit results are certainly of high quality and in accordance with existing realities. For investors, auditor reputation is not a major consideration because this study

failed to prove that the effect of auditor reputation on underpricing is not influential

- 4) The effect of fractional holding variables on the level of underpricing is significant. Information asymmetry often occurs between investors and company management, where company management has information that exceeds the information possessed by investors, so that management can predict the company's future performance. Therefore, the amount of shares held by the company affects underpricing
- 5) The effect of the company age variable on the level of underpricing is not significant. The age of a mature company cannot be a guarantee that the company can survive, because currently there are many start-up companies that are able to survive and outperform other companies.
- 6) The influence of the Size variable (company size) on the level of underpricing has no significant effect. High company size cannot be used as a reference for the company to have good performance because the company's assets that are too large are considered unable to be maximized by the company's designation.
- 7) The effect of the Proceeds variable on the level of underpricing is not significant. Proceeds is the amount of cash flow received at the time of the IPO, however, the difficulty of finding information on the utilization of this cash flow causes no influence on underpricing.

Advice

Based on the research findings, the researcher makes suggestions that may be useful for future researchers, analysts, and issuers.

1) Theoretical Aspects

The results of this study show that there are only two independent variables that have an effect: auditor reputation and fractional holding. Therefore, to get better results, future researchers should add additional variables such as industry type, dollar exchange rate, and so on, and extend the time span of the research year.

2) Practical Aspects

Advice for Analysts

For analysts, including those working in securities firms, this study will contribute to the literature and provide insight into historical performance by identifying financial and non-financial information that affects companies conducting IPOs. In addition, the results of this study can help analysts to focus and observe the variables of EPS, size of the stock offering, and reputation of the underwriter regarding their influence on underpricing.

For Issuers

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