

The Effect of Financial and Non-Financial Information on Underpricing in Initial Public Offerings

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Abstract

This study aims to examine the financial and non-financial information factors that affect underpricing in companies conducting IPOs in 2020 - 2022. The data analysis technique in this study consists of classical assumption tests and hypothesis testing using multiple linear regression analysis methods. The results of this study conclude that the debt-equity ratio does not affect underpricing. At the same time, earnings per share has a positive effect on underpricing, while underwriter reputation and auditor reputation have a negative effect on underpricing.

Keywords: Information Financial, Non-Financial and Underpricing

Introduction

The trend of companies conducting Initial Public Offering (from now on abbreviated as IPO) in the last three years has increased; a total of 164 companies conducted IPOs in 2020 – 2022. IPO is a change in the status of a company that was initially a closed company to a public company so that the public can purchase the shares of the company on the secondary market (Clayton et al., 2021). Companies need significant and unlimited capital to expand and develop their business in order to survive in business competition (Mayasari et al., 2018). IPO is one of the alternatives that companies can use to obtain additional capital that is desired and unlimited (Isyнуwardhana & Febryan, 2022).

Listing and initial offerings are very complex, so companies conducting IPOs will work with underwriters to assist the company's initial offering activities so that the focus of the company is balanced and remains focused on carrying out the company's business activities (Legierse, 2023). The underwriter helps determine a fair share price for the company. However, there must be an agreement made between the underwriter and the company regarding the price of the shares to be offered on the primary market (Hapsari & Subagyo, 2022). After the share price agreement has been determined, two possibilities will occur, namely, if the share price at the initial offering is lower than the price that occurs when closing on the first day on the secondary market; this is called underpricing. If the opposite happens, the initial offering price is higher than the first day closing on the secondary market, then overpricing occurs (Thoriq et al., 2018). The underwriter is one of the parties that has a vital role in the success of the company conducting an IPO; thus, the company can pay attention to choosing an underwriter. The company will obtain quality information about the IPO if it uses a reputable underwriter (Corwin & Schultz, 2005).

The anomaly of the underpricing phenomenon tends to occur in companies conducting IPOs. Underpricing is a loss for the company because the capital obtained is maximum. However, investors favor underpricing because it will provide the first profit, so investors take advantage

of the company's underpricing (Beatty & Ritter, 1986). One example of underpricing occurred at PT Primadaya Plastindo Tbk (Tbk stands for "terbuka" (publicly listed company). In Indonesia, the use of the term Tbk indicates that the company has gone public; its shares are traded on the stock exchange), which conducted an initial public offering (IPO) in 2022. The initial offering price proposed was IDR200.00 per share. However, at the close of the first day on the secondary market, the share price increased by IDR270.00 per share or an increase of 35%. Supposedly, the share price that can be offered during the initial offering is IDR270.00. However, what happened was that the company's share price was only valued at IDR200.00, so the company did not get the maximum profit.

Table 1. IPO and Underpricing Companies in 2020 – 2022

Year	IPO	Company Underpricing	Percentage	Average Underpricing
2020	51	51	100%	38,59%
2021	54	45	83%	24,30%
2022	59	47	80%	23,52%
Average	164	142	87%	28,80%

Table 1 explains that 87% of companies conducting IPOs in the last three years experienced underpricing, with an average underpricing of 28.80%. This occurs due to information gaps related to aspects of the prospectus that are the basis for prospect expectations between companies, underwriters, and investors (Ljungqvist, 2007). This is the basis for companies to publish company prospectuses with the aim of reducing the information gap that occurs (Li et al., 2018).

Based on this phenomenon, the topic of underpricing is interesting to research, and there are still inconclusive studies related to the topic of underpricing. Thus, this study aims to examine the factors that influence underpricing, using debt-equity ratio and earnings-per-share variables as financial information and underwriter reputation and auditor reputation variables as non-financial information.

Literature Review

Signaling Theory

Spence (1973) first introduced signaling theory in a study titled "Job Market Signaling." Due to the frequent occurrence of information asymmetry in the labor market, Spence developed signaling standards in the hope of supporting decision-making by stakeholders such as investors, creditors, and management. Leland & Pyle (1977) established the concept of signal theory in relation to public offerings (IPOs). When a company wants to go public, there is an information gap between the company owner and potential investors regarding the prospects offered. Potential investors have a different knowledge about the company than the previous owners, which is why the latter have a better understanding of the company.

The effect of debt equity ratio on underpricing

Through analysis of its debt-to-equity ratio, one can assess the company's ability to meet its obligations with current resources. A high debt-to-equity ratio indicates the financial risk of a company or the potential inability to repay its loans. (Vivianti, 2021). Along with signal theory, having a high level of debt is a negative signal for the company. This is because high levels of debt can increase the risks faced by the company, which in turn can have an impact on the level of uncertainty received by the company. As a result, high uncertainty tends to increase the likelihood of underpricing (Utami et al., 2019).

H₁: Debt equity ratio has a positive effect on underpricing

The effect of earnings per share on underpricing

The profit that will be obtained from each share is known as earnings per share; high EPS indicates that the company has good performance so as to generate high profits. Based on signal theory, high EPS is a positive signal for investors. In investing, investors want high profits; one of the ratios that can be seen regarding profits is the EPS ratio. As a result, there will be a greater desire among investors to purchase firm stock, and the share price will rise, giving investors a significant initial return. This is consistent with the study that was done (Djaelani et al., 2022), which states that earnings per share has a positive effect on underpricing.

H₂: Earnings per share has a positive effect on underpricing

The effect of underwriter reputation on underpricing

An underwriter is an (external) company that connects the interests of issuers and investors, including the responsibility of selling the issuer's securities to investors. The problem of determining the price of shares offered to potential buyers is a challenging matter because small mistakes that occur in the IPO process can cause the IPO to fail. A selling price that is too high will make the shares unsellable. Conversely, if the price is higher, the company will retain opportunities. According to signal theory, investors will receive a favourable signal from a reputable underwriter because they will not guarantee a firm with a poor reputation for being of low quality. The chance of lessening information asymmetry increases with the guarantor's reputation. This decreases underpricing since it represents the minimal risk associated with initial public offerings (IPOs) and the low degree of future uncertainty (Djaelani et al., 2022). This is consistent with the research (Tanoyo & Arfianti, 2022), that shows underpricing is negatively impacted by the underwriter's reputation.

H₃: Underwriter reputation has a negative effect on underpricing

The effect of auditor reputation on underpricing

Professional auditors can be used as an indication of the quality of the issuing company. Investors will interpret the issuer's sacrifice in using a qualified auditor that the issuer has information that is accurate about its prospects. This means that using a highly reputable auditor will reduce uncertainty in the future. According to signal theory, a good auditor's reputation will bring positive signals to investors because reputable auditors have a significant influence on the reliability of financial statements. Audited financial statements provide its users with more confidence. The degree of confidence in the information in the prospectus increases with the auditor's reputation. This implies that in order to attract investors interested in purchasing shares at high prices, a well-regarded auditor will lessen the IPO's uncertainty and show a low degree of corporate risk. The degree of underpricing may be decreased by a rise in share price (Djaelani et al., 2022). This is consistent with study findings (Tanoyo & Arfianti, 2022) that show underpricing is negatively impacted by auditor reputation.

H₄: Auditor reputation has a negative effect on underpricing

Methods

This research is a quantitative approach, with the population and sample consisting of companies that have conducted Initial Public Offering (IPO) during the period 2020 – 2022. The purposive sampling method was used, with criteria such as companies that conducted IPOs in 2020-2022, non-financial sectors, experienced underpricing, did not experience losses, and

published financial reports in the rupiah currency. A total of 115 companies were taken as samples.

Using the SPSS program as the analysis tool, multiple linear regression was employed in the data analysis to assess the relationship between the independent and dependent variables. In the past, the data was examined using the classic assumption test to guarantee that there were no issues with heteroscedasticity, multicollinearity, or normality with the regression model. Subsequently, the proposed links were tested by hypothesis testing.

Research Variables and Variable Measurement

This study uses variables: debt-equity ratio (X1), earnings per share (X2), underwriter reputation (X3), auditor reputation (X4) and underpricing (Y). The measurement can be formulated as follows.

Underpricing

Underpricing is the dependent variable in this research. Underpricing is measured by the initial return of stocks that have conducted an IPO. The measurement is formulated as follows (Mulyani & Maulidya, 2021).

$$IR = \frac{Pt_1 - Pt_0}{Pt_0}$$

Description:

IR: Initial return,

Pt₁: First day closing price, and

Pt₀: Initial offering price.

Earnings per share

A company's level of profitability is indicated by its earnings per share (EPS). EPS measurement can be formulated as follows (Abbas et al., 2022).

$$EPS = \frac{\text{Net Income After Tax}}{\text{Number of Shares Outstanding}}$$

Debt equity ratio

The company's capacity to settle its debt with equity is known as financial leverage. DER measurement can be formulated as follows (Tanoyo & Arfianti, 2022).

$$DER = \frac{\text{Total Debt}}{\text{Total Equity}}$$

Underwriter Reputation

Underwriters are third parties that support businesses in getting everything ready for an IPO. Underwriter reputation is measured using a dummy variable, with a value of 1 for underwriters who are included in the top 10 and a value of 0 for underwriters outside the top 10 (Tanoyo & Arfianti, 2022).

Auditor Reputation

Auditors are parties who have a license to examine the fairness of financial statements. Auditor reputation is measured using a dummy variable; auditors affiliated with the Big Four accounting firms are given a value of 1, and a value of 0 is given if the auditor is not affiliated with the Big Four (Tanoyo & Arfianti, 2022).

Results and Discussion

The data must first be tested for classical assumptions, namely, normality test, multicollinearity test and heteroscedasticity test, in order to find out whether all data can be applied in regression.

Table 2. Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		115
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.16176678
Most Extreme Differences	Absolute	.214
	Positive	.214
	Negative	-.105
Test Statistic		.214
Asymp. Sig. (2-tailed)		.000 ^c
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

Utilizing unstandardized residuals with a significance level of 0.00, the normalcy test is conducted. Given that the significance value is less than 0.05, this indicates that the data are not regularly distributed, so it is necessary to make efforts to normalize the data by outlier data.

Table 3. Normality Test (after outliers)

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		102
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.16827181
Most Extreme Differences	Absolute	.202
	Positive	.202
	Negative	-.080
Test Statistic		.202
Asymp. Sig. (2-tailed)		.000 ^c
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

Following the occurrence of outlier data, the significance value of the normality test remains at 0.00; the data is still not normally distributed, as indicated by the significance value of <0.05. Consequently, if the data is not generally distributed after being tested for normality, the central limit theory can be used to explain why. The data can be normally distributed as the total amount of data is still greater than 100.

Multicollinearity Test

The multicollinearity test result, Table 4, indicates that no variable has a tolerance value greater than 10 or a VIF value less than 10. In summary, the regression model in this study does not exhibit any signs of multicollinearity amongst the independent variables.

Table 4. Multicollinearity test

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	LAG_DER	.926	1.080
	LAG_EPS	.817	1.224
	LAG_RU	.870	1.149
	LAG_RA	.879	1.137
a. Dependent Variable: LAG_UNDP			

Heteroscedasticity Test

Using the Glejser Test, which involves regressing the independent variable on the absolute value of the residual (ABS_RES), the heteroscedasticity test in this study was conducted. If the significance value is more than 0.05, the heteroscedasticity issue is resolved.

Table 5. Heteroscedasticity test

Model		Sig.	Description
1	(Constant)	.000	
	LAG_DER	.492	Heteroscedasticity Free
	LAG_EPS	.461	Heteroscedasticity Free
	LAG_RU	.487	Heteroscedasticity Free
	LAG_RA	.337	Heteroscedasticity Free

Table 5 shows the results of the heteroscedasticity test; all variables have a significance value > 0.05, so it can be said that all variables used are free from heteroscedasticity.

Hypothesis Test

In this study, the method of data analysis employed was multiple linear regression to evaluate the hypothesis. Multiple linear regression is used to determine how each independent variable affects a dependent variable. There are three types of hypothesis testing; partial, simultaneous, and determination tests.

Determination Test

It is established that the Adjusted R Square value is 0.221 based on the determination test results shown in Table 6. This demonstrates that the debt-to-equity ratio, earnings per share,

underwriter and auditor reputations, and their combinations account for 22.1% of the study's variables, which can be used to explain the variation relationship of the dependent variable, underpricing.

Table 6. Determination Test

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.502 ^a	.252	.221	.06235
a. Predictors: (Constant), LAG_RA, LAG_DER, LAG_RU, LAG_EPS				

F Test

The impact of all independent variables on the dependent variable is ascertained by conducting a simultaneous test. The outcomes of the simultaneous test are listed below.

Table 7. F Significance Test Results

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.127	4	.032	8.153	.000 ^b
	Residual	.377	97	.004		
	Total	.504	101			
a. Dependent Variable: LAG_UNDP						
b. Predictors: (Constant), LAG_RA, LAG_DER, LAG_RU, LAG_EPS						

A significant value of $0.00 < 0.05$ is obtained based on the f-test findings in Table 7, and it may be inferred that the model chosen is adequate and practicable (fit).

Partial Test

Table 8. Partial hypothesis testing results

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.289	.010		27.558	.000
	LAG_DER	.008	.006	.125	1.370	.174
	LAG_EPS	.002	.001	.224	2.310	.023
	LAG_RU	-.040	.014	-.262	-2.778	.007
	LAG_RA	-.105	.024	-.405	-4.323	.000
a. Dependent Variable: LAG_UNDP						

Partial tests are conducted to determine whether each independent variable affects the dependent. If the significance value is < 0.05 , the test results are considered influential, while if the significance value is > 0.05 , the test results are considered to have no effect. In Table 8 above, the multiple linear regression model is obtained as follows:

$$\text{UNDP} = 0,289 + 0,008\text{DER} + 0,002\text{EPS} - 0,040\text{RU} - 0,105\text{RA}$$

The debt-equity ratio does not affect underpricing, as shown in table 8 based on the preceding equation, with a significance value of 0.174 greater than 0.05, indicating that the first hypothesis is rejected. This is consistent with the study that was done (Djaelani et al., 2022; Vivianti, 2021), which states that the debt-equity ratio does not affect underpricing; companies conducting initial public offerings (IPOs) operate in various types of industries. Each industry has a different capital structure. Therefore, the discrepancy in research results can cause the debt-equity ratio not to affect underpricing. However, the results of this study are not in line with research conducted by (Lukman & Kunawangsih, 2023; Tanoyo & Arfianti, 2022) which states that the debt-equity ratio has a positive effect on underpricing

The second hypothesis is accepted based on table 8, where the test results indicate that the profits per share variable has a positive effect on underpricing with a significance value of 0.02, smaller than 0.05. This is consistent with the study that was done (Djaelani et al., 2022), which indicates that underpricing is positively impacted by earnings per share (EPS); investors are typically more interested in companies with high EPS since they can result in higher profits for them. High interest from investors in company shares with high EPS can cause an increase in share prices, thereby increasing the level of underpricing. However, this result is not in line with research conducted by (Isywardhana & Febryan, 2022; Pangestuti, 2022; Soesetio et al., 2022) which states that earnings per share has a negative effect on underpricing.

The third hypothesis is accepted based on table 8, where the test results demonstrate that the underwriter reputation variable has a negative effect on underpricing with a significance value of 0.00, smaller than 0.05. According to the study that was done Utami et al., (2019) assert that underpricing is negatively impacted by underwriter reputation; underwriters who have a good reputation are more trusted by investors because they tend only to guarantee quality companies. This reduces the uncertainty experienced by investors and can reduce the level of underpricing. However, this result is not in line with research conducted by (Abbas et al., 2022; Purnomo & Suryaningsih, 2023) which states that underwriter reputation has a positive effect on underpricing.

The fourth hypothesis is accepted based on table 8, where the test results indicate that the auditor reputation variable has a negative effect on underpricing with a significance value of 0.00, smaller than 0.05. This is consistent with the study that was done (Farichah, 2018; Setiawan, 2018), it says that auditor reputation has a negative effect on underpricing; companies affiliated with the big four can lessen the degree of underpricing. This is due to the increased trust of investors in the company's financial statements because a highly reputable auditor audits the company. This increase in trust reduces how much uncertainty there is faced by investors, which consequently may lessen the degree of underpricing. However, this result is not in line with research conducted by (Rodoni et al., 2018) which states that auditor reputation has a positive effect on underpricing.

Conclusion

The results of this study conclude that the debt-equity ratio does not affect underpricing. At the same time, earnings per share has a positive effect on underpricing, while underwriter reputation and auditor reputation have a negative effect on underpricing. Future researchers can explore other factors that can affect underpricing, so it is hoped that there will be other findings on the topic of underpricing research.

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