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DETERMINANTS OF UNDERPRICED INITIAL STOCK: A STUDY ON THE INDONESIA STOCK EXCHANGE

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ABSTRACT

In the company, the issuer also wants profit, so expect a high initial price. However, on the part of the underwriters on the contrary, they expect a low initial price because they are bound by the full commitment stock guarantee system that applies in Indonesia. This difference in interests causes the issuer to compromise a bit by setting a lower initial share price so that investors are interested in buying the launched initial shares. As a result, when conducting an initial public offering, the company has difficulty in determining the price because there is no reference so that there is a potential for underpriced shares to occur. This study to analyze the factors that influence the level of undepriced, which is focused on age, return on total assets, financial leverage and firm size. First, the test will be carried out partially with a t-test to test the effect of each factor on the level of underpriced initial shares. Furthermore, the test will be carried out simultaneously with the F-test, namely to test the effect of the four factors together on the level of underpriced initial shares. The population in this study are companies that offer their initial shares on the Indonesia Stock Exchange and have underpricing stock values. The results show that company age has a positive effect on underpriced initial shares, while the return on total assets, financial leverage and firm size variables get the opposite result.

Keywords: *underpricing, age, return on total assets, financial leverage, firm size.*

1. INTRODUCTION

In facing the challenges of intense competition and the development of the information technology, the company always tries to keep maintaining its viability with various strategic plans. One of the company's strategies is to expand its business, including expansion action which requires a lot of funds and generally causes big problems that will hinder the development of small and medium scale companies, due to lack of funds. Companies can offer shares to the public as a solution to obtain new capital to develop their business and sustain operations.

Companies can meet their long-term funding needs through the capital market. The process for offering shares to the public is as follows: (1) Initial shares are offered in the primary market; and (2) The shares are traded to the public through the secondary market (stock exchange). The most important thing in the IPO activity is the determination of the initial share price because previously there was no reference to the stock price. Underwriters are needed to be a liaison between issuers and investors.

The advantage that investors get when buying IPO shares is that the fundamental value of the shares is higher than the market value of the IPO shares, so that investors can get positive abnormal returns. In addition, the issuer and the underwriter sometimes have different interests. The difference in the interests of the two parties concerned is due to information asymmetry, causing underpricing.

IPO underpricing is a common phenomenon in different securities markets and has becoming a financial issue (Lowry et al., 2017). Meanwhile, Chen et al. (2015) and Boone et al. (2016)

found that information asymmetry increases the level of IPO underpricing, if this happens then the external funds obtained from going public companies are not optimal and if investors sell underpriced shares on the first day, investors will get an initial return.

However, in an Initial Public Offering (IPO), uncertainty and differences in information received by investors and internal companies make it difficult for potential investors to distinguish the potential value of an IPO company, thus allowing the reputation of the organization to be a valid signal used by investors to measure the potential value of the company (Liu et al., 2020).

According to Gumanti et al. (2015), Arora and Singh (2020), and Teti and Montefusco (2021), the determinants of stock underpricing are the reputation of the guarantee company, auditor reputation, government ownership (SOE / non-SOE), company age, public, firm size and financial leverage. The results of the research by Arora and Singh (2020) show that the initial return obtained by investors for buying underpricing shares is influenced by the reputation of the guarantor company and the company's profitability.

Based on previous research, many researchers have tried to prove that the factors of buying underpricing stocks have a significant effect on the amount of initial return. However, there are still various results due to differences in the applied academic point of view, selection of determinants, performance measures and contextual nature of each company.

According to Miller (1977) in Narayanasamy et al. (2018), financial behavior can cause psychological differences in price and volume behavior in financial markets (divergence). The divergence suggests that uncertainty about the IPO can attract overvaluation on listing day, followed by poor performance over the long term. Initially, investors tend to be overly optimistic about the value of the IPO, causing underpricing of the initial share price.

The tendency of underpricing in companies that offer initial shares to the public occurs because of an imbalance between the guarantor company and the company, for investors this underpricing is profitable but the funds obtained by the company are not maximum. This polemic occurred in one of the state-owned companies (PT Krakatau Steel) which carried out an IPO hoping that a good company performance in Indonesia could provide a large initial return for the company, but underpricing occurred to the detriment of the company and the state (Indriani and Marlia, 2014).

The low underpricing rate reflects post-IPO success as opportunity costs are reduced. In addition, it also reflects lower information asymmetry. Similarly, a high level of information asymmetry is associated with a higher rate of IPO underpricing.

Research on underpricing stocks in companies conducting IPOs in Indonesia is still interesting because many investors are still interested in investing their funds on the Indonesia Stock Exchange despite the current global crisis. This research is devoted to the underpricing stocks of companies that offer their initial shares on the Indonesia Stock Exchange and an analysis of the determinants of the initial shares of publicly listed companies in Indonesia is carried out which focuses on financial information such as: age, firm size, financial leverage and profitability.

This study aims to determine the determinants of underpricing of initial shares of companies listed on the IDX, with the limitations of the formulation of the problem statement:

a. Can age affect the level of underpriced shares of a public company?
b. Can profitability affect the level of underpriced IPO of a public company?
c. Can financial leverage affect the level of underpriced shares of a public company?
d. Can firm size affect the level of underpriced shares of a public company?
e. Can age, return on total assets, financial leverage and firm size simultaneously affect the level of underpriced initial shares of a public company?

2. LITERATURE REVIEW

Grand Theory

Signaling Theory

According to Grundy and Verwijmeren (2020), the purpose of investment is to increase wealth both now and in the future, investors manage their wealth effectively to obtain maximum returns and are protected from inflation. There are many types of investment that can be chosen by an investor, including: (1) Non-marketable Assets. The characteristics of this asset are that it reflects a direct transaction between the owner of the asset (investor) and the issuer of the asset (issuer); (2) Money Market Instruments (Money Market Instruments). The characteristics of this instrument are highly liquid and have low risk such as T-Bills, Negotiable CDs, Repo; (3) Capital Market Securities. The characteristic of this security is that it is a long-term security that is fixed income and equities; (4) Derivatives Securities. The characteristic of this security is that its value is based on the bid and ask prices in the market, and/or based on the % interest. Examples of these securities are options and futures contracts; and (5) Indirect investments. Indirect investment is a sale and purchase transaction of investment ownership of a company. Indirect investment is divided into unit investment trust, open end, closed end.

Investors should be able to evaluate target companies, especially during the IPO process, where they have access to imperfect company-specific information. Signaling theory provides a valuable framework for explaining the effects of information asymmetry in the economy and how external investors value newly issued stocks. According to Welch (1989) in Liu et al. (2020) the perspective of signaling theory, underpricing is a signal of separation between high-quality companies and low-quality companies. High quality companies win the competition from quality companies through underpricing.

Relationship Among Age, Return on Assets, Financial Leverage and Firm Size on Underpriced Initial Shares

Firm size is positively correlated with initial return (Thoriq et al., 2018). Meanwhile, the underwriter's reputation and share offering have a significant positive effect on initial returns (Suwandi, 2018). The higher the profitability shows that the company is able to estimate the profits to be received. This profit is an important indicator that prospective investors will consider in investing and reducing the underpriced level (Miswanto and Abdullah, 2020). The increase in initial return is influenced by a significant increase in financial leverage (Carolina and Miswati, 2021).

Hypothesis Developments

According to Nadhiroh and Nugroho (2020), the longer the age of the company, the less information asymmetry, and less uncertainty in the future. Thus, it can be concluded that the longevity of a company can be evidence that the company is able to survive and compete, and can make business decisions in the economy. Based on this phenomenon, the hypothesis can be developed as follows:

H_1: There is a positive effect between age and the level of underpriced initial shares of a public company.

Return on total Assets (ROA) is a ratio to measure the company's overall rate of return on investment. Regarding stock underpricing, Gunawan and Laturette (2021) proves that there is a significant negative relationship between ROA and stock underpricing during the IPO. Based on this phenomenon, the hypothesis can be developed as follows:

H_2: There is a negative effect between the return on total assets and the underpriced level of the public company's initial shares.

Financial Leverage shows the size of the company's total assets with financing sources through debt. The higher the company's financial leverage, the higher the company's debt default. Therefore, in making decisions by investors, the financial leverage factor is also important to consider. The results of Veno and Sasongko (2017) show that after a successful IPO, bank-initiated loans to companies have much higher loan spreads resulting in the application of performance pricing provisions and higher commitment costs. Based on this phenomenon, the hypothesis can be developed as follows:

H_3: There is a positive effect between financial leverage and the level of underpriced initial shares of a public company.

Investors in offering their capital, of course, will prefer companies that have good prospects in a relatively long period of time. Company size is measured by the total assets owned by the company so that it becomes a factor that needs to be considered in determining the company's initial share price. Based on this phenomenon, the hypothesis can be developed as follows:

H_4: There is a positive effect between firm size and the level of underpriced initial shares of publicly listed companies.

Research Framework

Every investor will consider the profits he might get when investing his capital in all forms of investment. Likewise if they invest in stocks. This is a consideration for every company which is going to go public. In the company, the issuer also wants profit so expect a high initial price. However, on the part of the underwriters on the contrary, they expect a low initial price because they are bound by the full commitment stock guarantee system that applies in Indonesia. This difference in interests causes the issuer to compromise a bit by setting a lower initial share price so that investors are interested in buying the launched initial shares. As a result, when conducting an initial public offering, the company has difficulty in determining the price because there is no reference so that there is a potential for underpriced shares to occur. This underpricing condition is also influenced by several factors, both financial factors (return on total assets, financial leverage, solvency ratio) and non-financial factors (auditor reputation, underwriter reputation, government ownership (SOE / non-SOE), company age, ownership level shares offered to the public at the time of the IPO and the size of the company).

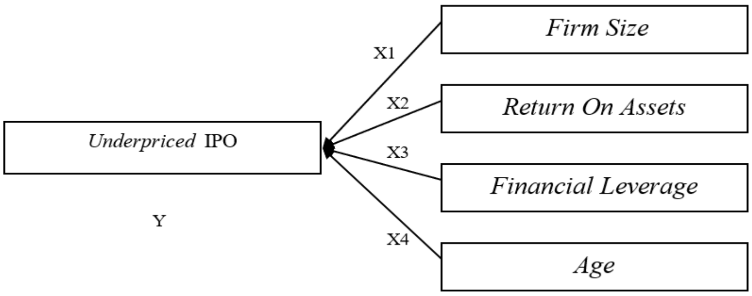

Figure 1. Research Framework

Figure 1 shows the significant relationship between age, return on total assets, financial leverage and firm size simultaneously on the underpriced level of public company shares.

3. METHODOLOGY

According to the efficient market hypothesis and other economic theories, under conditions of complete information symmetry, the IPO pricing of listed companies should truly reflect a fair assessment of the real value of the company (Ma et al., 2022). However, neither developing country capital markets nor capital markets have reached fully effective markets, and there are situations where stock IPO prices deviate from the company's real value.
In this study, the selection of the sample is based on several stages and certain criteria defined by the researcher, which include:

a. The company is underpriced when offering initial shares on the IDX for the 2019-Q1 2022 period.
b. The company has complete data needed, namely age, ROA ratio, financial leverage ratio and firm size.

Based on the sample selection criteria above, there were 208 companies that conducted initial public offerings (IPOs) during the research period 2019-Q12022. Among these 208 companies, 27 companies were underpriced. Thus, the number of samples in this study were 27 companies, with a total of 108 company observations.

Double linear regression method can be used to study the impact of IPO underpricing on primary market pricing and investor behavior in the secondary market. The population in this study are all companies that conduct initial public offerings (IPOs) and are still listed on the Indonesia Stock Exchange (IDX).

Table 1. Operational Variables

Type	Name	Symbol	Equation
Y	*Initial return*	Ir	Ln (IPO Price / Trading Price)
X	Age	A	Log Age
	Profitability	ROA	∑ Earnings : ∑ Asset
	Financial leverage	L	∑ Debt : ∑Asset
	Company Scale	S	Log ∑Asset

Table 1 shows that the variables in this study consist of:

a. Dependent variable: Initial Return
   This variable is calculated by comparing IPO price with the trading price at the time of the IPO divided by the trading price at the time of the IPO.

b. Independent variables, consisting of:
   (1) Age of the Company. The age of the company is calculated from the number of months since the establishment of the company until the company conducts an initial public offering. The measurement scale used is a ratio scale.
   (2) Return on Assets. According to Besley and Brigham (2000), ROA is "The ratio of net income to total assets; it provides an idea of the overall return on investment earned by the firm."
   (3) Financial Leverage. According to Keown et al. (2022), "Financial leverage is the ratio of book value of total debt to total asset in book value terminology of market value of debt to total value of the firm market terminology."
   (4) Company Size. The measurement of the firm size variable is carried out using the logarithm of the total assets in the last year before the company carries out the IPO. The measurement scale used is a ratio scale.

4. RESULTS

The results of this analysis include testing classical assumptions that must be met by a double linear regression model. Then hypothesis testing of the double linear regression model was carried out, namely t testing (partial test) and F testing (simultaneous test) against double linear regression models.

Table 2. Regression Analysis

Model	β	t
α	0.877 (0.334)	0.983
A	6.36E-005 (0.817)	0.233
ROA	-1.277 (0.252)	-1.168
L	-.033 (0.877)	-.157
S	-.045 (0.559)	-.591

Table 2 indicates that the double linear regression model in this study can be developed as follows:

$$Y' = 0.877 + 0.0000636\ A - 1.277\ ROA - 0.033\ L - 0.045\ S$$

The results show that a company's lifespan positively affects IPO underpricing but the opposite for the variables ROA, Leverage, and Firm Size.

Table 3 Partial Test

Model	β	t
A	5.14E-005 (0.827)	0.220
ROA	-1.131 (0.277)	-1.105
L	-.028 (0.872)	-.163
S	-.030 (0.661)	-0.443

Based on the results of testing the linear regression model using the t-test, it shows that there is no significant effect between the age of the company on the level of underpriced initial shares. The value of the regression coefficient of the company's age is in Table 3 shows a number of 0.00000514 which means that companies with a relatively long age have a higher level of underpriced initial shares in publicly traded companies. The longevity of a company is able to show the company's experience in managing its business.

However, this could mean that companies that already have a lot of experience will have a business mind that tends to be conservative in making decisions. This allows for an increase in the offering price of shares when traded on the secondary market but not significantly. The results of this study support the results of previous research conducted by Sulistio (2006) that there was no significant effect between firm age and the level of underpriced IPO.

Furthermore, the results of testing the linear regression model using the t-test show that there is no significant effect between return on assets and the level of underpriced initial shares. Table 3 shows a number of -1.131 which means that companies with higher ROA, the level of underpriced initial shares in publicly listed companies is lower. The size of the company's profit cannot be used as information for capital market investors in Indonesia so that investors are not very interested in or looking for shares of IPO companies. Therefore, the increase in the offering price of shares when traded on the secondary market is probably due to the demand for these shares not increasing significantly. The results of this study are supported by research conducted by Gunawan and Laturette (2021) which proves the hypothesis that ROA has negative no significant effect initial returns.

Likewise, the results of testing the linear regression model using the t-test indicate that there is no significant effect between financial leverage on the level of underpriced IPO. The value of the financial leverage regression coefficient is -0.028 which means that companies with high financial leverage have a lower level of underpriced initial shares in publicly listed companies. This shows that capital market investors in Indonesia are classified as short-term investors, especially those who buy in the capital market so that the large level of financial leverage does not have a significant effect on the increase in the offering price of shares traded on the secondary market.

The results of testing the linear regression model using the t-test indicate that there is no significant effect between company size on the level of underpriced initial shares. The value of the firm size regression coefficient is -0.030 which means that the larger the size of the company, the lower the level of underpriced IPO in the go public company. In this study, the amount of total assets does not significantly affect the level of underpriced initial shares because large total assets do not guarantee the liquidity of a company, causing an increase in the price of shares traded on the secondary market which tends to increase which is not significant.

Table 4. Model Summary

Model	Sum of squares	F
Regression	0.094	0.409 (0.801)
R-Squared = 0.231		

Table 4 shows the results of testing the double linear regression model using the F-test in this study prove that there is indeed no significant effect simultaneously (simultaneously) of firm age, return on assets, financial leverage and firm size on the level of underpriced IPO with a level of confidence 95%.

It is estimated that capital market investors in Indonesia tend to buy initial shares by relying solely on technical analysis, without looking at fundamental analysis, so it can be concluded that these investors are speculators who only prioritize profit from capital gains of a stock. The test results of the multiple linear regression model were clarified by using the t-test in this study which showed that none of the variables had a significant effect on the underpriced level of IPO with a 95% confidence level.

Judging from the magnitude of the coefficient of determination in Table 4 shows the number 0.231; This means that only 23.10 percent of the variation in the level of underpriced initial shares can be explained together by the variables of company age, return on assets, financial leverage and company size. While the remaining 76.90 percent can be explained by other variables that are not found in the multiple linear regression model.

5. CONCLUSIONS

Based on the analysis and discussion that has been taken, some conclusions can be drawn as follows:

a. The age of the company does not have a significant effect on the variable underpriced initial shares.
b. Return on assets does not have a significant effect on the variable underpriced initial shares.
c. Financial leverage does not have a significant effect on the variable underpriced initial shares.
d. The size of the company does not have a significant effect on the variable level of underpriced initial shares.
e. Simultaneously, the four independent variables do not affect the level of underpriced IPO.

The limitation of this study is that it does not consider external global factors that occur in certain periods such as the global economic recession that will affect the overall stock market price.

There are several suggestions or recommendations that can be given as follows:

a. For prospective issuers who plan to conduct an IPO, this research can be taken into consideration, especially with regard to the issue of information disclosure if they are going to make a good price determination on the secondary market.
b. For investors/potential investors who are interested in investing through the capital market, the results of this study can be used as additional references in considering investment decisions.
c. For academics and researchers who are interested in the capital market, the results of this study are expected to be the basis for developing further research.
d. For further research, it is recommended that the research period use longer data (time series) so that it is more representative, for example five or six years. In addition, it is also necessary to add other financial and non-financial information as research variables and pay attention to other factors such as interest rates, currency exchange rates, inflation rates, economic growth rates, political conditions and security conditions.

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