

Analysis of the influence of profitability, company size, company age, and underwriter's reputation on the underpricing of stocks during the IPO on IDX 2010–2020 period

Andre Agusti Wijaya*
Mahatma Kufepaksi

Management Department, Economic and Business Faculty, University of Lampung, Indonesia

ABSTRACT

The capital market is one of the most important means for the business world as a source of capital and a place for investment for the community. Research on the variables influencing underpricing still needs to produce different findings and consistent research results. Investors value companies that have been established for a long time better than experience and stand the test in the business world so that they have a low level of risk. The underwriter's reputation influences the initial share price and has special expertise in corporate securities. This study aims to see the effect of profitability, company size and age, as well as the reputation of the underwriter on stock underpricing at the time of IPO. The method used is the method of regression analysis to see the effect of the independent variables on the dependent variable. The results of this study indicate that the company size and underwriter's reputation influence the underpricing conditions at the time of the IPO; while company's profitability and age do not. Public company should pay attention to the size of the company and the underwriter's reputation since these two things affect how much the stock is underpriced and for the investors who want to buy IPOs, it is expected to consider the size of the company and the reputation of the underwriter.

KEYWORDS

Underpricing; Profitability;
Underwriter Reputation;
Company Age; Company Size

Received: 12 March 2023
Accepted: 10 April 2023
Published: 12 April 2023

Introduction

The capital market is an important source of capital and investment for the business world. Companies can sell their shares to the public through the capital market to obtain sources of funds to carry out business development. Going public is when a company first sells its initial shares in the primary market, carried out between the underwriter and the company (issuer). The initial public offering price is determined by the issuer and the underwriter, with an agreement and price agreement determined by both parties. In contrast, the secondary market price is determined through market mechanisms.

The difference between the two pricing mechanisms that determine stock prices can cause the company's initial return to have a positive or negative difference. Research has been conducted in various countries to study underpricing in the Indonesian capital market. Safitri (2013) suggests that underpricing occurred in IPO companies in 2005-2010 with an average underpriced rate of 33.66%. Heryanto and Kartawinata (2016) stated that there was an underpricing phenomenon with an average initial return of 23.32% for companies that went IPO in 2014. From 2010 to 2020 IPOs, with 353 companies carrying out IPOs, 296 companies experienced underpricing, and 4 companies experienced overpricing. The authors wish to re-examine to obtain empirical evidence that can benefit interested parties, with variables influencing factors consisting of financial and non-financial data of the company.

The most important details in this text are the factors that influence the company's stock price when conducting an Initial Public Offering (IPO). These factors include profitability, company size, and underwriter reputation. Profitability is the company's ability to earn profits using all of its assets and is measured using return on assets (ROA). ROA is part of the profitability ratios in financial ratio analysis. The greater the value of a company's ROA, the better it will be because its assets can rotate faster and earn profits. Other factors that can affect stock prices include company size, which is the size of the company's scale in operating using the total assets owned by the company. Company size can be used as a proxy for the future uncertainty of the stock price, as the public will better know large-scale companies than small-scale companies. Yasa (2008) found that company size can determine the level of investor confidence in the shares offered by the issuer. In addition to profitability and company size, other factors influence the company's stock price, such as the company's age. Company age is the company's experience in the business world, showing how long the company can survive and proving that the company can compete and take advantage of existing business opportunities. Companies that have been established for a long time are more experienced at generating returns for the company, so investors will be interested in buying the company's shares in the hope that the company's share price will rise when traded in the secondary market and be able to generate a sizable return in the future.

Additionally, the underwriter's reputation can affect the company's initial share price. The higher the underwriter's reputation, the more likely the underwriter has experience as a share underwriter with a high underwriting frequency and properly analyzes a stock. The success rate of a securities issuance in a company is highly dependent on the ability and experience of an underwriter. Expertise and the ability to develop a stock issuance strategy are needed, and the underwriter's reputation influences the initial share price. Underwriters with a high underwriting reputation dare to guarantee the issuer's share price at an optimum price because they have experience and special expertise in corporate securities. As the previous research has shown mixed results, so the authors are interested in testing their hypothesis in this topic.

Literature review

Capital market

The capital market is a market that brings parties who have excess funds (investors) together with parties who need funds (issuers) by trading securities in the form of stocks or bonds. Tandelilin (2010) explains that the capital market is a market for trading stocks that generally have a lifespan of more than one year, such as stocks and bonds. According to Sartono (2010), a capital market is a place for long-term financial asset transactions.

The capital market is making it easier to buy and sell things and does other things related to buying and selling (Andari, 2020). Thus, the capital market is a market that brings together sellers and buyers of long-term securities, both in the form of debt and equity. At the same time, the place where transactions occur is called the stock exchange. Therefore, the stock exchange is the essence of the physical capital market. Capital Market Law No. 8 of 1995 in Sartono (2010) also explains that the capital market is an activity relating to public offerings and securities trading, public companies related to the securities they issue, and institutions and professions related to securities. In addition, according to the understanding of the capital market in general, according to the Decree of the Minister of Finance of the Republic of Indonesia No. 1548/kmk/1990 concerning Capital Market Regulations, "a capital market is an organized financial system, including commercial banks and all intermediary institutions in the financial sector, as well as all securities in circulation. Thus, the capital market can be interpreted as a place in a physical sense that organizes securities sales transactions or is referred to as a stock exchange.

Signalling theory

Signalling theory reveals that parties from the company will convey good information about the state of the company to potential investors in an initial public offering so that this will give a signal to the market. The signal that the company has given can be a positive signal or a negative signal for investors. Investors need signalling theory to consider and determine whether they will invest their shares or not in the company concerned and to determine the existence of an association between the event and the return, price, or volume of shares in the capital market (Darmadji & Fakhrudin, 2012). So it can be concluded that the signal is useful if the information provided is correct or is used in decision-making by the intended user in the initial public offering.

An IPO (Initial Public Offering) is an activity in the capital market that involves selling shares for the first time to investors. The Law of the Republic of Indonesia No. 8 of 1995 concerning Capital Markets, Chapter I, Article 1 Point 15, defines that "a public offering is an activity of offering securities carried out by issuers to sell securities to the public based on the procedures set out in this law and its implementing regulations." Companies that conduct IPOs have a variety of different goals. As explained by Ali et al. (2020), most companies that have just been established in their operational activities need more funds. Companies carry out initial public offerings to develop their business, production, and capital. An IPO can enable companies and their manufacturing units to spend capital on investment activities to update technology, increase capital, and improve labour efficiency by hiring skilled workers.

Stock price

There are various types of stock prices in the capital market. An equal share price is when the initial share price (in the primary market) is the same as the share market price (in the secondary market) on the first day. This shows no difference between the two prices ($IR = 0$), so issuers and investors neither benefit nor lose. However, issuers and investors expected something else. Overpricing occurs when the initial stock price (in the primary market) is higher than the price (in the secondary market) on the first day, indicating a negative IR value. The difference from overpricing is an advantage for investors who buy shares on the secondary market on the first day because the price they pay is lower than the initial price of the issuer on the primary market. Underpricing is when the initial share price (in the primary market) is lower than the share market price (in the secondary market) on the first day, which indicates a positive IR value.

Profitability

Profitability is the company's ability to earn profits by using its assets. Harahap (2015) states that profitability describes a company's ability to earn profits through its existing capabilities and sources, such as sales activities, cash, capital, employees, and branches. Investors want their funds to be in good condition and constantly growing so that before investing in a company, they can assess its performance through profitability. The company's high profitability can also reduce investors' concerns about the effectiveness of management, which will increase the stock price at the time of the IPO. Therefore, a company with a high level of profitability will increase its stock price at the

time of its IPO because investors will assess the company's performance as good and will be willing to buy its initial shares at a high price.

Company size

Company size is how big the company is in terms of its total assets and how it runs. According to Yasa (2008), company size can be seen from the total assets owned by the company. The greater the total assets, the better it will indicate that the company's performance is good and has good prospects for the future. The company's size can determine the level of investor confidence in the shares offered, and the prospects shown by large-scale companies will reduce any uncertainty that may arise in the future.

Company age

The age of a company is the amount of time it has been in business and using its assets to compete and stay in business. The company's age can be used as one of the factors causing the IPO share price because the longer the company has been established, the more it will be known by the public and investors. According to Puspita (2014), the age of the company shows how long the company can survive in the future. Investors will evaluate companies that have been established for a long time better than companies that have not been established for a long time because companies that have been established for a long time can survive and compete in the business world for much longer and have more information about market conditions compared to companies that have not been established for a long time. So, investors will want to buy the company's shares in the hopes that the share price will go up when the company's shares are traded on the secondary market. This will help the company make a big profit in the future.

Underwriter reputation

The underwriter has an important role in the initial public offering (IPO), one of which is setting the initial share price. The underwriter's reputation is also believed to be an important consideration for investors when deciding whether to buy company shares. The underwriter's reputation greatly influences investor confidence in issuers conducting an initial public offering (IPO). Underwriters with a good reputation are judged by how often they guarantee the shares of companies doing initial public offerings (IPOs). Underwriters with high rankings on the Indonesian Stock Exchange (IDX) have a good track record and assessment experience. Besides, it also shows how many assets and issuers they have guaranteed. This has increased investor confidence in the shares underwriters offer and maintained their reputation (Andari, 2020). Carter and Manaster (1990) say that the underwriter's reputation can be a good sign for investors and reduce uncertainty before the deal. In this case, underwriters with a good reputation are likelier to set high prices because the guaranteed quality gives them more confidence. Therefore, with a good reputation from the underwriter, the underwriting rate will be lower. The higher the underwriter's reputation, the lower the level of underpricing.

Methods

Data types and sources

The type of data used in this study is secondary quantitative data, namely data originating from other parties that have been collected or processed into data for analysis purposes. The data comes from the financial reports of companies that conducted IPOs during the 2010 to 2020 research period obtained from the IDX. The data was obtained from the Indonesian Stock Exchange (IDX) from 2010 - 2020.

Data collection methods

By the type of data required, namely secondary data, the data collection method in this study is to use the method:

1. Literature study, theory obtained from journals, books and theses. This method is used to study and understand the literature, which contains discussions on stock prices, according to what is needed in this study.
2. Documentation study the method used in this study is documentation, namely documenting the annual financial statements of companies that conducted IPOs that were registered on the IDX in the 2010-2020 period and the publication of company financial reports in the 2010-2020 period.

Population and sample

Study Population

The population in this study are companies that went public listed on the Indonesia Stock Exchange (IDX) which conducted an initial public offering (IPO) with an observation period of 2010 - 2020, totaling 353 companies.

Research Samples

The sampling technique in this study was a purposive sampling technique with the aim of obtaining a sample in accordance with the research objectives. The purposive sampling method is a sampling method based on certain considerations or criteria. The criteria for companies that will be sampled in this study are as follows.

- a. Go public companies that conducted an Initial Public Offering (IPO) during the 2010-2020 period.
- b. Companies that experienced underpricing in the Initial Public Offering (IPO) during the 2010-2020 period.
- c. Unstable companies (underpricing and overpricing companies)
- d. Go public companies that carry out an Initial Public Offering (IPO) with financial reports using rupiah (Rp).

From this sampling process it was found that 318 public companies listed on the IDX could be sampled based on the above criteria.

Data analysis

Descriptive statistical analysis

Descriptive statistics provide an overview of a variable seen from the mean, standard deviation, maximum, and minimum values (Widarjono, 2013). The standard deviation, minimum and maximum values describe the data distribution. This analysis is intended to analyze the data accompanied by calculations to clarify the data's circumstances and characteristics. This research analyses the data using descriptive statistics and stepwise regression analysis method by processing data through SPSS (Statistical Package for Social Science) 25 software.

Classical Assumption Test

Before the regression model is used to test the hypothesis, it is necessary to test the classical assumptions to ensure that the model meets the criteria. The classical assumption test was carried out to ensure that the sample under study was protected from normality, multicollinearity, autocorrelation, and heteroscedasticity disturbances. The tests used in this study were the normality test, multicollinearity test, autocorrelation test, and heteroscedasticity test.

Regression analysis

Regression analysis is a study of the dependence of the dependent variable (bound) with one or more independent variables (independent variables) to estimate or predict the population mean or the average value of the dependent variable based on the known values of the independent variables (Ghozali, 2013). This study uses the technique of Multiple Linear Regression Analysis with the stepwise method.

Hypothesis analysis

Hypothesis testing is a decision-making method based on data analysis, both from controlled experiments and from (uncontrolled) observations. In statistics, an outcome is statistically significant if it is almost impossible to occur due to chance factors within predetermined probability limits. Hypothesis testing is sometimes called "data analysis confirmation". Decisions from hypothesis testing are almost always made based on testing the null hypothesis. This is a test to answer a question that assumes the null hypothesis is true. The test we used here is a determination coefficient test and a t-test.

Results

Descriptive statistics

Descriptive statistics transform research data into a tabular form that is easy to understand and interpret. The measures used in this description include the lowest (minimum) value, the highest (maximum) value, the average (mean) and the standard deviation of each variable. Descriptive data in this study illustrates profitability, company size, company age, underwriter reputation, and underpricing. The results of the descriptive statistical analysis research can be seen in the table below:

Table 1. Descriptive statistics

	N	Minimum	Maximum	Mean	Std. deviation
Profitability	296	-0.7805	2.0588	0.049784	0.1807
Company size	296	14.2189	34.4134	26.7435	2.9958

Company age	296	0	100	18.81	15.324
Underwriter reputation	296	0	1	0.22	0.413
Underpricing	296	0.0075	0.9138	0.250390	0.1560

The profitability variable (X1) shows an average (mean) value smaller than the standard deviation, indicating that the research data is heterogeneous, meaning that companies have different profitability. The average value is close to the maximum value, which indicates that a company that made an Initial Public Offering (IPO) in the 2010-2020 period has tended to have high profitability. The company size variable (X2) shows an average value (mean) greater than the standard deviation; this indicates that the data in this study is homogeneous, which means that the size of each company has a low vulnerability to differences. The average value in this study is close to the maximum value, which indicates that the company size in this study tends to be high.

The firm age variable (X3) shows an average value (mean) greater than the standard deviation, which indicates that the research data is homogeneous, meaning that companies have a firm age that does not tend to be different. The average value is close to the minimum, indicating that most companies are younger than a small number of companies. The underwriter reputation variable (X4) shows that the mean value is smaller than the standard deviation, which indicates that the research data is heterogeneous, which means that each company has a different underwriter reputation. The average value is close to the maximum, meaning each company has a highly reputable underwriter.

Multiple regression

Multiple regression is a statistical method used to test hypotheses. This follows the formulation of this study's problem, objectives, and hypotheses. The multiple linear regression method connects one independent variable in a single predictive model. Multiple linear regression tests are used to predict how far the effect of profitability, firm size, firm age and underwriter reputation on underpricing. Based on the SPSS output results, it can be seen as follows:

Table 2. Multiple regression results

Model		Unstandardized Coefficients		Standardized Coefficients Beta
		B	Std. Error	
1	(Constant)	0.542	0.101	
	Profitability	-0.149	0.116	-0.093
	Company size	-0.010	0.004	-0.197
	Company age	0.001	0.001	0.057
	Underwriter reputation	-0.104	0.027	-0.274

From table above it can be seen the relationship between the independent and dependent variables as follows:

$$Y = B_0 + \beta_1 \text{ROA} + \beta_2 \text{SIZE} + \beta_3 \text{AGE} + \beta_4 \text{REPUTATION} + \varepsilon$$

$$Y = 0.542 - 0.149 \text{ROA} - 0.010 \text{SIZE} + 0.001 \text{AGE} - 0.104 \text{REPUTATION} + \varepsilon$$

The interpretation of the regression model above is as follows:

Constant (a) of 0.542 indicates that if the variables of profitability, company size, company age and Underwriter's reputation are constant, then the underpricing variable has a value of 0.00542 or 0.542 per cent. The profitability regression coefficient of -0.149 indicates that for every 1 per cent addition to the profitability variable, underpricing will decrease by 0.00149 or 0.149 per cent. The regression coefficient of company size is -0.010, indicating that for every additional company size variable by 1 unit, underpricing will decrease by 0.0001 or 0.010 per cent. The regression coefficient of firm age is 0.001, indicating that for each addition of the firm age variable by 1 year, underpricing will increase by 0.00001 or 0.001 per cent. The regression coefficient of the underwriter's reputation is -0.104, indicating that for each edition of the underwriter's reputation variable by 1 unit, underpricing will decrease by 0.00104 or 0.104 per cent. The result section objectively shows the presentation of the research key result without any interpretation using text, tables and figures. The result section must present how the author ensures the data's validity and reliability and should be clear and concise.

F-test

Table 3. F-test results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.597	4	0.149	6.967	0.000 ^b
	Residual	3.663	171	0.021		
	Total	4.260	175			

From Table 4.8 above it can be seen that the significant value is 0.000 < 0.05 which can be concluded that the regression equation model formed is significant meaning that all independent variables can be used to predict and explain the dependent variable.

t-test

The t test is used to test the hypothesis in a study using multiple linear regression analysis. The t test is used to partially test each variable. The criteria used in testing the level of confidence used is 95% or a significance level of 5% ($\alpha = 0.05$). If the significance level is > 0.05 then H_0 is rejected and if the significance level is < 0.05 then H_0 is accepted.

Table 4. T-test results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.542	0.101		5.363	0.000
	Profitability	-0.149	0.116	-0.093	-1.277	0.203
	Company size	-0.010	0.004	-0.197	-2.747	0.007
	Company age	0.001	0.001	0.057	.791	0.430
	Underwriter reputation	-0.104	0.027	-0.274	-3.779	0.000

The profitability variable has a significance value of 0.203, greater than 0.05. So, the profitability variable does not affect underpricing, so H_1 in this study is rejected. The company size variable has a significance value of 0.007, smaller than 0.05. So, the company size variable affects underpricing, so H_2 in this study is accepted. The firm age variable (X_3) has a significance value of 0.430, greater than 0.05. So, the firm age variable does not affect underpricing, so H_3 in this study is rejected. The underwriter's reputation variable has a significance value of 0.000, less than 0.05. So, the Underwriter's Reputation variable influences Underpricing, so H_4 in this study is accepted.

Coefficient determination test

The R^2 test was conducted to examine how much the independent variable can explain changes in the dependent variable. The multiple coefficient values are between 0 to 1. The greater R^2 or closer to 1 indicates the greater the ability of the independent variable to affect changes in the dependent variable. According to Ghozali (2011), a small R^2 value means the ability of the independent variables to explain the limited percentage of variation in the dependent variable. If it is close to 1, it means that the independent variable can perfectly explain the percentage variation of the dependent variable.

The results of the determination test (R^2) can be seen from the value of the coefficient of determination in the SPSS output results below:

Table 5. Coefficient determination test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.374 ^a	0.140	0.120	0.146

Based on the results in Table above, the Adjusted R^2 result is 0.120. This value indicates that the underpricing variable is explained simultaneously by profitability, company size, company age and underwriter reputation by 12% and the remaining 88% is explained by other variables not included in this study.

Discussion

Effect of profitability on underpricing

The test results show that the profitability variable (ROA) has a significance value of 0.203, greater than 0.05. This means that the profitability variable does not affect underpricing. Profitability (ROA) is a way to measure how well a company does financially, especially how well it does at making money. Underpricing refers to share prices at the time of an initial public offering (IPO), where the price of shares in the primary market is sold at a lower price than its value in the secondary market. When investing, investors tend to be careful when making decisions. Companies that have high profitability do not always experience underpricing at the time of the initial public offering (IPO) because, for investors, the net income that the company gets when making the initial public offering (IPO) is not always a benchmark that the company will continue to grow well in the future. So even though the return on assets (ROA) of a company when carrying out an IPO is classified as profitable in terms of net income, if other factors are deemed not to have a positive impact on investors in the future, it will be possible for investors not to invest in these shares. In short, profitability is not the only factor affecting underpricing. This research is in line with the research of Setiawan (2018) and Retnowati (2013), which states that return on assets (ROA) profitability does not affect underpricing. However, this study's results differ from the research results by Alviani and Lasmana (2015), where profitability is measured by ROA and has a positive and significant effect on underpricing. Likewise, Andari's research (2020) shows that ROA has a significant but negative effect.

Effect of company size on underpricing

Based on the results of the t-test in table before, the company size variable has a significance value of 0.007, which means it is smaller than 0.05. So, the company size variable affects underpricing, so H2 in this study is accepted. The results of this study indicate that company size affects underpricing. This is because companies with large sizes usually have more capital and assets, such as land, buildings, and machinery, which can be used to develop the company in the future.

Companies with large company sizes and large assets will be considered to have sufficient capital to make the company more efficient in obtaining future profits. It will become an attraction and influence investors' decisions to buy a stock because the company has good prospects. Conversely, if the company is small, the attractiveness of investors will not be the same, or they may even not be interested at all because investors will assume that companies with small amounts of assets have sources of funding that are not large so that companies will find it difficult to develop their businesses. Besides that, investors will also assume that companies with small company sizes will have small efficiency to provide small profits. This will cause the number of requests for shares in the secondary market to be less than the number of shares offered, so the share price stays the same. The results of this study are in line with the research of Ariyanto, Sri Hasnawati, and Ernie Hendrawaty (2020), which states that company size has a negative effect on stock underpricing, which is also in line with the research results of Setiawan (2018) and Retnowati (2013), where company size influences the underpricing of shares during the Initial Public Offering (IPO).

Effect of firm age on underpricing

The test results show that the company's age does not affect underpricing. The firm age variable has a significance value of 0.430, greater than 0.05. So, the firm age variable (X3) does not affect underpricing (Y). When investors invest, they tend to choose a company with a good and healthy financial condition, hoping that the funds to be invested in the capital market can provide profits in the future. Kristiantari, I.D.A. (2012) stated that the age of a company does not always guarantee that a company has good and healthy financial conditions; on the other hand, companies that have a younger (shorter) age do not necessarily have worse performance or prospects compared to companies that have been around for a long time.

Companies of any age can experience unhealthy financial conditions or even bankruptcy, so when making investment decisions, an investor not only looks at the long or shortage of the company conducting an initial public offering (IPO) but also considers the projected cash flow income (income). Future company. So, when investors are going to buy shares, the age of the company is only sometimes the main basis for making investment decisions, even though the company's age is relatively long. The results of this study are in line with the research of Ariyanto, Sri Hasnawati, and Ernie Hendrawaty (2020), which states that company age does not affect underpricing, but this is not in line with research by Andari (2020) and Retnowati (2013), where company age has a significant effect on underpricing.

Effect of the underwriter's reputation on underpricing

The test results show that the underwriter's reputation affects underpricing. The underwriter's reputation variable has a significance value of 0.000, less than 0.05. The underwriter reputation variable (X1) affects underpricing (Y). A good underwriter's reputation can affect investor confidence in buying a stock because investors will assume that stocks with good underwriters have been properly and correctly assessed before being offered to the public.

If the underwriter has a good reputation, they will be more trusted by investors and better able to sell the shares or bonds they offer to the public at a more reasonable price. On the other hand, if the underwriter has a bad reputation, investors will be hesitant about the shares being offered because they are considered not to have been properly and correctly assessed, so the underwriter will find it difficult to sell the shares or bonds at a reasonable price because investors will prefer stocks managed by the underwriter with a good reputation. In addition, companies that go public usually use the services of underwriters with a good reputation, so indirectly, this will show the quality of the underwriters in the eyes of investors and show that these companies are satisfied with the services provided by the underwriters with a good reputation. In short, a good underwriter's reputation can influence stock prices. The results of this study align with the research of Setiawan (2018) and Retnowati (2013), where the underwriter's reputation significantly affects underpricing. However, the results of this study are different from Andari's research (2020), where the underwriter's reputation does not significantly affect underpricing.

Conclusion

Based on the results of the research and discussion above, several conclusions can be drawn. The profitability and company age has no effect on underpricing in companies that carry out initial public offerings (IPOs) for the 2010-2020 period. Other than that, company size and underwriter's reputation have an effect on underpricing in companies that carry out initial public offerings (IPO) for the 2010-2020 period. The results of the R determination test show how much the variables profitability (X1), firm size (X2), firm age (X3), and underwriter's reputation (X4) explain the underpricing variable; as much as 12% of the independent variables in this study explain the dependent variable, while 88% are explained by other factors not examined in this study.

The suggestion for the future is that companies that want to go public should pay attention to the size of the company and the underwriter's reputation since these two things affect how much the stock is underpriced. Investors who want to buy IPOs, it is expected to consider the size of the company and the reputation of the underwriter because these two variables affect the level of underpricing of shares, so when investors buy IPOs, they can minimize the loss or risk of buying IPOs and can optimize the profits. In this study, only a limited number of independent variables affect the dependent variable-only four variables. It is hoped that additional variables, such as financial leverage and

the purpose of using IPO funds, will be added in future research. The number of years of research will increase because if the number of research increases, the data will be more and more, and the results obtained will be more accurate.

Acknowledgements

We would like to thank all the parties involved in this research.

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

References

- Ali, G., Khan, A. J., & Rafiq, S. (2020). Economic Analysis of IPO Underpricing in Stock Market of Pakistan. *International Journal of Economics and Financial Issues*, 10(4), 198-205.
- Alviani, D., Lasmana, A. (2015). Analisis Keuangan ROA,ROE, Price Earning Ratio Terhadap Underpricing Saham Perdana. *Jurnal Akunida.*, 1(1).
- Andari, B. (2020). Pengaruh Return On Asset (ROA), Debt To Equity Ratio (DER), Ukuran Perusahaan, Umur Perusahaan, Jenis Industri Dan Reputasi Underwriter Terhadap Underpricing Saham Pada Perusahaan IPO Di Bursa Efek Indonesia Periode (2016-2018). *Jurnal Ilmu Administrasi Bisnis*, 9(4).
- Carter, R., & Manaster, S. (1990). Initial Public Offerings and Underwriter Reputation. *The Journal of Finance*, 55(4), 1045-1067.
- Darmadji, T., Fakhrudin, H. (2012). *Pasar modal di Indonesia, Pendekatan Tanya Jawab*. (3rd ed.). Salemba Empat.
- Ghozali, I (2013). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 21*. Badan Penerbit Universitas Diponegoro.
- Harahap, S. S. (2015). *Analisis Kritis Atas Laporan Keuangan*. PT Rajagrafindo Persada.
- Heryanto, H., & Kartawinata, B. R. (2016). Analisis Kinerja Saham Pada Perusahaan Yang Melakukan Initial Public Offering (IPO) Di Bursa Efek Indonesia Pada Tahun 2014. *E-Proceeding of Management*, 3(2), 1999-2006.
- Puspita, R. I. (2014). Analisis Faktor - Faktor Yang Mempengaruhi Underpricing Pada Saat Initial Public Offering (IPO) di Bursa Efek Indonesia Periode 2010 - 2012. *Diponegoro Journal Of Accounting*, 3(3).
- Retnowati, E. (2013). Penyebab Underpricing Pada Penawaran Saham Perdana di Indonesia". *Accounting Analysis Journal*, 3(1).
- Safitri, T. A. (2013). Asimetri Informasi Dan Underpricing. *Jurnal Dinamika Manajemen*, 4(1), 1-9.
- Sartono, A. (2010). *Manajemen Keuangan: Teori dan Aplikasi*. (4th ed.). Yogyakarta: BPFE.
- Setiawan, D. (2018). Determinan Underpricing Pada Saat Penawaran Saham Perdana. *Jurnal Akuntansi Dan Pendidikan.*, 7(2).
- Tandelilin. (2010). *Portofolio dan Investasi: Teori dan Aplikasi*. Kanisius.