
DETERMINANTS OF LONG-TERM PERFORMANCE OF INITIAL PUBLIC OFFERING: EVIDENCE FROM INDONESIA STOCK EXCHANGE

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ABSTRACT

Introduction: Companies conducting initial public offerings have two main anomalies in stock exchanges around the world, namely underpricing (short-term performance) and poor long-term performance (poor long-run term performance). One of the factors that can provide information on the performance of an initial public offering company is the initiation of dividends, the age of the company, and the reputation of the underwriter. The purpose of this study is to analyze the long-term performance of Indonesian IPOs made during the period from 2012 to 2018. **Method:** This type of research is quantitative research, and the type of data used is secondary data. The population in this study are all initial public offering companies listed from 2012 to 2018. The sampling technique is non-probability sampling. The data analysis technique used SPSS 24. **Result:** IPO companies that experienced a positive initial return of 78% consisting of 139 companies, this was an advantage for investors while underpricing for the company while experiencing a negative initial return of 22% consisting of 40 companies. The initiation dividend has a coefficient (B) of -0.023 and a significant value of 0.349, indicating that the initiation dividend has a negative and insignificant effect on the long-term stock performance of IPO companies. The variable age of the company has a coefficient value (B) of 0.001 with a significance value of 0.049 which means that the age of the company has a positive and significant effect on buy and hold abnormal returns. The results of testing the influence of underwriter reputation1, underwriter reputation2, underwriter3 reputation, and underwriter reputation4 have no significant effect on the long-term stock performance of IPO companies. **Conclusion:** In general, the results of the long-term performance of IPOs in Indonesia from 2012 to 2018 during the three years after the IPO found negative abnormal results.

Keywords: initial public offering, initial return, underpricing

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INTRODUCTION

Funding is the fuel that runs a business where companies can choose different methods or a combination of these methods to obtain capital that is useful in meeting the needs of the company's short-term goals and long-term goals. There are two types of funding available to companies when they need to raise capital, namely *debt financing* and *equity financing*. Debt financing wherein the company agrees to pay the loan and interest on the loan from time to time whereas, in equity financing, the company sells its share of ownership in exchange for funds. Problems arise in obtaining capital from debt when the company's loan amount is high enough or the business is in trouble. This of course will be difficult for companies to obtain loans or may require collateral in these loans. However, it is different from the capital financing method which is an approach that can be used by

companies to obtain additional paid-in capital by increasing the company's equity by selling its share ownership to the public to create a strong capital structure.

The capital market can be a funding solution for companies to get fresh funds by conducting an *Initial Public Offering* (IPO). The capital market is a forum that brings together issuers as parties who need funds and investors as parties who provide funds with buying and selling transactions such as securities, shares, mutual funds, and other financial instruments. *Initial Public Offering* (IPO) or initial public offering is a process where a company releases its share ownership for the first time to the public. If the company has made an *initial public offering* (IPO) then the company has become public property or commonly referred to as a *go-public company*. The initial public offering is a strong positive signal for the company where the company communicates to the public that the company will soon begin a period of growth with the successful use of the newly acquired capital. Companies use these external funds to advance the company to the next level whether in terms of profitability, growth, product offerings, or services.

When a company conducts its initial public offering, there are two main anomalies on stock exchanges around the world, namely *underpricing* (*short-term performance*) and poor long-term performance (*poor long-run term performance*). The extensive literature shows that short-term companies experience underpricing where the stock price at the time of offering is lower than the stock price at the close of the first day in the secondary market. The *underpricing* phenomenon was found in research conducted (Ritter & Welch, 2002) on American companies that conducted IPOs from 1980 to 2001, namely on the first day of trading closing on average the company's shares traded 18.8% above the offering price. Furthermore, another study (Siersema, 2017) found that *fintech companies* in the United States had a higher level of *underpricing* than *fintech companies* in Europe from 1990 to 2017. This study used a sample of 238 companies consisting of 39 *fintech companies* and 39 companies. *non-fintech companies* in the European market, while the United States capital market consists of 84 *fintech companies* and 74 *non-fintech companies*. This study shows that the average sample underpricing is 27.10 %. In the capital market in Indonesia, the *underpricing phenomenon* can be found in research (Utomo & Kurniasih, 2020) that companies conducting IPOs in the 2015-2019 period experienced *underpricing* which reached an average of 92.70%.

Underpricing is often associated with the *initial return* that investors will receive. *Initial return* in this study is defined as the difference between the IPO offer price and the closing market price on the first day of trading on the secondary market (Siew et al., 2015). *Initial* high returns or positive IPO shares have been proven in all financial markets around the world (Lowry et al., 2017; Mohd Rashid et al., 2014). Research (Ritter, 1991) shows that there is a tendency for companies that have high *initial returns* to have the worst *aftermarket performance*. Research (Adrian et al., 2019) states that *initial returns* are positive due to *market overreaction* or companies taking *windows of opportunity* and this will lead to poor long-term performance and when IPO companies show *underpricing* in a longer period, which is more than one year is referred to as long-term IPO *underpricing* (Kumar Singla, 2019). This has become a well-documented phenomenon in much literature where further observations show that the stock price performance of IPOs is not only *underpricing* on the first day but it is found that IPO companies are found to experience lower stock price performances compared to non-performing companies. - publisher in the long run. Furthermore, Ritter's (1991) research analyzed the long-term performance of 1526 IPO companies

from 1975 to 1984 in the United States by calculating company returns based on *cumulative average adjusted returns* (CARs) and *buy-and-hold abnormal returns* in 3 years. years after the IPO. The study found that the company *underperformed* by – 29.13% at the end of 36 months after the IPO. Research by Giudici & Roosenboom (2004) found that the long-term stock price performance of three-year IPOs is inversely related to first-day returns in European new stock markets and that on average these firms are very poor long-term investments. In the research of Bessler & Thies (2007), post-IPO returns were measured using *raw return* CAR and BHAR with a research sample of 218 IPO companies in the period 1977 to 1995 in the German capital market in the first 36 months of trading. This study produces a positive *raw return value* of about 20% over a 3-year trading period. However, when compared to the market performance as proxied by the DAX Index for its market portfolio, the company produces a short-term positive abnormal performance which then turns into a long-term negative abnormal performance using the CAR and BHAR adjustment methods. Furthermore, research conducted on the Japanese capital market (Kirkulak, 2008) which took data from Jasdak, Osaka Hercules, and TSE Mothers on IPO companies from 1998 to 2001 found that in general, the companies experienced severe poor performance, which occurred in the second year. after publication. The CAR results were found to be positive and significant only in the first two months after the offer and within six months the CAR declined sharply after 31 months there was a slight increase in CAR, but the company still performed poorly. In a study (Abu Bakar et al., 2019) in the capital market of Malaysia, it was found that 17 Islamic companies issued IPOs in 2014 and 2015 showing that the company found an average *abnormal return value* of -10.9647% while the *market-adjusted cumulative abnormal value return* (MACAR) of -46.0024% with a period starting from January 2016 to December 2018 and the number of observations for 36 months. The negative MACAR value indicates the performance of this IPO company is lower than the market on the stock exchange in Kuala Lumpur. Furthermore, research conducted (AlShiab, 2018) which conducted a comprehensive set of 162 *Middle East and North American* (MENA) public offerings for the period 2001 to 2015 stated that IPO performance varied among *the Middle East and North America* (MENA) countries.) or the Middle East and North Africa Region which are classified into three groups. The first group, namely Tunis, Morocco, Egypt, and Oman, had IPO companies that outperformed the benchmark portfolio in the short term but underperformed in the long term. In this group, Morocco is considered an extreme case that shows the company's excess positive returns for 12 months after the IPO date but in the second year after the IPO the company produces negative returns on *cumulative abnormal returns* for 5 years. The second group consisted of representing Jordan, Qatar, and Bahrain where the IPO performed poorly compared to *the benchmark* for 60 months or 5 years after the date of the disability. The final group of countries represents Kuwait, the UAE, and Saudi Arabia, where the IPO portfolio underwent cyclical price corrections, from positive to negative, and vice versa, relative to the value of the fundamental common stock over time after the offering date. Research (Mindosa & Pasaribu, 2020) found that companies that went public did not perform well in the 3 years after the IPO. The performance of companies that go public will get worse in the third year, namely in the sample of IPO companies in 2012 and 2019. Furthermore, research (Kumar & Sahoo, 2021) identifies the *aftermarket stock price performance* of listed IPOs during the 2009-2014 period in India. that the average BHAR across the selected time intervals is negative i.e. 1, 6, 12, 24, and 36 months from the date of recording.

An interesting area of research for both academics and practitioners. Research on companies that conduct IPOs mostly focuses on the performance of stock prices on the first day, but very little research on the performance of IPO companies in the long term. The performance of IPO shares can be divided into short-term performance, namely the first day, five days, and thirty days, and long-term performance, namely one year and three years (Teja, 2021). Long-term performance in this study is measured by *buying and holding abnormal returns*, which is a passive investment strategy in which investors buy shares and hold them for a long time regardless of market fluctuations. An investor who uses a *buy-and-hold* strategy actively chooses investments but does not pay attention to short-term price movements and technical indicators. Many legendary investors such as Warren Buffett and Jack Bogle touted the *buy-and-hold approach* as the ideal strategy for individuals seeking healthy long-term profits. Barber & Lyon (1997) argue that a simple *buy and hold* is good for measuring long-term abnormal stock returns. This study chose a time frame that accurately reflects the long term using a three-year horizon which many previous researchers have done and is sufficient to capture the long-term effects thus providing some justification for the three-year timeframe (Agathee et al., 2014; Huang, 2012; Ritter). , 1991). This is because over three years the long-term performance related to disagreements and prices will adjust downwards as information flow increases over time and dissent between investors will decrease (Agathee et al., 2014).

One of the factors that can provide information on the performance of an *initial public offering company* is the initiation of dividends. When a company decides on a policy of paying regular cash dividends for the first time to its shareholders, it is called an initiation dividend. Most of the researchers revealed that dividend payout policies are interrelated with the firm's expected future profitability and earnings and (Grullon et al., 2002) argued that increasing dividends would convey information about changes in the firm's life cycle – in particular, the transition from a growth phase to a growth phase. faster to a more mature growth phase. The dividend is the distribution of a portion of the company's income to a group of shareholders as determined by the company's board of directors. This dividend can be in the form of cash dividends or stock dividends depending on company policy. In an IPO company, deciding to pay cash dividends for the first time is a fundamental thing in the company's life cycle. This is because the initiation dividend represents a significant change in the company's financial policy. In addition, dividend policy is an important factor for shareholders in the stock selection process because dividends are the company's free cash flow. Although previous studies have analyzed the relationship between dividend policy and company performance, very little attention has been paid to the performance of IPO companies, especially in Indonesia in the context of abnormal returns.

Other factors that may have an impact on a company's long-term performance and identify as affecting long-term performance include the age of the company and the reputation of the underwriter. The definition of company age in this study is the number of years from the company's establishment until the IPO (Arora & Singh, 2021). The influence of the firm age variable positively affects profitability as measured by *return on assets* (Samosir, 2018). Age can be the best proxy for ex-ante uncertainty because the future of younger firms is very difficult to predict and can also be a good proxy for financial risk (Miller, 2000; Ritter, 1991). The difficulty of estimating future cash flows for younger companies increases disagreement among investors which leads to a decline in *aftermarket performance*. Ritter (1991) shows that younger publishing firms perform lower than

their more established counterparts. Supporting this theory, a positive relationship is also reported in various studies such as (Kumar & Sahoo, 2021; Merikas et al., 2011) showing that companies with a long history before they will *go public* perform better in the long term and research. In contrast, (Agathe et al., 2014; Gupta et al., 2021; Komenkul & Siri Wattanakul, 2016) reported an insignificant relationship between firm age and long-term performance. This difference prompts the current research to re-examine the effect of firm age on long-term returns after IPOs in Indonesia from 2012 to 2017.

Another factor that can affect the long-term performance of an IPO company is the reputation of the *underwriter*, which is a financial specialist who specializes in and has an important role in the IPO. Underwriters with good reputations for IPO companies and investors of IPO shares have more success in the IPO business (Teja, 2021). An *initial public offering* is one of the *make-or-break moments* in a company's life where its success or failure can have serious long-term consequences. *Go-public* companies involve the sale of large shares and companies are required to publish financial information as well as other strategic information to be considered as an IPO investment. Public companies must comply with more regulations than private companies and must actively market their shares to a large number of new investors, who may not have heard of the company before. To help with this process, the company hires an *underwriter*. The function of the *underwriter* in the stock market depends on the relationship with the company. *Underwriters* in new stock offerings serve as intermediaries between companies wishing to issue shares in an initial public offering (IPO) and investors. *Underwriters* help companies prepare for an IPO by considering issues such as the amount of money to be raised, the types of securities to be issued, and the agreement between the underwriter and the company. *Underwriters* in new stock offerings serve as intermediaries between companies wishing to issue shares in an initial public offering (IPO) and investors. Research (Bhattacharya, 2017) confirms a positive relationship between *underwriter reputation* and long-term IPO performance, and *lead underwriter reputation* is considered a signal of company quality that can reduce the level of underpricing during the IPO (Robiyanto et al., 2020). This is because the *underwriter* plays an important role in reducing ex-ante uncertainty. Thus, the information signal theory in this study is a means to explain the long-term stock performance of *initial public offering companies*.

METHOD

This type of research is quantitative research, where the essence of quantitative analysis is exploiting theory to formulate phenomena in a study so that it can be understood and elaborated on ideas based on these findings. To make this happen, theories are often translated into conceptual models, elaborated mainly through hypotheses, and then measured through variables (Jonker & Pennink, 2010).

In this study, the object of research is a company that conducted an initial public offering on the Indonesia Stock Exchange from 2012 to 2018. The data used in this study is quantitative in the form of secondary data obtained indirectly, in the form of stock price data—companies in the study period obtained from the financial statements. Population refers to the entire group of people, events, or things of interest that will be investigated by the researcher (Sekaran & Bougie, 2016). The population in this study are all initial public offering companies listed from 2012 to 2018. The

lower limit of the year is used from the 2012 period because Indonesia's economic growth in 2009 did not reach 5%, namely 4.63%, caused by the impact of the subprime financial crisis. Mortgages in the United States and 2010 Indonesia's economic growth rose again to 6.22% and stabilized at a level above 5% in the following years (Adrian et al., 2019); with the completeness of the data in this study, the lower limit of the year of observation is 2012. The sampling technique used in this study is non-probability sampling, i.e. the researcher can use this approach when a representative sample is not needed (such as to explore the existence of a phenomenon or when a probability sample is not available even with a sample that does not represent a population). Technical analysis of data in This research is testing data using multiple regression with the help of SPSS 24.

RESULTS AND DISCUSSION

1. Descriptive Statistical Analysis

Descriptive statistics is a unique method used to calculate, describe and summarize research data collected logically, meaningfully, and efficiently. According to (Nalendra et al., 2021), descriptive statistics is a procedure used to describe, organize and conclude the main characteristics of the sample data obtained for the study. Descriptive statistics in this study can be seen in table 1:

Table 1. Descriptive statistics

Information	N	Minimum	Maximum	mean	Std. Deviation
Buy and Hold Abnormal Return	179	-0.1202	0.1643	0.000385	0.0517440
Initial Return	179	-0.95	1.50	0.3502	0.56287
Initiation dividend	179	0	0.883	0.05	0.157
Company Age	179	1	64	19	13,663
Underwriter1's Reputation	179	0	1	0.73	0.447
Underwriter2's Reputation	179	0	1	0.374	0.485
Underwriter3's Reputation	179	0	1	0.117	0.323
Underwriter4's Reputation	179	0	1	0.056	0.230
Unstandardized Residual	179	-0.11299	0.15201	0.0000000	0.04986593
Valid N (listwise)	179				

Source: Data Processing Results

Table 1 shows that the average value of the *buy and hold abnormal return* variable is 0.000385, and the standard deviation of the *buy and have unknown return variable* is 0.0517440. PT owns the maximum value for the *buy-and-hold unknown return variable*. Mark Dynamics Indonesia Tbk conducted an IPO in 2017, which was 0.1643, while the minimum *buys and holds*

the odd return value of PT. Kisan Komersial Indonesia Tbk, which showed an IPO in 2017, was -0.1202.

One of the *ex-ante* factors that can signal investors in calculating long-term investments in IPO companies is the *initial return*. In table 2, IPO companies in Indonesia in 2012, 2013, 2014, 2016, 2017, and 2018 had a positive *initial recovery*, and an average *negative initial return* was only found in 2015. The company that experienced the highest *initial return* of 150% was PT. Indomobil Multi Jasa Tbk PT. In contrast, a minor *initial return* occurred in 2015 at -0.06, and the company experienced a *negative initial return* of -95% by PT. Mitra Pemuda Tbk, namely:

Table 2. Summary of Initial Return by Year of Public Offering

Year	Number of IPOs	Average Initial Return
2012	19	0.30
2013	28	0.24
2014	22	0.153
2015	16	-0.06
2016	13	0.12
2017	34	0.39
2018	47	0.70
Total Number of IPO Companies	179	0.70

Source: Data Processing Results

The following variable is the initial dividend as measured by the *dividend payout ratio* (DPR); the IPO companies that paid the initiation dividend in the first year were 19%. The companies that did not pay the initiation dividend in the first year were 81% of the research sample. The average value in this variable is 0.005, with a standard deviation of 0.157. The maximum value of the company paying dividends in the first year is 0.883 or 88.3%, namely PT Indonesia Vehicle Terminal Tbk. In contrast, the minimum value of the *dividend payout ratio* is 9.4% owned by PT Andalan Perkasa Abadi Tbk.

The third variable studied is the age of the company, where the minimum value is the difference between the company's establishment and the year the company conducted an IPO is one year, which is found in the company PT. PP Properti Tbk and PT. Waskita Beton Tbk and PT. Waskita Beton Tbk and the maximum value generated is 64 years owned by PT Malacca Trust Wuwungan Insurance Tbk and PT Phapros Tbk with an average of 0.73 or 73% and a standard deviation of 0.447 or 44.7%.

The last variable in this research is the *underwriter's reputation*. As mentioned in the operational definition in chapter 3, this variable is divided into four independent variables: *underwriter reputation 1*, *underwriter reputation 2*, *underwriter reputation 3*, and *underwriter reputation 4*. The *underwriter* reputation measurement method uses three levels of dummy variables. The maximum value for the four levels of underwriter reputation is 1 or 1%, and the drink value is 0% for each level of *underwriter* reputation. The results of this study indicate that the average reputation of underwriter 1, reputation of underwriter 2, reputation of underwriter 3, reputation of underwriter 4 are respectively 0.73 (73%), 0.374 (37.4%) 0.117 (11.7%), 0.056

(5.6%) and with standard deviation values were 0.447 (44.7%), 0.485 (48.5%), 0.323 (32.3%) and 0.230 (2.3%).

Table 3. Underwriter reputation based on accumulated IPO frequency

Information	IPO Frequency
Underwriter Frequency 1	130
Underwriter Frequency 2	67
Underwriter Frequency 3	21
Underwriter Frequency 4	10

Source: SPSS 24. data processing results

In table 3, it can be seen that companies that will conduct an IPO choose to use reputable *underwriters*, namely 130 companies with *underwriter reputation 1*, 67 *underwriter reputation companies 2*, *underwriter* three frequency as many as 21 companies and *underwriting frequency* four, which includes non-prestigious frequencies of 10 companies.

2. Normality test analysis

Ordinary or near-average data is a regression model that predicts bias in data analysis. This test aims to test whether the dependent and independent variables are usually distributed in the regression model. The tests used in this study were Kolmogorov Smirnov and histogram tests to see whether the data were normally distributed or not.

Table 4. Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		179
Normal		
Parameters a,	mean	000,000
b		
	Std. Deviation on	04,986,593
Most Extreme	Absolute	076
Differences	Positive	076
	negative ve	-034
Kolmogorov-Smirnov Z		1.023
As up. Sig. (2-tailed)		0.246

Source: SPSS 24. data processing results

From the table above, the results of the Kolmogorov-Smirnov test have a significant value or p-value of 0.246 greater than 0.05. Thus the data in this study is usually distributed. In addition to using the Kolmogorov-Smirnov test, it can also be used to determine the normal distribution by using a probability plot that can be seen from the distribution of data around the diagonal, normally distributed data will be distributed around the line, and along the diagonal. This can be seen from this study's probability plot test, which shows that the data is spread around the diagonal, indicating that the information is usually distributed.

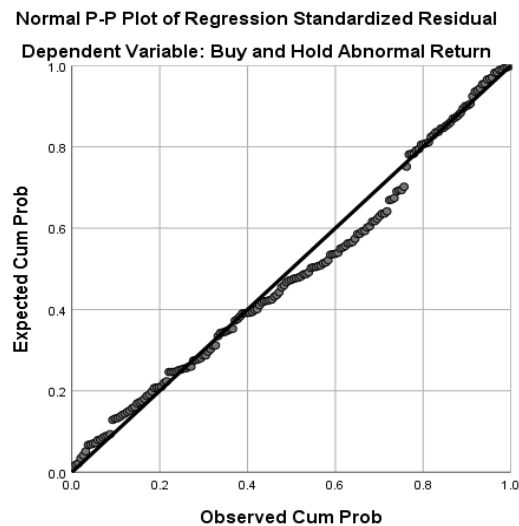


Figure 1P -Plot

Source: SPSS 24. data processing results

3. Multicollinearity Test

A multicollinearity test was carried out to determine whether there is a perfect correlation between independent variables in the regression model. This study used the Tolerance Value and Inflation Factor (VIF) method to strengthen the previous test results. Multicollinearity occurs when tolerance value > 0.1 or VIF value < 10 . Here are the results of the multicollinearity test in this study:

Table 5. Multicollinearity Test

Coefficients			
Model		Collinearity Statistics	
		Tolerance	VIF
1	Initial Return	957	1.045
	Dividend invasion	965	1.036
	Company Age	966	1.035
	Underwriter1's Reputation	708	1.412
	Underwriter2's Reputation	745	1.342
	Underwriter3's Reputation	916	1.092
	Underwriter4's Reputation	919	1.089

a. Dependent Variable: Buy and Hold Abnormal Return

Source: SPSS 24. data processing results

Each independent variable n ilan VIF is less than ten and or the Tolerance value is more than 0.01; it can be concluded that there is no multicollinearity problem.

4. Heteroscedasticity Test

Detecting the presence or absence of heteroscedasticity in data can be done in several ways. One is doing the Glacier test and looking at the scatterplot graph on the SPSS output.

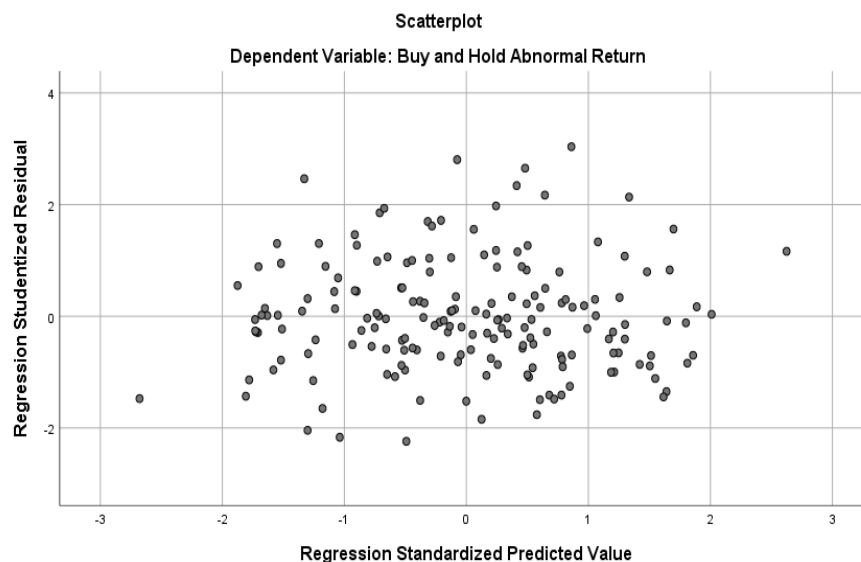
Table 6. Heteroscedasticity Test

Model	Sig.
(Constant)	0
Initial Return	0.998
Initiation dividend	0.188
Company Age	0.805
Underwriter1's Reputation	0.155
Underwriter2's Reputation	0.493
Underwriter3's Reputation	0.077
Underwriter4's Reputation	0.48

Source: SPSS 24. data processing results

The Glejser test for each of these variables is 5% (0.05), namely initial return of 0.998, initiation dividend of 0.188, company age of 0.805 and underwriter reputation 1, the reputation of underwriter 2, the importance of underwriter3 and reputation of underwriter 4 are respectively 0.155, 0.493, 0.077, 0.48 where from all these results all independent variables are more significant than the significance rate of 5%.

The study also carried out a scatter plot test which found that if there was no clear pattern, as well as the points spread across the above and below zero on the Y axis, there is no heteroscedasticity. In this study, there were no symptoms of the heteroscedasticity test.

**Figure 2. Heteroscedasticity Test**

5. Autocorrelation test

The run test is used to see whether residual data occurs randomly or not, with a significance level of 0.05. The results obtained by this study are that the results of asymp. Sig. (2-tailed) is greater than the rate of 5% (0.05). Above the significance level, then the regression equation is free from the autocorrelation problem.

Table 7. Autocorrelation Test

Runs Test	
	Unstandardized Residual
Test Value ^a	-0.00346
Cases < Test Value	89
Cases >= Test Value	90
Total Cases	179
Number of Runs	87
Z	-0.524
asympt. Sig. (2-tailed)	0.6

Source: SPSS 24. data processing results

6. Determination Test (R²)

Tests are conducted to determine the model's ability to explain the variation of the dependent variable. The amount of the contribution of a variable can be seen from the test of determination or R². Therefore a test is needed for determination (R²). This can be done to find out good accuracy in the analysis that can be seen from the magnitude of the coefficient of determination R-Squared.

Table 8. Results of the R². Determination Test

Model	R	R Square	Adjusted R Square	Std. The error in the Estimate	Durbin-Watson
1	.267 ^a	0.071	0.033	00.0508763	1,938

Source: SPSS 24. Data processing results

From the research, the R-Squared result is 0.071 or 7.1%. The independent variables include initial return, initiation dividend, company age, underwriter reputation, and underwriter reputation. Able to explain the dependent variable (**buy and hold abnormal return**) of 92.9%.

7. Simultaneous Significance Test (F Test)

The test was used to see the effect of the independent variable and the dependent variable as a whole. The test is observed from the F value resulting in a level of 0.10. The significance is that when $F < 0.1$, H₀ is rejected, which means that the equation model is accepted or feasible. On the other hand, when the significance of $F > 0.1$, there is no simultaneous effect.

Table 9. Simultaneous test results (Test F)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.034	7	0.005	1.875	.076 ^b
Residual	0.443	171	0.003		
Total	0.477	178			

Source: SPSS 24. Data processing results

In the table above, the calculated F value is 1.875 with a probability value of $0.076 < 0.1$, which means that *initial return*, *initiation dividend*, *company age*, *underwriter reputation 1*, *underwriter reputation 2*, *underwriter reputation 3*, *underwriter reputation 4* have a simultaneous effect on *buy and hold abnormal returns*.

8. Partial Significance Test (T-Test)

This test is used to explain whether or not there is an effect of initial return, initiation dividend, company age, underwriter reputation1, underwriter reputation2, underwriter reputation3, and underwriter reputation4 on the dependent variable buy and hold abnormal returns.

Table 10. Multiple Regression Results

Information	Unstandardized Coefficients	t	Sig.
B			
(Constant)	-0.01	-0.797	0.427
Initial Return	-0.015	-2,157	0.032
Initiation dividend	-0.023	-0.938	0.349
Company Age	0.001	1980	0.049
Underwriter1's Reputation	0.004	0.423	0.673
Underwriter2's Reputation	0.011	1.221	0.224
Underwriter3's Reputation	-0.012	-0.933	0.352
Underwriter4's Reputation	0.006	0.319	0.75
a Dependent Variable: Buy and Hold Abnormal Return			

Source: SPSS 24. data processing results

Table 10 above shows that the *initial return variable* has a significant level of $0.032 < 0.10$, so H_0 is rejected, and H_1 is accepted. The conclusion is that *initial returns significantly affect buying and holding abnormal returns* on IPO companies in Indonesia. The initiating dividend variable with dividend payments in the first year after the *initial public offering* has a significant level of $0.349 > 0.10$, so H_2 is rejected, and H_0 is accepted. It can be concluded that the initiation dividend has no significant effect on *buying and holding abnormal returns* in Indonesian IPO companies. The results of the third hypothesis testing show the significance level of the firm age variable is $0.049 < 0.10$, so the firm's age significantly affects *buy and hold abnormal returns* so that H_0 is rejected and H_3 is accepted. The conclusion for the company's variable period is that the company's age has a significant effect on *buying and holding abnormal returns* on IPO companies in Indonesia. Following the hypothesis testing in chapter 2, the significance level of the *underwriter reputation variable 1, underwriter reputation 2, underwriter reputation 3, and underwriter reputation 4* are 0.673, 0.224, 0.352, and 0.75 > 0.10 , respectively. So it can be concluded that underwriter reputation at various levels significantly affects *buy and hold abnormal returns* on IPO companies in Indonesia. It can be said that H_0 is accepted, and H_4 , H_5 , H_6 , and H_7 , are rejected.

The following are results of the discussion of the research results are as follows:

1. The Effect of *Initial Return* on the Long-Term Performance of the Company's *Initial Public Offering*

In this study, the results showed that IPO companies that experienced positive *initial returns* of 78% comprised 139 companies, which was an advantage for investors, while *underpricing* for companies participating in negative *initial returns* of 22%, including 40%. Initially, the IPO company had a positive return on the first day in the secondary market. However, in the

long term, namely 36 months or three years, *the market underperformed* (poor performance). This can be shown by regression testing, which indicates a significant negative intercept or constant of -0.01 or -1%. The regression test results in table 4.11 show that it has a coefficient (B) of -0.015 and a significant value of 0.032, which means that *initial return* has a negative and significant effect on long-term performance as proxied by *buying and holding abnormal returns*. The study results follow the signaling theory where when conducting an *initial public offering*; the company significantly *underpins* to make the *initial public offering* more attractive; joint strategy companies use to signal to the market (Adrian et al., 2019; Singla, 2019). Market information asymmetry theory also supports the results of this study in that the stock value takes time to be corrected to approach *fair value*, which in this study takes 36 months. This study's results align with the research by Agathee et al. (2014), who identified. The highest *underperformance* occurred in the highest *initial return group*, which showed worse long-term performance than IPO companies with lower *initial returns in the Mauritius capital market* from 1989 to 2010. Furthermore, research with the case study of the Indonesia Stock Exchange (Adrian et al., 2019) found the result that the more, more significant the *initial return rate* during the IPO of stock, the worse the long-term performance of the company, while according to (Hanafi & Hanafi, 2022) more specifically found that there was a negative relationship between *initial return* and long-term performance for Islamic and non-Sharia IPOs in Indonesia. , this study uses IPOs during 1990–2018 from Indonesia.

2. The Effect of the First-Year Initiated Dividend on the Long-Term Performance of the Company's Initial Public Offering

According to (Raed, 2020), dividend, yield, and dividend payout ratio variables can detect a solid relationship to company performance. The regression test results show that the initiation dividend has a coefficient (B) of -0.023 and a significant value of 0.349, indicating that the initiation dividend variable has a negative effect and does not significantly impact the long-term stock performance of IPO companies. (Raed, 2020) However, in research, the initiation dividend does not affect the long-term stock performance of IPO companies in Indonesia. This is because companies that pay dividends in the first year after the IPO are only 19% or 34. In comparison, companies do not pay initiation dividends in the first year after the IPO, 81% or 145 companies. The results of this study are supported by the company's poor performance three years after the IPO, which can be seen with a negative intercept. The results of this study are in line with (Sugeng, 2016), which states that companies listed on the Indonesia Stock Exchange (IDX) that initiate dividends imply that the dividend initiation behavior of Indonesian companies is proven not to fully follow the framework of the *dividend signaling theory* where *the theory is* developed based on the behavior of regular dividends.

The conclusion from the results of this study is that generally, companies conducting IPOs aim to promise growth to the public as illustrated in the offering prospectus, where external funds from the public will be used for future acquisitions, research, and development of innovative products and technologies so that companies conducting initial public offerings unlikely to be in a position to pay dividends in the future. In general, companies that operate initial public offerings have negative cash flows, so they require substantial external funds aimed at maintaining the company's growth rate. In addition, many companies prefer *earning retention*

(earnings retention) when the company makes a profit and thus can reduce the company's dependence on the unpredictable capital market when the company requires the availability of funds in the company's growth projects (Jain et al., 2009). This condition conditions investors to expect returns in the form of *capital gains* rather than dividends.

3. The Effect of Company Age on Long-Term Stock Performance of a Company's Initial Public Offering

Young. In the tests carried out, it is shown that the company age variable has a coefficient value (B) is 0.001 with a significance value of 0.049; in this case, the company's age has a positive and significant effect on the *buy and hold abnormal returns*. The results of this study are in line with Strottnner (2017), who identified older publicly traded companies already have a strong position in the market even though they have not been publicly funded. Research by Mallingu et al. (2020) stated that company age significantly influences foreign investors' decisions regarding domestic companies. The results of this study conclude that mature companies have passed the test of time in a business environment, understand industry trends better, and, therefore, have a higher probability of identifying the right project for the allocation of money raised compared to their more advanced counterparts. The results of this study are supported by research data which shows that companies that are small or equal to 10 years old with an average of BHAR -0.899, and companies that are more than ten years old have an average of 0.008.

4. Effect of Underwriter's Reputation on Long-Term Stock Performance of Initial Public Offering Companies

The results of testing the influence of *underwriter reputation* 1, *underwriter reputation* 2, *underwriter reputation* 3, and *underwriter reputation* 4 had no significant effect on the long-term stock performance of IPO companies; this is indicated by a small significance value of 10% at each level of *underwriter reputation* which is worth 0.673, 0.224, 0.352, 0.75 and the coefficients 0.004, 0.011, -0.012, 0.006. The results of this study find that IPO companies that use *underwriter reputation* with the highest frequency or *underwriter reputation* one do not result in positive long-term performance as well as *underwriter reputation* 2, and *underwriter reputation* 3. influence on long-term stock price performance. The results showed that the underwriter's reputation had an insignificant relationship with the IPO valuation. Companies that use the services of leading underwriters have an IPO offering price set lower than the intrinsic value after three years or 36 months.

This is in line with research (Goergen et al., 2007) which did not find the impact of *underwriter reputation* on long-term performance companies in the UK, and research (Amelia & Adrianto, 2020) identified underwriter reputation not having a significant effect on performance. Companies that carry out IPOs, because using a reputable underwriter neither guarantees reducing uncertainty for investors as well as the truth of the information provided by the company through the prospectus. Similarly, (Thomadakis et al., 2012) *underwriter reputation* emerges as a negative determinant wherein the findings suggest the possibility that leading underwriters drive high aftermarket prices in the short term (i.e., in the first month of trading) and generate subsequent negative returns, which is more evident in the Greek IPO company.

CONCLUSION

This study has two objectives analyzing the long-term performance of Indonesian IPOs made during the period 2012 to 2018 and identifying the effect of initial return, dividend initiation, company age, and underwriter reputation as a signaling mechanism in long-term post-listing performance. This study uses a sample of 179 Indonesian IPO companies listed on the Indonesia Stock Exchange. In general, the long-term performance of IPOs in Indonesia from 2012 to 2018 during the three years after the IPO found negative abnormal results. To test the support for the hypothesis under study, the current study uses multiple regression with the help of SPSS version 24.

Testing the first hypothesis found that initial return significantly negatively affects long-term stock performance. The results of this study follow the signaling theory, where the company deliberately makes the price more attractive to investors, which in the end, after 36 months, will approach its fair value. In IPO companies on the Indonesia Stock Exchange for 2012-2018. This is because companies that make dividend initiation payments are only 19%, with an average negative abnormal return. Testing the third hypothesis found that age significantly affected the firm's long-term stock performance. R&D activities, thereby increasing their competitiveness and enterprise value. In testing the fourth hypothesis, it is found that the underwriter's reputation does not have a positive and significant effect on the long-term stock performance of IPO companies. The underwriter's reputation method explains the long-term performance of Initial Public Offering (IPO) shares differently (Amin, 2007). In this study, underwriter reputation based on the accumulation of IPO frequency has not been able to explain its relationship with long-term performance.

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