

The Fairness Assessment Of Stock Prices For Investment Decision Making During Initial Public Offerings

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ABSTRACT: This research aims to analyze the differences of intrinsic value of stocks, IPO prices, and closing stock prices on the first day of trading of secondary markets. This study is an example of quantitative descriptive research. The population in this research was all the companies who performed Initial Public Offerings and samples were obtained through purposive sampling. 182 companies were the samples for this study. The fairness assessment of stock prices was conducted through the PER (Price Earning Ratio) approach and the independent samples t-test was used as the analysis method. Research results show that there was a significant difference between the intrinsic value of stocks that was calculated through the PER approach and stock prices that was determined during IPO. After the stocks were traded on the secondary market, there was no significant difference between the IPO price and the closing price. The novelty of this research is to study the differences in stock prices during two conditions, namely the primary and secondary markets. The differences in intrinsic value and the price during IPO was studied for the primary market; while for the secondary market it was the differences between the IPO prices and first day closing price.

Keywords: IPO Price, Closing Price, Initial Public Offering, Intrinsic Value, Stock Assessment

1 INTRODUCTION

Companies will expand their business and require a large amount of financing to increase their competitiveness. The financing for each company is conducted through several means. The source of financing may come from the company itself or from outside the company. One source of financing from outside the company is the capital market. A company may sell off part of its ownership to the public through the capital market by issuing and selling stocks. These stock offerings will change the status of the company to a go public company. The first public offering transaction of stocks is called an IPO (Initial Public Offering). IPO is an activity that is used to develop a company by making way for investors to invest so that the company can obtain additional funds to expand its business (Tina et al., 2014, Abdul Rasheed et al., 2017, P. Radner et al., 2017, Reber et al., 2016). The issuers and investors both have goals relating to the IPO. The issuers aim to obtain funding that can be used for business expansion, improve capital structure, increase working capital, and pay off part of the company's liabilities (Qorry and Bernandus, 2014). Whereas investors are also expecting returns on their investment in the form of dividends and capital gain. Therefore investors also have an interest in the fairness assessment of stock prices in the market. Investors must be careful in assessing a particular stock because stock investment is categorized as a high risk investment (Gumanti, 2011, Leif W et al., 2016, Artika Ayu Aprilia et al., 2016). A company will assign an underwriter and publish a prospectus that will give information to potential investors when it is time for the IPO.

The prospectus published by the company or underwriter covers very important information relating to the condition of the company that will undergo the IPO process. Some important information in the prospectus that potential investors need to pay attention to include the number of stocks offered, offering price, brief history of the company, the purpose of going public, business activities and prospects, business risks, dividend policy, company financial performance, etc. From the information on the prospectus, a potential investor will gain important and relevant information regarding the IPO that can be used as a basis to make the right investment decision. The underwriter can estimate the value of the stock from the financial performance reports found on the prospectus, investors can also assess the fair stock price of the underwriter's company. The stock fairness price is the reference for the investor in making investment decisions. Fairness price relates to whether the stock price is too high (overvalued) or too low (undervalued). Potential investors and underwriters often have difficulty in appraising and determining stock fairness price due to not having any information of the previous market price; underwriters are also not obliged to publish previous financial performance reports before the publication of the prospectus (Gumanti, 2011: 225). There are several models that is used to measure stock fairness price, however none have stated to be the most accurate. The research of Kim and Ritter (1999) state that Price Earnings Ratio (PER) is the best method for stock assessment. This is supported by Sahoo and Rajib (2013) who have carried out PER research on 120 companies that have gone through the IPO process in India and the results claim that 77.5% of valuations tend to be more accurate. The fairness assessment of stock prices through calculation may differ to the IPO price due to the IPO price being determined by both the issuer and underwriter. A phenomenon that occurs during IPOs is the IPO price offered is lower (undervalued) than the fairness assessment price or intrinsic value (Herawati et al., 2016, Andre Yulius et al., 2017). Underwriters have more information on the capital market than issuers; therefore they will make a price deal that will minimize risk if the stocks fail to sell entirely. Subsequently, when the stocks

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enter the secondary market, another phenomenon than always raises interest and is much discussed is the phenomenon of underpricing. Underpricing is a phenomenon where the IPO price is lower than the closing price of the secondary market. An investor will hope for an event of underpricing so he will gain profit from the difference of the prices in the primary and secondary markets or have a positive initial return, while issuers will avoid underpricing. Many companies have undergone the IPO process in the last few years. This shows that the capital market is strengthening its role in supporting funding needs. The IPO activities show that the majority of companies that perform IPO have a positive initial return. Research conducted by Herawati et al., (2016), shows that there is a difference in the intrinsic stock value and the fixed IPO price. After entering and listing on the secondary market, there is also a difference between the fixed IPO price and the first day closing price so that it creates underpricing or overpricing. The aim of this research is to analyze the difference between the intrinsic value of stock and IPO stock price and the difference between IPO stock price with the first day closing price on the secondary market.

METHODOLOGY

Research Design

This research is categorized as quantitative descriptive with the purpose of gaining understanding about information on the intrinsic value of stocks, IPO prices, and closing prices to assist the decision making process regarding the companies who are going public.

Type and Source of Data

The type of data used in this research was quantitative data, while the source of data was secondary data. The secondary data is in the form of the company prospectus during the Initial Public Offering as well as information on closing stock price on the first day of trade on the stock exchange. The company prospectus was obtained and downloaded through the Indonesian Stock Exchange website (www.idx.co.id) or the site of The Indonesia Capital Market Institute (www.ticmi.co.id). Information regarding the closing price of stocks was obtained and downloaded from the site of www.finance.yahoo.com or other similar websites.

Population and Samples

The population of the object of research were companies that underwent IPO. Meanwhile, the sample collecting technique used was the purposive sampling method, which is the collection of samples according to specified criteria. The specified criteria were companies who underwent an IPO from 2009 to 2017 and had a prospectus that was available and able to be accessed. data is hand collected from the prospectus documents that provide distinct access to thorough valuation analysis information for a sample of 182 IPOs on Indonesian Stock Exchange (idx) during the period 2009–2017.

Data Analysis Method

For this study the method or approach used to calculate the intrinsic value of stocks was the PER (Price Earning Ratio).

PER is a ratio that compares the price of the stock per share with the net profit per share. The analysis tool used in this research was the independent samples t-test using SPSS software. The difference test analysis technique was used to test whether there is a difference between the intrinsic value and IPO value and the IPO value with the closing price.

Results and Discussion

Results

General Description of the Research Object

This research was conducted on companies who underwent the IPO process in the Indonesian Stock Exchange for the first time. The samples gathered in the research were through purposive sampling which means that not all of the companies that underwent IPO were included as a sample in the research. 182 companies were obtained according to the method. The research sample determined through purposive sampling is shown on Table 1 below:

Table 1. The Research Sample Determination Process

No.	Explanation	Total
1.	Companies who underwent IPO 2009-2017	208
2.	Companies whose prospectus were inaccessible or unavailable	(26)
Number of companies who met the criteria		182

Descriptive Statistical Analysis

Table 2. Descriptive Statistical Analysis

Variable	Min	Max	Mean	Std. Dev
Intrinsic	103	9347	807.34	1204.17
IPO	100	5395	628.05	790.26
Close	94	5950	727.24	862.53

Table 2 shows that the companies that were included as samples in the research had an average intrinsic value of Rp807.35, meaning that companies who performed IPO in 2009-2017 had an average intrinsic value of Rp807.35 which was rated through the PER approach. The minimum intrinsic value of the research sample was Rp103.00, meaning that companies that underwent IPO in 2009-2017 had a lowest intrinsic value of Rp103.00. Additionally, the maximum intrinsic value for this research sample was Rp9,347.00, which means that the companies who underwent IPO in 2009-2017 had a highest intrinsic value of Rp9,347.00. The standard deviation value was 1,204.17, which was larger than the average value of 807.35, indicating that the intrinsic value of IPO companies were more varied or spread out. The average IPO price was Rp628.05, which is quite a large difference to the maximum value. This shows that the companies who underwent IPO did not sell their stocks too high. Meanwhile, the minimum IPO price of this research was Rp100.00; which means that the companies who underwent IPO sold their shares at the lowest rate of Rp100.00. The maximum IPO price for this research sample was Rp5,395.00 which means that the company fixed the highest IPO price at Rp5,395.00. The standard deviation value was 790.26 which is larger than the

average value of 628.05, indicating that the IPO prices were more varied and spread. The first day closing price had an average or mean of Rp727.24, meaning that the closing price of the first day on the secondary market was closed at the average price of Rp727.24. The minimum closing price for this research sample was Rp94.00 meaning that the lowest price for the IPO company on the secondary market was Rp94.00. The maximum closing price for this research sample was Rp5,950.00 which means that the company had the highest closing price of Rp5,950.00 when traded on the secondary market. The standard deviation value was 862.54 which is higher than the average value of 727.24, indicating that the IPO value was more varied or spread. On Table 2 we can see that the average IPO value was lower than its intrinsic value. This means that the average IPO price was determined below its intrinsic value. Meanwhile, the closing price had an average value that was higher than the IPO price, showing that the average IPO stock price when it had entered and traded on the secondary market was higher than the set IPO price. Moreover, the average intrinsic value was larger than the average closing price, which shows that the average intrinsic value was larger than the closing price on the secondary market.

The Determination of Stock Intrinsic Value Using PER

In this research, the stock intrinsic value was determined by the PER (Price Earning Ratio) approach. According to Damodaran and (2012), the utilization of the PER method considers the earning growth rate and the earning per share (EPS). The more the PER increases, the higher the stock price. The determination of stock intrinsic value is carried out in several steps, the first step is to determine the ROE in order to find out the company growth rate. We can find out the PER estimation from this growth rate, so that the intrinsic value of the company can be found. Out of the 182 companies included in the sample for this research, the IPO price offered for 172 companies was lower than its intrinsic value or undervalued. For the rest, three companies were overvalued and seven companies were at fairvalue or the offering price was equal to its intrinsic value. The companies that were overvalued were GTBO, MONA, and ARMY. Whereas the companies who were fairvalued were GREN, BRMS, BULL, GAMA, NIRO, GOLL, and NASA. The large number of companies offering the IPO price below fairness supports the claim of Herawati et al., (2016) that stocks are undervalued during IPO. The IPO prices are subsequently compared to the closing price of the first day of trade on the secondary market because this is related to the initial return rate that will be received by investors. Out of the 182 companies, 146 companies were underpriced, meaning that the closing price on the secondary market was higher and investors gained a positive initial return. Another 7 companies experienced truepricing which means that the closing price was equal to the IPO price. These companies were AMRT, MTLA, GLOB, BBRM, LEAD, MBAP, and VINS. Moreover, 29 companies experienced overpricing, meaning that investors did not gain any initial returns and experienced capital loss. This is in line with previous studies conducted by several researchers that stated that IPO stocks have a tendency to be underpriced when traded on the secondary market.

Independent samples t-test

The independent samples t-test or average difference test is used to find out whether there are any differences between two unrelated sample groups. The independent samples t-test was conducted twice, once between the intrinsic value and IPO price and once again between IPO price and closing price. The results of the independent samples t-test of each group are can be seen below:

Table 3. Results of Independent Samples t-test

Group	t Sig. (2 tailed)	Explanation
Intrinsic-IPO	0.094	H ₀ rejected
IPO-Close	0.253	H ₀ accepted

From the table above we can see on the t-sig table that the results of the difference test show that the intrinsic value and IPO price have a significance value of 0.094, this is lower than the sig value 0.10 meaning that H₀ is rejected. Hence it can concluded that the stock intrinsic value that is calculated by the PER approach is significantly different than the offered IPO price. The results of the difference test between IPO price and closing price show a significance value of 0.253, this is larger than the sig value of 0.10 which means that H₀ is accepted. Therefore it may be concluded that the offered IPO price is significantly no different or the same as the closing price on the secondary market.

Discussion

The Comparison between Intrinsic Value and IPO Price

Based on the independent samples-test results, there is a significant difference between the stock intrinsic value and IPO price. This means that a majority of companies do indeed carry out IPO by selling stock below their intrinsic value. The IPO price is the price based on the agreement of the underwriter and issuer, and the underwriter will create a price agreement that will reduce the risk if the stocks offered are not sold entirely. Based on the data from this research, 172 companies set their IPO prices below their intrinsic value or was undervalued. An additional three companies experienced overvalue and seven companies were fairvalued or the price offered was the same as its intrinsic value. The companies that were overvalued were GTBO, MINA, and ARMY. Whereas the companies that were fairvalued were GREN, BRMS, BULL, GAMA, NIRO, GOLL, and NASA. This supports the research of Herawati et al., (2016), Andreas Yulius et al., (2017) where the intrinsic stock price and IPO price are significantly different. This is due to the underwriter who contributes as one of the parties that determines IPO price having information on the capital market. The underwriter will try to minimize risk if the stocks do not sell out entirely. Moreover, an undervalued stock price will attract investors because of its cheap price and investors will expect returns. Signaling theory assumes that there is an asymmetry of information between the issuer and the prospective investors. The signaling theory answers the importance for companies going public to present information to the public through the company prospectus. This is carried out by the issuer to give a signal to the prospective investors on the prospects of the company in the future. From the prospectus, investors can discover both financial and non-financial information that

may affect the investor actions. The intrinsic value rated by investors is also formed by the financial information stated on the prospectus. Whereas the IPO price is formed based on the agreement between the issuer and underwriter, here the underwriter will determine a price that will minimize risk if the offered stocks do not sell out entirely. Therefore, there may be a difference in the intrinsic value and IPO price.

Comparison between IPO Price and Closing Price

Based on the data analysis performed, there was no difference between IPO price and the closing price. In fact, the closing price could be the same or different to the established IPO price considering that price is determined by the supply and demand mechanism in the secondary market. In this case, the IPO stock that is traded on the secondary market could experience overpricing or underpricing. This is because the price on the primary and secondary market could be the same; hence investors must be cautious and prudent in choosing to invest in the IPO stock if they are hoping for positive initial returns. According to the test data, 146 companies who underwent IPO experienced underpricing when the stocks of their company were traded on the secondary market. Seven companies experienced overpricing, meaning that the closing price was the same as the IPO price. These companies were AMRT, MTLA, GLOB, BBRM, LEAD, MBAP, and VINS. Moreover, 29 companies experienced overpricing, which means that investors did not receive any initial return. Determining stock prices during IPO proves to be difficult for issuers because there is no previous market price to refer to for determining the prices. Hence, issuers need underwriters. The underwriters play a role in minimizing uncertainty risks. In an IPO, issuers will request underwriters to guarantee the sale of stocks. The issuers cannot enter the capital market without the assistance of underwriters. The knowledge and competence of the underwriter is a form of guarantee that the IPO will be carried out smoothly. In determining the IPO price, underwriters tend to take a small risk, which is selling the IPO stocks at a cheap price so that it can be underpriced or overpriced when it is on the secondary market. However, due to the supply and demand mechanism system on the secondary market, the IPO price and closing price may not have any difference at all. Investors on the secondary market generally utilize information on past price movements. When the IPO stock is entered and traded on the secondary market, the information on previous prices can be used as a guide for IPO prices. Therefore, the IPO price and closing price on the secondary market may not have any differences at all.

CONCLUSION

There is a significant difference between the intrinsic value of stock calculated by PER with the price determined during IPO. 172 companies had set their IPO prices below their intrinsic value. This shows that the price offered by issuers during IPO mostly tend to be undervalued. This is because the issuers are concerned that if the IPO price is too high then the shares will not sell out entirely. This is because the issuer is worried that if the IPO price is too high then the stock is not sold as a whole. Another strong reason is that the issuer in determining the stock price at the time of the IPO is done carefully and considers many factors and one of the important factors considered is the advice of the

guarantor company (under writer) who generally recommends setting IPO prices under undervalued conditions so that more easy to sell. After the stock is traded on the secondary market, there is no significant difference between IPO price and the closing price. This is because on the secondary market the price is formed due to supply and demand mechanisms; hence the IPO stock on the secondary market may experience overpricing or underpricing. When there is an increase in stock demand while the offer does not change, the other factors constant, the stock price will increase. Likewise, if there is a decrease in share demand while the stock offer does not change, the stock price will decline. In general it can be said that in the secondary market the price of IPO shares can experience overpricing or underpricing. In future, scholars can focus the research on a particular sector so that it can analyze further how fair the company's stock price is at the time of the IPO. Testing in a particular sector will reveal new facts that have not been revealed and different uniqueness and deeper studies. For future research, researchers can assess the fairness of stock prices with other methods or approaches, in addition to PER, for example discounted cash flow or the dividend growth model, in order to be compared. In Future, Investors are expected to be able to better understand and observe the fairness of stock prices, because investment in stocks is an investment with a high enough risk, so they can make investment decisions appropriately. The issuer is expected to display relevant information related to the IPO that will be contained in the prospectus. This is because the information will be used as investors as the main consideration in investing in shares.

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