Underpricing Phenomenon and Stock Return after IPO

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Abstract: The purpose of this study is to find out the influence of financial and non-financial factors in the company’s prospectus that can affect underpricing and stock return 7 days after the IPO. This research uses multiple linear regression analysis to measure the relationship between the dependent variable (initial return and return 7 days after the IPO) with independent variables (DER, TATO, ROA, PPS, and AGE). The existence of a high underpricing phenomenon leads to non-optimal funding by IPO companies. The company’s goal of obtaining abundant funds is not achieved. In the market efficient theory, prices should have been agreed upon by the underwriter and the company to get a response according to company goals, but overly optimistic investor behavior makes prices go far beyond actual value so that underpricing occurs. This research compiles financial and non-financial variables to find out the most influencing factors the occurrence of the phenomenon of underpricing of shares when the Indonesian capital market has been rose and broke the record with the most IPO in year 2013.

1 INTRODUCTION

At the moment, the capital market in the current economic development has an important role as one of company’s external funding sources and as an investment media for the investor (Song et al., 2015). The growth of capital market is considered as one of the indicators that indicates the economic level of a country. Company’s funding and attracting new investors are found to be the biggest problems faced by most companies. Around 45.1% of companies tend to use debt as an alternative funding operations than the other sources (Yulianto et al., 2016). According to Jogryanto (2014) there are four options to obtain funding, they are sale of shares directly to the old owner of stock, employee stock ownership (ESOP), dividend reinvestment plan, and go public or initial public offering (IPO).

When a company decides to go public or IPO, then they should make a prospectus as specified by BAPEPAM (Rusal, 2014). According to Kusuma (2001), a prospectus is a source of relevant information and can be used to assess the company. Thus, all the information contained in the prospectus for both financial and non-financial should be considered by the company. Investors use that information to assist in making rational decision regarding the risk and return of the shares on offer issuers (Ang & Liu, 2007). Therefore, it can be said that the prospectus is the key of IPO success. The process of determining the offering price is determined by agreement of the issuers with underwriter, while the process of shares in the secondary market occurs by supply and demand (Adhipradana & Daljono, 2014).

Investors who want to place their asset in the capital market should be able to set the goal correctly. The investors could not just set a goal to get maximum return, due to a positive correlation between the expected return and risk (Sartono, 2010). Therefore, investors should do a deep analysis in advance to determine specific strategies (Safitri, 2013). These things need to be completed as Pardosi & Wijayanto (2015) stated that choosing picking out the best option is not an easy thing especially during high uncertainty situations.

When companies decide to IPO, there will be various and many interesting phenomenon to be examined. According to Nurm & Subermin (2013) there are three possibilities that may occur at the capital market. First, when prices in the secondary market is lower than primary market, it is called overpricing. Second, when prices in the secondary market is lower than primary market, it is called true pricing. Third, when prices in the secondary market is higher than primary market after IPO, it is called underpricing.
The phenomenon of underpricing should not happen, because the price of the primary market should reflect all available information. However, this phenomenon may occur due to the investors' overly optimistic that leads to the price over the actual values (Klova, 2017). The abundance of underpricing happened indicates that many companies are in not profitable position, because of fund obtained from IPO is not a maximum. The risk of the company affected by financial decisions made by the company's internal management is less precise (Sari & Wijayanto, 2012). Indonesia stock exchange (2014) in its official report states that throughout 2013 there are thirty-one new issuers listed on exchanges, where it makes a new record of the highest number of new shares of issuers in a year for fifteen last year. That achievement made a lot of new issuers that record their shares on stock exchange in the following years in order to get funding. This revival continues until 2017, there are around thirty-seven new issuers who have IPO. Its rapidly growing issues go public on exchange, increases higher fluctuation phenomenon of underpricing (Hanafi, 2016), where this should not happen.

Ljungqvist (2007) gives the illustration that the average initial return at the IPO in eight (8) countries around Asia – Pacific and America Latin is estimated more than 1% of the underpricing level could happen. This calculation aims to see the potential occurrence of underpricing in different countries.

According to Nuroh (2013), underpricing is a condition where an average market price of a company's stock price is higher than the offering price on the first day of IPO. Thus, underpricing phenomenon tends to occur more frequently in the stronger market condition, but meanwhile in a weak market truepricing and overpricing are the most frequently phenomenon (Klova, 2017). A theory has been advanced by Ljungqvist (2007), who has pioneered the research of the existence, where underpricing stated in 4 models, namely Asymmetric Information, Institutional Theories, Ownership and Control Theories, and Behavioral Theories. Based on the existence of information asymmetry with the fought between investors with issuers, there will be underpricing on the Indonesia stock exchange.

This research tries to replicate previous research which suggested that there are 5 factors affect the initial return and 7 days return after the IPO which are debt to equity ratio (DER), total asset turn over (TATO), return on asset (ROA), percentage share offer (PPS), and age (AGE). In addition, this research also provides some advices for earlier researchers to conduct testing of the difference between the initial coefficient of return and 7 days return after the IPO. There are a few things that distinguish this research with some earlier research: first, this research uses the observation period 7 days return after the IPO, to find out whether the influence of return is derived from the information contained in the the prospectus of the company through a financial variable and Non-financial variables used. Financial variables used i.e. debt to equity ratio (DER), total assets turn over (TATO), and return on assets (ROA). While Non-financial variable used is the percentage of the offer shares (PPS), and age (AGE). In contrast, there is a research by Mayes & Alqahtani (2015) conducted in Saudi Arabia stock exchange, which just uses the variables in the form of Non-financial size of the company (firm size), percentage share offer, age of the company, company status, and market conditions as a factor that can affect the initial return.

Second, this research is different from research that has been conducted by Khodavandloo & Zakaria (2016) who has done research on the Tehran Stock Exchange by taking three observation period i.e., the period of 30 days, 120 days, and third observations i.e. 240 days after the IPO with variable assets turn over, age of firm, p/e ratio, and size of the company without putting financial leverage ratio and variable ratio of profitability such as those used in this study i.e. ROA and DER. The third study is different from the research of Song et al. (2014) who has done a research about China’s Exchange and prove that the level of underpricing happened amounted to 14.22%. That is because the existence of variables affecting the stock investor sentiment that is overvaluation, whereas the variable used is the reputation of the underwriter and the regulation of prices without considering the financial variables.

The purpose of this research is to find out the influence of financial variables and Non-finance to the level of underpricing shares and 7 days return after the IPO. In addition, it is to find out if there is a difference between the initial coefficient of return and 7 days return after the IPO or nots. As many contrast results happened among the previous researches, so this research needs to be conducted.

2 LITERATURE REVIEW

2.1 The Influence of Debt to Equity to the Stock Value of Underpricing

DER produced by a single company can be the basis of decision-making by investors. With a high degree of leverage in a company, investors will think if a
company has a lot of debts directly will affect the capital owned by the company so that the IPO would yield funds likely to be used to pay debt than to investment activity in order to conduct its business expansion (Risal, 2014). The research that has been conducted by Lineaza & Setyowati (2015) proved that there is a positive effect to DER initial return. The higher of DER the higher underpricing shares to occur. Thus the greater the value of the allegedly DER leads to the greater the progress of initial return and return 7 days after IPO. Therefore, the hypothesis regarding the impact of debt to equity to underpricing stock value can be formulated as follows:

Ha1: DER has a positive effect to the initial return.
Ha2: TATO has a negative effect to initial return.

2.2 The Influence of Total Asset Turnover to the Underpricing

Sartono (2010) revealed that total asset turnover (TATO) is often referred to with the turnover total assets. The ratio measures the overall assets owned by the company, whether in a company there is turnaround effectively or not. Where the higher inventory turnover of a company, then the company will be more efficient in change the amount of inventory the company (Maulidya & Lautania, 2016). Horne & Wachowicz (2016) stated that a TATTOO is a ratio that can be used to measure the number of times the funding that was planted in supplies inventory) spinning in one period. The value of the tattoo that the higher it will reduce the uncertainty of return received by investors and will reduce the level of underpricing (Yuliana, 2013). It will make investors get a return that is getting low (Wijayanto, 2010). A research that has been done by Klova (2017) stated that the TATO has significant affects to the occurrence of the phenomenon of underpricing. Thus supposedly the higher value of the TATO of a company, then it will also lower initial return and 7 days return after the IPO. Hence, the second hypothesis is formulated as follows:

Ha2: TATO has a negative effect to initial return.

2.3 Influence of Return on Asset to the Underpricing

ROA included in the Group of ratio analysis of profitability becomes one of the important information for investors. It is caused due to the ROA is the ratio that is used to assess the effectiveness of the company's activity in generating profits. A research that has been done by Suryanto (2002) proves that ROA influences underpricing shares. It gives the sense that the larger the value of the ROA owned by the company, it will be more and greater investor interested to the company's stock. With the high profits it will minimize the degree of uncertainty that can occur, so it certainly will make the initial return received by large investors. Thus, it is assumed that the greater value of ROA of a company, the greater the initial return and return 7 after the IPO which will be received by investors. Therefore, the hypothesis regarding Return on Asset can be formalized as follows:

Ha3: ROA has a positive effect to initial return.

2.4 The Influence of the Percentage Share Offer to the Underpricing

Investors who are going to do an investment, they will consider the level of risk and uncertainty that they will receive, so that the percentage share offer should be really considered because the PPS associated with it (Dita, 2013). The larger percentage of the offer shares held of the company, the greater increasing level of underpricing will be. It will also create an uncertainty in the future increases (Nuroh & Suhermin, 2013). Retnowati (2013) has proven that the PPS positively effect the initial return significantly. Thus, it is assumed that the greater percentage of shares it will offer lower initial return and also 7 days return after the IPO. Hence, the fourth hypothesis is formalized as follows:

Ha4: PPS has a negative effect to initial return.

2.5 Influence of the Age of the Company to the Underpricing

Prathama (2015) states that the age of the company shows the company's ability to survive. The company's older and mature can be perceived as a company that has been tested, so the level of risk is lower than other and this could be the attraction of investors (Wahyudi, 2004). The company that have a long of age are also considered capable of generating a return will have an impact on the return received by investors. Research conducted by Nuroh dan Suhermin (2013) prove that the company's age has a positive effect significantly to
the initial return and 7 days return after the IPO. Thus, it assumed that the older age of the company will be getting lower initial return and 7 days return after the IPO. Based on the explanation above, the hypothesis regarding age of company is formulated as follows:

Ha5: AGE has a negative effect to initial return
Ha10: AGE has a negative effect to 7 days return after IPO.

3 METHOD

The population according to Sugiyono (2012) is a combination of all the elements that shape events, the thing or the person having similar characteristics can be the center of a researcher because it is seen as a universe of research. The population in this research is the whole company that IPO in 2013 - 2017 outside of banking company in Indonesia stock exchange totaling 93 companies. While the sample used of 77 firms using a purposive sampling technique.

Data collection is carried out directly on the TICMI library website and through the BEI, then the data already obtained being processed and analyzed by researchers. Statistical calculations done using Microsoft Excel and Eviews Program 9.

Independent variables in this study are financial variables (DER, TATO, and ROA) and non financial variables (percentage share offer and the age of the company). While the bound variable used is the initial return and 7 days return after the IPO. The ratio of leverage (debt to equity ratio) that is the company's ability to meet the entire obligation is shown by its own capital is used to pay the debt. The activity ratio (total assets turn over) is a ratio that indicates the capability and efficiency of the company in utilizing assets owned or how the turnover of assets-those assets. The ratio of profitability (return on asset) is the ratio which shows company's ability in operations resulting in a gain or profit.

The age of the company as one of the factors taken into consideration by investors when they will invest. The age of the company shows how long the company was able to survive and be evidence of companies able to compete. While the percentage share offer as a proxy from the uncertainties of the stock return that will be received by investors.

The dependent variable used are the initial return and 7 days return after the IPO. Initial return is a reflection of the level of underpricing. Where the initial return is the difference between the prices of the IPO priced deals in the primary market. While the rate of return received by investors on investment has been done.

Based on the explanation and model studies were used, then the equation is formulated as follows:

IR = a + β1DER + β2TATO + β3ROA + β4PPS + β5AGE + e (1)

R7HR = a + β1DER + β2TATO + β3ROA + β4PPS + β5AGE + e (2)

4 RESULTS AND DISCUSSION

Results of this research partially to the initial return (Equation 1) shows that there is only one variable that have an impact (alpha level 5%), that is percentage share offer (PPS) variable. Thus, on the variable PPS also has a negative coefficient direction, it means that the higher value of PPS will be get a smaller value of underpricing. In this case the underpricing figured on initial return that will be accepted by investors. The other independent variables such as DER, TATO, ROA, and AGE have no effect to the initial return.

On the results of testing to IR, DER was consistent with some earlier research such as Zaluki (2016), Retnowati (2013), and Rexy et al. (2017) that support this research, DER has no effect to the initial return.

On the results of testing the TATO to IR is consistent with the study that has been conducted by Aissia (2014) stating that a TATO is not a variable that can affect the initial return both short term and long term. The same fact stated by Zhou & Lao (2012).

On ROA variable, this research results was consistent with previous researchers. Such as Pahlevi (2014), Prawesti & Indrasari (2014) and Rexy et al. (2017) that had been declared in advance that ROA had no effect to the initial return.

The age of company which is group of Independent Non-financial variables were not able to prove that the AGE effect on the initial return. It managed to refine the research conducted by Hennuningsih (2014), Linazah & Setyowati (2015), and Retnowati (2013) which found that the variables AGE have no effect to the initial return.

Percentage share of offer is the only independent variable that may affect the initial return. This finding is consistent to finding of Nuroh (2013) and Niesriwan (2000), that is the percentage of stock offerings is a factor that can influence the occurrence of underpricing shares.

The results of the regression analysis to a return of 7 days after the IPO indicates that only partially variable debt to equity ratio (DER) and percentage share offer (PPS) that affect return 7 days after an IPO.
on the alpha level of 5%. The second coefficient of the variable indicates a different direction. On the DER variable coefficient indicates a positive direction, it means that the higher the value of DER will increase the return that will be accepted by investors. Whereas in variable PPS has a negative coefficient direction, it means that the higher the PPS company will decline the return of investor until the seventh day on the secondary market.

While the other independent variables such as ROA, TATO, and AGE has no effect to a return of 7 days after the IPO. This research was found that the variable of DER has an effect on 7 days return after the IPO. Where the results of these tests are consistent with the research that has been done by Ardiansyah (2004) that stated DER has an effect significantly to return 15 days after the IPO. In addition, Prathama (2015) also states that DER has an effect on stock return.

Variable of TATO has been proven not to be able to 7 days return after the IPO. This is consistent with Yuliana (2013) which has proven that the TATO is not the variable may affect the return of 7 days after the IPO.

The financial variables tested next is ROA, where the results of these findings stated that ROA was not able to prove the effect of 7 days return after the IPO. The results correspond to studies of Sulistyawati (2006) who find the similar things.

Non-financial variables tested is PPS or the percentage of the shares offer. PPS has proven to be able to 7 days return after the IPO. Where such findings in accordance with the research that has been done by Mayes & Alqahtani (2015) stating that the PPS or size of offer significant negative effect in the long term after an IPO, where such research is done on Saudi Arabia Stock Exchange.

Non-financial variables, AGE is different with PPS. AGE could not have an effect of 7 days return after the IPO. The results of study are consistent with previous research, Yuliana (2013) and Sulistyawati (2006) which found that the independent variable of AGE has no significant effect to return of 7 days after the IPO.

Hypothesis Test Results
Based on the analysis of the results of multiple regression equations 1 obtained as summarized in the following table:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.2332</td>
<td>0.0987</td>
<td>2.3621</td>
<td>0.021</td>
</tr>
<tr>
<td>DER</td>
<td>-0.0013</td>
<td>0.0079</td>
<td>-0.1599</td>
<td>0.873</td>
</tr>
<tr>
<td>TATO</td>
<td>0.0107</td>
<td>0.0111</td>
<td>0.9578</td>
<td>0.341</td>
</tr>
<tr>
<td>ROA</td>
<td>-0.3177</td>
<td>0.2694</td>
<td>-1.1791</td>
<td>0.242</td>
</tr>
<tr>
<td>AGE</td>
<td>0.0005</td>
<td>0.0026</td>
<td>0.1735</td>
<td>0.863</td>
</tr>
<tr>
<td>PPS</td>
<td>-1.0618</td>
<td>0.1831</td>
<td>-5.7097</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source: Research Data Processed, 2018

From the results of regression analysis, the regression equation 1 can be composed as follows:

\[ Y = 0.233 - 0.001DER + 0.015TATO - 0.262ROA + 0.004AGE - 1.062PPS + e \]

The results of the regression analysis can be seen at the table 1. It showed that using 0.05 alpha level, there is only variable PPS which have significance level of 0.0000 or alpha level of not more than 5%. While variable DER, TATO, ROA, and AGE has value prob. more than adequate for the alpha 5%, whereas DER has value Prob. Of 0.8733, TATO has a value of 0.3412 Prob; ROA has Prob. Of 0.2421; and AGE has value Prob. of 0.8627. Thus, that four variable were not able to effect on variable initial return. Only variables PPS can affect in the level of significance of 5%.

Based on the analysis of the results of multiple regression equations 2 obtained as summarized in the following table:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-0.5134</td>
<td>0.5005</td>
<td>-1.0258</td>
<td>0.308</td>
</tr>
<tr>
<td>LNDER</td>
<td>0.2967</td>
<td>0.0578</td>
<td>5.1274</td>
<td>0.000</td>
</tr>
<tr>
<td>LNTATO</td>
<td>-0.0006</td>
<td>0.1840</td>
<td>-0.0032</td>
<td>0.997</td>
</tr>
<tr>
<td>LNROA</td>
<td>-1.24066</td>
<td>1.1118</td>
<td>-1.1158</td>
<td>0.268</td>
</tr>
<tr>
<td>LNAE</td>
<td>0.7105</td>
<td>0.9771</td>
<td>0.7271</td>
<td>0.469</td>
</tr>
<tr>
<td>LNPPS</td>
<td>-0.9417</td>
<td>0.1242</td>
<td>-7.5807</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source: Research Data Processed, 2018

On the basis of the results of the regression analysis, the regression equation 2 can be composed as follows:

\[ Y = -0.513 + 0.297DER – 0.000TATO – 1.241ROA + 0.071AGE - 0.942PPS + e \]
The results of the regression analysis it can be seen at table 2. This model used a 0.05 alpha level, there is only LNNDER and LNPPS which have a significance level of 0.0000 or alpha level of not more than 5%. While the variables LNTATO, LNROA, and LNAGE has a value of prob. more than adequate for the alpha 5%, the variable LNTATO has a significance value of 0.9975; LNROA has the significance value of 0.2680; and LNAGE has a value of significance 0.4694. It concludes that variable has no effect to 7 days return after the IPO. Only variables that can be LNPPS and LNNDER has an effect on the level of significance of 5%.

Based on the results of the test T-statistic, then obtained the test results as follows:

<table>
<thead>
<tr>
<th>No.</th>
<th>Testing</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>DER has a positive effect to IR</td>
<td>Rejected</td>
</tr>
<tr>
<td>2.</td>
<td>TATO has a negative effect to IR</td>
<td>Rejected</td>
</tr>
<tr>
<td>3.</td>
<td>ROA has a positive effect to IR</td>
<td>Rejected</td>
</tr>
<tr>
<td>4.</td>
<td>PPS has a negative effect to IR</td>
<td>Accepted</td>
</tr>
<tr>
<td>5.</td>
<td>AGE has a negative effect to IR</td>
<td>Rejected</td>
</tr>
<tr>
<td>6.</td>
<td>DER has a positive effect to R7HR</td>
<td>Accepted</td>
</tr>
<tr>
<td>7.</td>
<td>TATO has a negative effect to R7HR</td>
<td>Rejected</td>
</tr>
<tr>
<td>8.</td>
<td>ROA has a positive effect to R7HR</td>
<td>Rejected</td>
</tr>
<tr>
<td>9.</td>
<td>PPS has a negative effect to R7HR</td>
<td>Accepted</td>
</tr>
<tr>
<td>10.</td>
<td>AGE has a negative effect to R7HR</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

Source: Research Data Processed, 2018

### 5 Conclusion

Based on the explanation in the previous sections, this research concludes that only Non-financial variables (percentage share offer) affect the initial return. While there is only two variable in equation 2, debt to equity ratio (DER) and variable percentage share offer (PPS) that affect 7 days return after the IPO. From the results of these tests indicate that there is a difference influence between independent variables DER, TATO, ROA, PPS, and AGE to dependent variables to the initial return and 7 days return after the IPO.

Managerial implications from this research is the management company should give more attention to the information contained in the prospectus of the company, because it will affect investors regarding their investment decisions in the stock market. For investors who will invest in Indonesia Stock Exchange also should give more attention to mainly financial and non-financial information that affects an initial return and 7 days return after the IPO. While the theoretical implications for further research is expected to consider the macro factors outside of the company either controlled or uncontrolled by the company.

### REFERENCES


Naqvi (2003). Reputasi: Penawaran Emisi, Return Awan, Return 15 Hari Setelah IPO dan Investasi 1 Tahun Setelah IPO di BEJ. In Symposium Nasional Akuntansi III IAI.


Return 15 Hari Setelah IPO. Jurnal Riset Akuntansi Indonesia, 7.


