



Analysis of Company Financial Performance Before and After Initial Public Offering (IPO) on the Indonesia Stock Exchange

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ABSTRACT

This study aims to analyze (1) the company's financial performance before and after (2) Initial Public Offering (IPO) in companies that conducted an IPO in 2018. The company's financial performance is measured by (3) financial ratios consisting of: Current Ratio (CR), Debt to Equity Ratio (DER), Total Assets Turnover (TATO), and Return On Equity (ROE). The sample used in this study were 8 companies. The sample was selected using purposive sampling. The type of research used in this research is descriptive with SPSS 25. Data analysis consists of descriptive statistics, normality test using Kolmogorov Smirnov test and hypothesis testing using Paired Sample T-Test. Based on the test using the Paired Sample T-Test, it shows that the company's financial performance after the IPO there is a difference in the solvability ratio which is proxied by the Debt to Equity Ratio (DER). While the ratios that do not experience any difference are the liquidity ratio proxied by the Current Ratio (CR), the activity ratio as proxied by Total Assets Turnover (TATO) and the profitability ratio as proxied by Return On Equity (ROE).

ABSTRAK

Penelitian ini bertujuan untuk menganalisis (1) kinerja keuangan perusahaan sebelum dan sesudah (2) *Initial Public Offering* (IPO) pada perusahaan yang melakukan IPO tahun 2018. Kinerja keuangan perusahaan diukur dengan (3) rasio keuangan yang terdiri dari: *Current Ratio* (CR), *Debt to Equity Ratio* (DER), *Total Assets Turnover* (TATO), dan *Return On Equity* (ROE). Sampel yang digunakan dalam penelitian ini sebanyak 8 perusahaan. Sampel dipilih menggunakan *purposive sampling*. Jenis penelitian yang digunakan dalam penelitian adalah Deskriptif dengan alat bantu SPSS 25. Analisis data terdiri dari Statistik Deskriptif, Uji normalitas dengan menggunakan Uji *Kolmogorov Smirnov* dan Uji Hipotesis menggunakan Uji *Paired Sample T-Test*. Berdasarkan pengujian menggunakan Uji *Paired Sample T-Test* menunjukkan bahwa kinerja keuangan perusahaan setelah melakukan IPO terdapat perbedaan pada rasio solvabilitas yang diproksikan dengan *Debt to Equity Ratio* (DER). Sedangkan rasio yang tidak mengalami perbedaan adalah rasio likuiditas yang diproksikan dengan *Current Ratio* (CR), rasio aktivitas yang diproksikan dengan *Total Assets Turnover* (TATO) dan rasio profitabilitas yang diproksikan dengan *Return On Equity* (ROE).

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INTRODUCTION

The rapid development of the business world has led to intense competition among business entities, with each striving to be the best in their respective fields. Many companies are established with the aim of generating wealth for their owners, but not all of them succeed in the process. In Indonesia, numerous companies are competing to become market leaders and surpass their competitors. They implement various strategies to ensure their survival and long-term growth. To thrive and expand, companies need to make the right strategic choices and decisions to achieve their objectives. Companies have access to various sources of funding to finance operational activities and expansion. However, each option for utilizing these sources of funds carries different implications for the company (Zulmariadi, 2017).

Achieving long-term and short-term goals requires a well-developed strategy that encompasses both internal and external aspects of the company. An internal strategy can be implemented by improving product quality, launching new products, and enhancing public trust in the company's offerings. A key component for achieving competitive advantage through internal strategy is the company's core competencies, which are based on its assets or capabilities. As a company grows, it will increasingly need additional capital to support operational expansion. An external strategy to meet this need is for the company to go public. Companies intending to go public must first conduct an initial public offering (IPO). An IPO is the process through which a private company becomes a public entity. A public company is one that sells a portion of its shares to the public, making them available for ownership by the general public. The process of becoming a public company typically begins with an IPO, in which shares are offered to the public for the first time via a stock exchange (Zulmariadi, 2017). According to Law No. 8 of 1995 concerning the capital market, a public offering is defined as the activity of offering securities by issuers to sell securities to the public, carried out in accordance with the procedures set forth in the law and its implementing regulations.

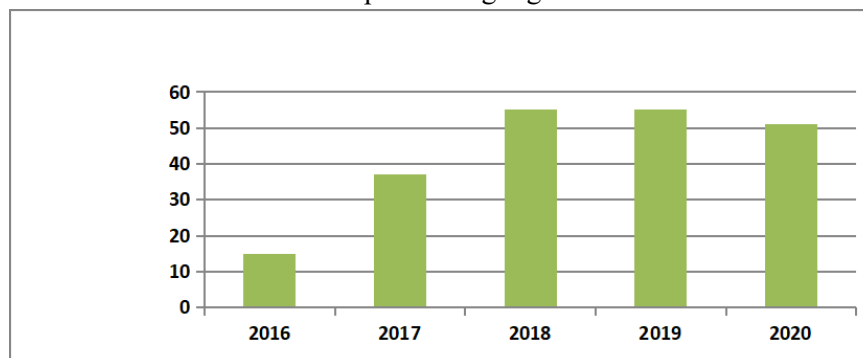


Figure 1: The Number of Companies conducting IPOs in 2016-2020

Based on the data presented, 2018 marked the year with the highest number of companies conducting Initial Public Offerings (IPOs) compared to the preceding years—2016 and 2017—and the subsequent years, 2019 and 2020. A total of 55 companies from various sectors conducted IPOs in 2018. This significant activity motivated the author to explore companies conducting IPOs in 2018 in greater detail, particularly analyzing their financial performance. Additionally, the author selected 2018 as the focal year to provide an updated perspective compared to previous studies that analyzed companies conducting IPOs before 2018. Furthermore, the choice of 2018 aligns with the research methodology, which involves examining companies' financial performance two years prior to and two years following



their IPO. This approach positions 2018 as the midpoint for the analysis, making it a logical and relevant choice.

According to Wirajunayasa & Putri (2017), assessing company performance before and after becoming a public company is very important. Company performance, especially in the form of financial reports, is required to be reported periodically as a manifestation of the full disclosure function of public companies. The assessment criteria for the results of the company's operations are many and varied, depending on which angle the success is viewed from and on what aspect the company is oriented. By knowing the results of the assessment of company performance, investment decisions can be made better.

Financial performance is an effort carried out by a company to determine the performance of a company by evaluating the effectiveness and efficiency of the company's activities during a certain period. Financial performance is also a prospect or future of the company in the growth and development of the company. The company's operating performance is described through financial report analysis in the form of financial ratios. Information based on financial statement analysis includes an assessment of the financial condition of the corporation, both past, present, and future expectations. The purpose of this analysis is to identify any weaknesses in the financial condition that could cause problems in the future and determine any strengths that can be used to determine the level of credibility or investment potential. Financial ratio analysis is a ratio that is compiled by combining figures in or between the income statement and balance sheet. Samryn (2015) Several studies on the differences in the company's financial performance before and after the IPO have produced mixed and inconsistent results. Khatami's research (2017) which conducted a study entitled Analysis of Company Financial Performance Before and After the IPO on the IDX (Study on Non-Financial Companies Listed on the IDX in 2011) showed that there was a significant difference in the company's financial performance before and after the IPO when viewed from the mean Current Ratio (CR) value. Meanwhile, research conducted by Ekawani (2016) which conducted a study entitled Analysis of Company Performance Before and After the IPO on the IDX. This study uses the Current Ratio financial ratio, the results of the study indicate that there is no significant difference between the company's financial performance before and after the Initial Public Offering (IPO) in 2011-2013 on the IDX. Khatami's research (2017) which conducted a study entitled Analysis of Company Financial Performance Before and After IPO on the IDX (Study on Non-Financial Companies Listed on the IDX in 2011) when viewed from the mean Debt Equity Ratio (DER) value there is no significant difference in the company's financial performance before and after conducting an IPO. Meanwhile, research conducted by Cahyani and Suhada (2017) who conducted research entitled Analysis of Company Financial Performance Before and After Initial Public Offering (IPO) on the IDX (Study on Companies Listed on the IDX in 2013) which was measured using the financial ratio Debt Equity Ratio, the results of this study indicate that there is a difference in the Debt Equity Ratio before and after the company conducts an IPO, this can be seen from the results of statistical tests which show that the calculated t value is greater than the t table, which means H_0 is rejected.

Khatami's research (2017) conducted a study entitled which was measured using the Total Assets Turn Over Ratio (TATO), when viewed from the mean TATO value there was no significant difference in the company's financial performance before and after conducting an IPO. Meanwhile, Yuliarni's research (2016) conducted a study which was measured using the Total Assets Turnover (TATO) there was a significant difference in company performance before and after conducting an IPO,



which showed a significant negative difference so that it would have an impact on performance in the following period.

The next study is Ramadhani (2018) who conducted a study uses the financial ratio Return On Equity (ROE), the results of this study that IPO does not affect company performance. The study conducted by Cahyani & Suhada (2017) who conducted study which was measured using the financial ratio Return On Equity. The results of this study indicate that there is a difference before and after the company conducts an IPO, this can be seen from the results of statistical tests which show that the calculated t value is greater than the t table, which means H_0 is rejected.

The research gap that has been explained is a problem in this study. Based on the background description above, the author is interested in raising the research title "Analysis of Company Financial Performance Before and After Initial Public Offering (IPO) on the Indonesia Stock Exchange". The expected objective of this study is to determine whether there was an increase in financial performance in the liquidity ratio, solvency, activity, and profitability before and after the company conducted an IPO in 2018.

LITERATURE REVIEW

A financial ratio is a ratio calculation using financial statements that function as a measuring tool in assessing the financial condition and performance of a company. Meanwhile, according to Kamir (2014:104) financial ratio is an activity of comparing the numbers in the financial statements by dividing one number by another. Comparisons can be made between one component and another in one financial statement or between components in the financial statements.

Liquidity is the ability of a company to meet short-term obligations that must be met immediately. Weston in Kasmir's book (2017) states that the liquidity ratio is a ratio that describes the company's ability to meet short-term obligations (debts). This means that if the company is billed, it will be able to meet (pay) the debt, especially the debt that is due.

The liquidity ratio used in this study is the Current Ratio. The current ratio is a ratio to measure the company's ability to pay short-term obligations or debts that are due immediately when billed in their entirety (Kasmir, 2017). In other words, how many current assets are available to cover short-term obligations that will soon be due? The current ratio can also be said to be a form of measuring the level of safety (margin of safety) of a company. A high ratio usually indicates high liquidity, but a ratio that is too high can mean inefficient use of resources.

The following are the objectives and benefits that can be obtained from the results of the liquidity ratio according to Kasmir (2014):

1. To measure the company's ability to pay obligations or debts that are immediately due when billed.
2. To measure the company's ability to pay short-term obligations with current assets as a whole.
3. To measure the company's ability to pay short-term obligations with current assets without taking into account inventory or receivables.
4. To measure or compare the amount of existing inventory with the company's working capital.
5. To measure how much cash is available to pay debts.

Solvency Ratio

The solvency ratio or leverage ratio is the use of assets or funds where for that use must cover or pay fixed costs. The solvency shows the proportion of debt used to finance its investment. The Solvency Ratio is a ratio used to measure the extent to which a company's assets are financed by debt. This means, how much debt burden is borne by the company compared to its assets (Kasmir 2017).



The leverage or solvency ratio used in this study is the Debt to debt-equity ratio. Debt to Equity Ratio (DER) is a ratio used to assess debt with equity. To find this ratio by comparing all debts, including current debt with all equity. This ratio is useful for knowing the amount of funds provided by borrowers (creditors) to the company owner. In other words, this ratio is to find out every rupiah of own capital used for debt collateral (Kasmir 2017).

Activity Ratio

The activity ratio measures how effectively the company's management manages its assets. In other words, this ratio measures how quickly the company's assets are managed. In company activities, all assets must be used to provide benefits to achieve the company's goals. Each asset must be operated according to its respective objectives so that the asset provides benefits that assets is generally measured through its turnover (Sitanggang, 2012).

The activity ratio used in this study is Total Assets turnover (asset turnover). Total Assets Turn Over is a comparison between sales and total assets of a company where this ratio describes the speed of total asset turnover in a certain period. This ratio measures how all company assets owned by the company are operated in supporting company sales (Kasmir, 2017).

Profitability Ratio

The profitability ratio measures a company's ability to generate profits. Companies that have sufficient profitability to finance their operations do not need to increase the amount of debt from the company. Because the greater the company's profit, the greater the retained earnings that can be used in its operations. The ratio of the company's ability to earn profits depends on which profit and capital are calculated (Sitanggang, 2012).

The profitability ratio used in this study is Return On Equity (ROE). ROE is a ratio to measure net profit after tax with equity. This ratio shows the efficiency of using equity. The higher the ratio, the better. This means that the position of the company owner is getting stronger, and vice versa (Kasmir, 2017).

Financial Performance Improvement in Company Liquidity Ratio Proxied by Current Ratio (CR) Before and After Initial Public Offering (IPO) in 2018

According to Kasmir (2017), the ratio is used to measure a company's ability to pay short-term liabilities or debts that are due immediately when billed in full. In other words, how much current assets are available to cover short-term liabilities that are due soon? The current ratio can also be said to be a form of measuring the level of security (margin of safety) of a company. A positive Current Ratio makes the company's ability to pay its obligations better. This ratio will measure the smoothness of the use of the company's assets so that the company's financial performance can be assessed whether it is smooth or not.

This theory is supported by Khatami's research (2017) which shows that there is a significant difference in the company's financial performance before and after the Initial Public Offering on the Current Ratio. This is also supported by Fitriyani's research (2016) which shows that there is a significant difference in liquidity measured by CR before and after the IPO. It can be concluded that if the company's Current Ratio increases, the company will be better because the increase in the Current Ratio is due to the proportion of the increase in the company's current assets being greater than the increase in short-term debt so the company is better able to pay its short-term debt.



Improvement of Financial Performance in the Company's Solvency Ratio Proxied by the Debt to debt-to-equity ratio (DER) Before and After Conducting an Initial Public Offering (IPO) in 2018

According to Kasmir (2017), the Debt to Equity Ratio (DER) is a ratio used to assess debt with equity. To find this ratio by comparing all debts, including current debt with all equity. This ratio is useful for knowing the amount of funds provided by borrowers (creditors) with the company's owners. In other words, this ratio is to find out every rupiah of own capital used for debt collateral. Research by Cahyani & Suhada (2017) shows that the Debt to debt-equity ratio (DER) experiences differences in financial performance before and after the company conducts an Initial Public Offering (IPO). So it can be concluded that companies that have a high solvency ratio have a greater risk of loss than companies that have a low solvency ratio.

Improvement of Financial Performance in the Company's Activity Ratio Proxied by Total Assets Turnover (TATO) Before and After Conducting an Initial Public Offering (IPO) in 2018

According to Kasmir (2017), Total Assets Turnover is a comparison between sales and total assets of a company where this ratio describes the speed of total asset turnover in a certain period. This ratio measures how all company assets owned by the company are operated in supporting company sales. Yuliarni's research (2018) which was measured using Total Assets Turnover (TATO) found a significant difference in company performance before and after conducting an IPO, which showed a significant negative difference so that it would have an impact on performance in the following period.

Financial Performance Improvement on Company Profitability Ratio Proxied by Return On Equity (ROE) Before and After Initial Public Offering (IPO) in 2018

According to Kasmir (2017), Return On Equity (ROE) is a ratio to measure net profit after tax with equity. This ratio shows the efficiency of using equity. The higher the ratio, the better. This means that the position of the company owner is getting stronger, and vice versa. Research conducted by Cahyani & Suhada (2017) which was measured using the financial ratio Return On Equity (ROE) showed that there was a difference before and after the company conducted an IPO, this can be seen from the results of statistical tests which showed that the calculated t value was greater than the t table, which means H_0 is rejected. Hypothesis Development

Referring to previous research, literature review, and research objectives, the author tries to formulate the following research hypotheses:

H1: There is an increase in financial performance in the company's liquidity ratio proxied by the Current Ratio (CR) before and after the Initial Public Offering (IPO) in 2018

H2: There is an increase in financial performance in the company's solvency ratio proxied by the Debt to Equity Ratio (DER) before and after the Initial Public Offering (IPO) in 2018.

H3: There is an increase in financial performance in the company's activity ratio proxied by the Total Assets Turnover (TATO) before and after the Initial Public Offering (IPO) in 2018.

H4: There is an increase in financial performance in the company's profitability ratio proxied by the Return On Equity (ROE) before and after the Initial Public Offering (IPO) in 2018.



RESEARCH METHODOLOGY

This study analyzes descriptively the measurement of the financial performance of companies conducting Initial Public Offering (IPO) in 2018 which are non-financial companies. Therefore, it is necessary to test the hypotheses that have been presented. Hypothesis testing is carried out according to research and analysis methods designed by the variables studied to obtain accurate results. The variables in this study are financial performance. Specifically, financial performance in this study is focused on the financial performance of companies conducting Initial Public Offering (IPO) activities in 2018 which are non-financial companies. In this study, the financial performance used is represented by 4 financial ratios, namely the liquidity ratio measured by the Current Ratio (CR), the solvency ratio measured by the Debt to Equity Ratio (DER), the activity ratio measured by Total Asset Turn Over (TATO), and the profitability ratio measured by Return On Equity (ROE).

Table 1: Operationalization variables

Variable	Sub-Variable	Indicator	Size	Scale
Financial performance	Current Ratio (CR)	- Current Assets - Current Liabilities	$\frac{\text{Current Assets}}{\text{Current Liabilities}}$	Ratio
	Debt to Equity Ratio (DER)	- Total Liabilities - Total Equity	$\frac{\text{Total Liabilities}}{\text{Total Equity}}$	Ratio
	Total Assets Turnover (TATO)	- Sale - Average Total Assets	$\frac{\text{Sale}}{\text{Average Total Assets}}$	Ratio
	Return on Equity (ROE)	- Net Profit - Total Equity	$\frac{\text{Net Profit}}{\text{Total Equity}}$	Ratio

The population of this study consisted of 55 companies consisting of companies that conducted an IPO in 2018. The sample in this study were companies that conducted an Initial Public Offering (IPO) in 2018 which were selected using the purposive sampling method, namely the selection/drawing of sample members based on certain objectives and considerations from the researcher.

The sample was selected from the population of companies that conducted an Initial Public Offering (IPO) in 2018 with the following criteria:

1. Companies that conducted an Initial Public Offering (IPO) in 2018.
2. Non-financial companies.
3. Companies listed on the Indonesia Stock Exchange during the research period for at least 2 years after conducting an Initial Public Offering (IPO), namely 2018-2020.
4. Using Rupiah as the reporting currency.
5. Publishing complete financial reports during the research year, namely 2016-2020.
6. Using the financial reporting period from January 1 to December 31.
7. The company did not experience any losses during the research year.

Descriptive statistics to provide an overview of the data used which is reviewed from the average value, standard deviation, maximum value, and minimum value for the period before and after the Initial Public Offering (IPO). Where if the standard deviation is greater than the average value, it means that the existing data has high variation, likewise if the standard deviation is smaller than the



average value, it means that the existing data has low variation. The maximum value shows the highest value in the data, while the minimum value shows the lowest value in the data.

The normality test is used to determine whether the data is normally distributed or not. This test is usually used to measure ordinal, interval, or ratio scale data. The sample is normally distributed or H_0 if the asymptotic sig > the level of significance used in the test, in this case 5% or $\alpha = 0.05$, otherwise it is said to be abnormal or reject H_0 if the asymptotic sig < level of significance. This test uses the SPSS statistic 23 program. If the test results show that the sample is normally distributed, then the difference test that will be used is the parametric test (paired sample t-test), but if the sample is not normal, then the difference test used in this study is the non-parametric test (Wilcoxon sign test).

A hypothesis is an assumption or guess about something that is made to explain it which is often required to be checked. Each hypothesis can be true or false and therefore research needs to be conducted before the hypothesis is accepted or rejected. The steps or procedures to determine whether to accept or reject a hypothesis are called hypothesis testing.

This test is conducted to determine whether the company's financial ratio after the Initial Public Offering (IPO) is significantly different or not. The steps are as follows:

Find the t table value using the significance level formula $\alpha = 0.05$ with two-way testing. Decision-making criteria:

- If Sig. (2-tailed) > α (0.05), then H_0 is accepted, meaning that there is no significant difference between financial performance before and after the IPO.
- If Sig. (2-tailed) < α (0.05), then H_1 is accepted, meaning that there is a significant difference between financial performance before and after the IPO.

RESULTS AND DISCUSSION

Descriptive Statistics Before Initial Public Offering (IPO)

The following explains descriptive statistics reviewed from the average value, standard deviation, maximum value, and minimum value for the period before the IPO. Where if the standard deviation is greater than the average value, it means that the existing data has high variation, likewise if the standard deviation is smaller than the average value, it means that the existing data has low variation. The maximum value shows the highest value in the data, while the minimum value shows the lowest value in the data. The following is a table showing descriptive statistics of data in the period before the IPO.

Table 1: Results of Descriptive Statistics Before I
Descriptive Statistics

	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
CR	16	,13	4,14	1,2300	,28072	1,12289
DER	16	,03	16,42	2,7950	,93739	3,74957
TATO	16	,04	1,29	,6187	,10137	,40548
ROE	16	,03	,87	,1925	,05308	,21234
Valid N (listwise)	16					



It is known that the number of samples used in this study is 8 samples with a period before the IPO of 2 years so that $N = 16$. Furthermore, the results of descriptive statistics in Table 1 will be explained as follows:

1. The average CR value before the IPO is 1.2300 with a standard deviation of 1.12289. A standard deviation value that is lower than the average indicates low variation and then a low gap between the maximum and minimum values. The average CR value of 1.2300 indicates that the average company's ability to use its current assets outside of inventory to meet its current liabilities is 1.2300%. While the maximum and minimum values are 4.14 and 0.13 respectively.
2. The average DER value before the IPO is 2.7950 with a standard deviation of 3.74957. A standard deviation value that is higher than the average indicates higher variation and then a high gap between the maximum and minimum values. The average DER value of 2.7950 indicates that the average level of debt to equity of the company is 2.7950%. While the maximum and minimum values are 16.42 and 0.03 respectively.
3. The average TATO value before the IPO is 0.6187 with a standard deviation of 0.40548. A standard deviation value lower than the average indicates low variation and then a low gap between the maximum and minimum values. The average TATO value of 0.6187 indicates that the average ability of funds embedded in all assets to generate income is 0.6187 times. While the maximum and minimum values are 1.29 and 0.04 respectively.
4. The average ROE value before the IPO is 0.1925 with a standard deviation of 0.21234. A standard deviation value higher than the average indicates high variation and then a low gap between the maximum and minimum values. The average ROE value of 0.1925 indicates that the average for measuring the rate of return on common stock equity is 0.1925 percent. While the maximum and minimum values are 0.87 and 0.03 respectively.

Descriptive Statistics After Initial Public Offering (IPO)

The following explains the descriptive statistics reviewed from the average value, standard deviation, maximum value, and minimum value for the period after the IPO. Where if the standard deviation is greater than the average value, it means that the existing data has high variation, likewise if the standard deviation is smaller than the average value, it means that the existing data has low variation. The maximum value shows the highest value in the data, while the minimum value shows the lowest value in the data. The following is a table showing descriptive statistics of data in the period after the IPO.

Table 2: Results of Descriptive Statistics After the IPO
Descriptive Statistics

	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
CR	16	,22	3,62	1,3531	,22602	,904
DER	16	,23	1,75	1,0569	,12699	,507
TATO	16	,03	1,83	,5025	,12874	,514
ROE	16	,00	,23	,0856	,01703	,068
Valid N (listwise)	16					



Based on Table 2, it is known that the number of samples used in this study is 8 samples with a period after the IPO of 2 years so that $N = 16$. Furthermore, the results of descriptive statistics in Table 2 will be explained as follows:

1. The average CR value after the IPO is 1.3531 with a standard deviation of 0.90406. A standard deviation value that is lower than the average indicates low variation and then a high gap between the maximum and minimum values. The average CR value of 1.3531 indicates that the average company's ability to use its current assets outside of inventory to meet its current liabilities is 1.3531. While the maximum and minimum values are 3.62 and 0.22 respectively.

2. The average DER value after the IPO is 1.0569 with a standard deviation of 0.50795. A standard deviation value that is lower than the average indicates lower variation and then a low gap between the maximum and minimum values. The average DER value of 1.0569 indicates that the average level of debt to equity of the company is 1.0569%. While the maximum and minimum values are 1.75 and 0.23 respectively.

3. The average TATO value after the IPO is 0.5025 with a standard deviation of 0.51497. A standard deviation value that is higher than the average indicates high variation and then a low gap between the maximum and minimum values. The average TATO value of 0.5025 indicates that the average ability of funds embedded in all assets to generate income is 0.5025 times. While the maximum and minimum values are 1.83 and 0.03 respectively.

4. The average ROE value after the IPO is 0.0856 with a standard deviation of 0.06811. A standard deviation value that is lower than the average indicates low variation and a low gap between the maximum and minimum values. The average ROE value of 0.0856 indicates that the average for measuring the rate of return on common stock equity is 0.0856%. While the maximum and minimum values are 0.23 and 0.00 respectively.

Data Normality Test

As explained in Chapter III, after analyzing the data using descriptive statistics, the next data analysis is the data analysis prerequisite test using the normality test. The data normality test is carried out before the data is processed based on the research model. The purpose of the normality test is to determine whether the distribution of data in the variables that will be used in the study is normally distributed or not. To detect normality in this research data, the Kolmogorov-Smirnov (K-S Test) is used. The criteria used are if the significance ($\alpha < 5\%$) then the data is not normally distributed, and vice versa (Ghozali, 2016).

Table 3: Results of the Kolmogorov-Smirnov Normality Test
One-Sample Kolmogorov-Smirnov Test

		CR	DER	TATO	ROE
N		8	8	8	8
Normal Parameters ^{a,b}	Mean	1,2913	1,9263	,5600	,1388
	Std. Deviation	,72349	1,40280	,32693	,07039
Most Extreme Differences	Absolute	,144	,287	,230	,243
	Positive	,144	,287	,230	,243
	Negative	-,130	-,261	-,166	-,126
Test Statistic		,144	,287	,230	,243
Asymp. Sig. (2-tailed)		,200 ^{c,d}	,052 ^c	,200 ^{c,d}	,182 ^c



Based on the results of the normality test above, it can be seen that the significance value obtained for the CR, DER, TATO, and ROE variables is greater than the predetermined significance value of 0.05 for a CR significance value of 0.200, DER 0.052, TATO 0.200, and ROE 0.182. So it can be assumed that all variables are normally distributed and meet the normality assumption. Therefore, the most appropriate difference test used for testing the hypothesis on these variables is the parametric test, namely the paired sample t-test.

Hypothesis Testing

Based on the results of the normality test, the data used in this study are normally distributed, therefore, as previously explained, if the data is normally distributed, then the most appropriate test tool used to test the hypothesis in this study is the paired sample t-test or paired t-test, and vice versa for data that is not normally distributed, the most appropriate difference test used is the non-parametric test, namely the Wilcoxon Signed Rank test. Hypothesis testing in this study aims to answer the question of whether or not there is a difference in financial performance proxied by financial ratios consisting of CR, DER, TATO, and ROE before and after the IPO. In hypothesis testing using paired sample t-test, the basis for decision making is if the significance value obtained is $>$ from the predetermined significance level then H_0 is accepted and H_1 is rejected, and if the significance value obtained is $<$ from the predetermined significance level then H_0 is rejected and H_1 is accepted, the significance level set is 5%. The following are the results of hypothesis testing using paired sample t-test and Wilcoxon Signed Rank test.

Hypothesis Testing with Paired Sample T-Test

According to Widyanto (2013), a paired sample t-test is one of the testing methods used to assess the effectiveness of treatment, marked by a difference in the average before and after treatment is given, namely before and after the IPO activity. The paired sample t-test is used to determine whether there is a difference in the average of 2 related samples. The data requirement in the paired sample t-test is that it must be normally distributed. Based on the results of the normality test, it has been explained previously that the variables that meet the normal assumptions of all variables are CR, DER, TATO, and ROE.

Paired Sample T-Test On Testing Period 1 Year Before With 1 Year After

1. Current Ratio (CR)

The following presents the results of hypothesis testing using paired sample t-test or paired t-test on CR on testing period 1 year before with 1 year after IPO.

Table 4: Paired Sample T-Test Results On CR 1 Year Before IPO With 1 Year After IPO

Paired Samples Test							
	Paired Differences				T	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference			
				Lower Upper			



Pair 1	CR_1 Before IPO - CR_1 After IPO	-,20750	1,52941	,54073	-1,48612	1,07112	-,384	7	,713
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Table 4 shows the results of the paired sample t-test analysis on the CR variable by comparing CR 1 year before and 1 year after the IPO. From the test results, a significance value of 0.713 was obtained with a calculated t-value of -0.384 for the analysis of 1 year before and 1 year after the IPO.

2. Debt to Equity Ratio (DER)

The following presents the results of hypothesis testing using the paired sample t-test or paired t-test on DER in the test period 1 year before and 1 year after the IPO.

Table 5: Paired Sample T-Test Results on DER 1 Year Before the IPO and 1 Year After the IPO

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	DER_1 Before IPO - DER_1 After IPO	1,09125	,97153	,34349	,27903	1,90347	3,177	7	,016

Table 5 shows the results of the paired sample t-test analysis on the DER variable by comparing DER 1 year before and 1 year after the IPO. From the test results, a significance value of 0.016 was obtained with a calculated t-value of 3.177 for the analysis of 1 year before and 1 year after the IPO.

3. Total Asset Turn Over (TATO)

The following presents the results of hypothesis testing using the paired sample t-test or paired t-test on TATO in the test period 1 year before and 1 year after the IPO.

Table 6: Paired Sample T-Test Results on TATO 1 Year Before the IPO and 1 Year After the IPO

Paired Samples Test								
	Paired Differences				T	Df	Sig. (2-tailed)	
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower				Upper



Pair 1	TATO_1 Before IPO - TATO_1 After IPO	-,14375	,41996	,14848	-,49485	,20735	-,968	7	,365
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Table 6 shows the results of the paired sample t-test analysis on the TATO variable by comparing TATO 1 year before and 1 year after the IPO. From the test results, a significance value of 0.365 was obtained with a calculated t-value of -0.968 for the analysis of 1 year before and 1 year after the IPO.

4. Return on Equity (ROE)

The following presents the results of hypothesis testing using the paired sample t-test or paired t-test on ROE in the test period 1 year before and 1 year after the IPO.

Table 7. Paired Sample T-Test Results on ROE 1 Year Before the IPO and 1 Year After the IPO

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	ROE_1 Before IPO - ROE_1 After IPO	,00375	,10809	,03822	-,08662	,09412	,098	7	,925

Table 7 shows the results of the paired sample t-test analysis on the TATO variable by comparing ROE 1 year before and 1 year after the IPO. From the test results, a significance value of 0.925 was obtained with a calculated t-value of 0.098 for the analysis of 1 year before and 1 year after the IPO.

Paired Sample T-Test on Testing Periods 2 Years Before and 2 Years After

1. Current Ratio (CR)

The following presents the results of hypothesis testing using the paired sample t-test or paired t-test on DER in testing periods 2 years before and 2 years after the IPO.

Table 8. Paired Sample T-Test Results on CR 2 Years Before and 2 Years After the IPO

Paired Samples Test				
	Paired Differences	t	Df	Sig. (2-tailed)



		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	CR_Before2 IPO - CR_After2 IPO	-,03875	,99683	,35243	-,87212	,79462	-,110	7	,916

Table 8 shows the results of the paired sample t-test analysis on the CR variable by comparing DER 2 years before and 2 years after the IPO. From the test results, a significance value of 0.916 was obtained with a calculated t-value of -110 for the analysis of 2 years before and 2 years after the IPO.

2. Debt Equity Ratio (DER)

The following presents the results of hypothesis testing using the paired sample t-test or paired t-test on DER in the test period 2 years before and 2 years after the IPO.

Table 9. Paired Sample T-Test Results on DER 2 Years Before the IPO and 2 Years After the IPO

Paired Samples Test								
	Paired Differences					T	Df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
DER_Before2 IPO - DER_After2 IPO	2,38500	5,20082	1,83877	-1,96300	6,73300	1,297	7	,023

Table 9 shows the results of the paired sample t-test analysis on the DER variable by comparing DER 2 years before and 2 years after the IPO. From the test results, a significance value of 0.023 was obtained with a calculated t-value of 1.297 for the analysis of 2 years before and 2 years after the IPO.

3. Total Asset Turn Over (TATO)

The following presents the results of hypothesis testing using the paired sample t-test or paired t-test on TATO in the test period 2 years before and 2 years after the IPO.

Table 10: Paired Sample T-Test Results on TATO 2 Years Before the IPO and 2 Years After the IPO

Paired Samples Test							
	Paired Differences				t	Df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference			



				Lower	Upper			
TATO_Before2 IPO - TATO_After2 IPO	,37625	,46349	,16387	-,01124	,76374	2,296	7	,055

Table 10 shows the results of the paired sample t-test analysis on the TATO variable by comparing TATO 2 years before and 2 years after the IPO. From the test results, a significance value of 0.055 was obtained with a calculated t-value of 2.296 for the analysis of 2 years before and 2 years after the IPO

4. Return On Assets (ROE)

The following presents the results of hypothesis testing using the paired sample t-test or paired t-test on ROE in the test period 2 years before and 2 years after the IPO.

Table 11: Paired Sample T-Test Results on ROE 2 Years Before the IPO and 2 Years After the IPO

Paired Samples Test									
		Paired Differences					t	Df	Sig. (2-tailed)
			Std. Deviation	Std. Error	95% Confidence Interval of the Difference				
					Mean	Lower			
	ROE_Before2 IPO - ROE_After2 IPO	,21000	,28390	,10037	-,02735	,44735	2,092	7	,075

Table 11 shows the results of the paired sample t-test analysis on the ROE variable by comparing ROE 2 years before and 2 years after the IPO. From the test results, a significance value of 0.075 was obtained with a t-value of 2.092 for the analysis of 2 years before and 2 years after the IPO.

Discussion

After conducting a data normality test on the variables used in this study, it is known that the CR, DER, TATO, and ROE variables used in this study are normally distributed, because the data is normally distributed, the difference test used to test the hypothesis is the paired sample t-test, namely by testing 1 year before and 1 after the IPO and testing 2 years before and 2 years after the IPO. Then because no data shows a non-normal distribution, the Wilcoxon Signed Rank Test is not used. The basis for concluding the two difference tests is that if the significance value obtained is > the specified significance level, then there is no significant difference in the test, and vice versa. The specified significance level is 5%. The results of the analysis of the hypothesis test that have been obtained are explained as follows.

Discussion of Paired Sample T-Test Results in Testing 1 Year Before and 1 Year After Initial Public Offering (IPO)

1. Based on the results of the paired sample t-test in Table 4.8, namely in the CR test 1 year before and 1 year after the IPO, it shows a significance value of 0.713. This shows that the significance



value obtained is greater than the specified significance level ($0.713 > 0.05$), meaning that there is no significant difference in CR between 1 year before and 1 year after the IPO.

2. Based on the results of the paired sample t-test in Table 4.9, namely in the DER test 1 year before and 1 year after the IPO, it shows a significance value of 0.016. This shows that the significance value obtained is smaller than the specified significance level ($0.016 < 0.05$), meaning that there is a significant difference in DER between 1 year before and 1 year after the IPO.
3. Based on the results of the paired sample t-test in Table 4.10, namely the TATO test 1 year before and 1 year after the IPO shows a significance value of 0.365. This shows that the significance value obtained is greater than the specified significance level ($0.365 > 0.05$), meaning that there is no significant difference in TATO between 1 year before and 1 year after the IPO.
4. Based on the results of the paired sample t-test in Table 4.11, namely the ROE test 1 year before and 1 year after the IPO shows a significance value of 0.925. This shows that the significance value obtained is greater than the specified significance level ($0.925 > 0.05$), meaning that there is no significant difference in DER between 1 year before and 1 year after the IPO.

Discussion of Paired Sample T-Test Results in Testing 2 Years Before and 2 Years After Initial Public Offering (IPO)

1. Based on the results of the paired sample t-test in Table 4.12, namely in the CR test 2 years before and 2 years after the IPO, it shows a significance value of 0.916. This shows that the significance value obtained is greater than the predetermined significance level ($0.916 > 0.05$), meaning that there is no significant difference in CR between 2 years before and 2 years after the IPO.
2. Based on the results of the paired sample t-test in Table 4.13, namely in the DER test 2 years before and 2 years after the IPO, it shows a significance value of 0.023. This shows that the significance value obtained is greater than the predetermined significance level ($0.023 < 0.05$), meaning that there is a significant difference in DER between 2 years before and 2 years after the IPO.
3. Based on the results of the paired sample t-test in Table 4.14, namely the TATO test 2 years before and 2 years after the IPO shows a significance value of 0.055. This shows that the significance value obtained is greater than the specified significance level ($0.055 > 0.05$), meaning that there is no significant difference in TATO between 2 years before and 2 years after the IPO. Based on the results of the paired sample t-test in Table 4.15, namely the ROE test 2 years before and 2 years after the IPO shows a significance value of 0.075. This shows that the significance value obtained is greater than the specified significance level ($0.075 > 0.05$), meaning that there is no significant difference in ROE between 2 years before and 2 years after the IPO.

CONCLUSION

After conducting analysis and hypothesis testing on the analysis of the company's financial performance before and after the Initial Public Offering (IPO) in companies listed on the Indonesia Stock Exchange (IDX) that conducted an IPO in 2018, the conclusions of this study are as follows:



1. Based on the results of hypothesis testing using the paired sample t-test, the Current Ratio (CR) shows that there is no significant difference in all years of the study, this indicates that H0 is accepted and H1 is rejected. This indicates that the company's ability to meet its short-term obligations after conducting an IPO does not experience a significant difference. However, based on the results of descriptive statistics, there is a difference in CR between before and after the IPO, namely the average (mean) CR value after the IPO is higher than before the IPO, but the difference in CR is not significant. Therefore, CR that experiences a difference but is not significant is considered not to have a difference between before and after the IPO. The increase in the average (mean) CR value after the IPO based on descriptive statistics is due to the increase in the company's current assets after the IPO. This shows that the current assets owned by the company after the IPO can be used optimally to meet its short-term liabilities when they fall due. Thus, there is no increase in financial performance in the company's liquidity ratio proxied by CR before and after the 2018 IPO.
2. Based on the results of hypothesis testing using a paired sample t-test on the Debt to Equity Ratio (DER) variable, it shows that before and after the IPO, namely DER, there is a difference based on the results of the paired sample t-test, this shows that H0 is rejected and H1 is accepted. This means that the comparison between the company's liabilities and equity owned between before and after the IPO has a significant difference. then based on the results of descriptive statistics before and after the IPO, DER also has a difference, namely where the average (mean) DER value after the IPO is smaller than before the IPO, it can be said that the DER ratio has a significant difference. Therefore, DER which experiences a significant difference is considered to have a difference between before and after the IPO. The decrease in the average (mean) DER value is caused by the increase in the company's capital after the company conducts an IPO. This shows that after the IPO, more equity can be used by the company to cover the company's liabilities. Thus, there is an increase in financial performance in the company's solvency ratio proxied by DER before and after the 2018 IPO.
3. Based on the results of hypothesis testing using paired sample t-test, data analysis on Total Assets Turnover (TATO) shows that before and after the IPO, TATO has no difference, this shows that H0 is accepted and H1 is rejected. This shows that the company's ability to generate income by using total assets has decreased significantly between before and after the IPO in 1 year before and 1 year after and 2 years before and 2 years after the IPO. Based on the results of descriptive statistics before and after the IPO, TATO also did not experience a significant difference, namely the average value after the IPO was smaller than before the IPO. Therefore, TATO did not experience a difference between before and after the IPO. Thus, there is no increase in financial performance in the company's activity ratio proxied by TATO before and after the 2018 IPO.
4. Based on the results of hypothesis testing using paired sample t-test, the results of data analysis on the Return on Equity (ROE) variable show that before and after the IPO ROE has no difference based on the results, it shows that H0 is accepted and H1 is rejected. This indicates that the ability to generate net profit as measured by the equity owned does not experience a difference where there is no significant decrease between before and after the IPO in 1 year before and 1 year after and 2 years before and 2 years after the IPO. Based on the results of descriptive statistics before and after the IPO, ROE did not experience a significant difference, namely the average (mean) ROE value after the IPO was lower than before the IPO. The



decrease in the average (mean) ROE value was caused by the decrease in the company's net profit after the IPO. This shows that the equity owned by the company after the IPO has not been used effectively by the company's management to generate maximum profit. Thus, there is no increase in financial performance in the company's profitability ratio proxied by ROE before and after the 2018 IPO.

Based on this explanation, it is concluded that the number of variables that do not experience differences in financial performance before and after the IPO based on the hypothesis test is 3 variables, it can be said that 75% of the variables used do not experience differences. While the variables that experience differences in financial performance before and after the IPO are 1 variable out of 4 variables used, then 25% of the variables used are different, namely experiencing a significant decline, it can be concluded that the financial performance proxied by CR, DER, TATO, and ROE has no increase in financial performance before and after conducting an IPO in companies listed on the IDX that conducted an IPO in 2018.

Based on the results of the discussion regarding the analysis of financial performance before and after the IPO in companies listed on the IDX that conducted an IPO in 2018, the following are suggestions related to this study. For further research using the same research, it is recommended to increase the number of samples by extending the observation period of the research so that the range of data processed is more representative of the differences obtained after the company decided to conduct an IPO. Further research is expected to add other variables that can be used to measure the differences in the company's financial performance before and after the IPO.

The assessment criteria for the results of the implementation of an IPO for a company are many and varied, depending on which angle the success is viewed from and on what aspect the company is oriented. By knowing the results of the assessment of the company's performance, investment decisions can be made better

For investors when they want to invest in a company conducting an IPO, they should consider factors that have been proven to affect financial performance. In addition, investors should also pay attention to information inside and outside this research regarding the IPO. Investors should also be more careful before investing and pay attention to the legal, political, and economic conditions so that when making investment decisions they are in the right condition.

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