

The Performance of Renewable Energy Companies Before and After Initial Public Offering

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ABSTRACT

The aim of this research is to analyze the differences in the performance of renewable energy companies before and after the Initial Public Offering (IPO). This research uses Paired Sample T-test as a data analysis method. The population in this study is a renewable energy company that conducts an IPO on the Indonesia Stock Exchange with a total of 3 companies. The sampling technique in this study uses purposive sampling and gets 2 samples. The results of this research indicate that there is no significant difference in the performance of renewable energy companies before and after the IPO. This could be due to the high initial investment costs in the renewable energy industry, the Government's low attention and utilization of renewable energy and the quality of management.

Keywords: Renewable Energy Companies; Performance; Initial Public Offering.

Kinerja Perusahaan Energi Terbarukan Sebelum dan Setelah Penawaran Umum Perdana

ABSTRAK

Tujuan dari penelitian ini adalah untuk menganalisis perbedaan kinerja perusahaan energi terbarukan sebelum dan sesudah Penawaran Umum Perdana (IPO). Penelitian ini menggunakan Paired Sample T-test sebagai metode analisis data. Populasi dalam penelitian ini adalah perusahaan energi terbarukan yang melakukan IPO di Bursa Efek Indonesia sebanyak 3 perusahaan. Teknik pengambilan sampel dalam penelitian ini menggunakan purposive sampling dan mendapatkan 2 sampel. Hasil dari penelitian ini menunjukkan bahwa tidak terdapat perbedaan yang signifikan pada kinerja perusahaan energi terbarukan sebelum dan sesudah IPO. Hal ini dapat disebabkan oleh biaya investasi awal yang cukup tinggi di industri energi terbarukan saat ini serta masih rendahnya perhatian, pemanfaatan energi terbarukan oleh Pemerintah dan kualitas pengelolaan.

Kata Kunci: Perusahaan Energi Terbarukan; Kinerja; Penawaran Umum Perdana.

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INTRODUCTION

Renewable energy can be regarded as one of the game changers of the country's economic development. The use of renewable energy can secure an energy supply and may be an option to mitigate climate change problems by reducing the burning of environmentally friendly and sustainable fossil fuels (Chachuli et al., 2021).

The topic of environmental damage is not a new topic, but has evolved over the last two decades. The use of non-renewable energy sources is believed to be a major cause of climate change and global warming (Küpeġ et al., 2019). Almost every country pays close attention to the deterioration of nature, and all stakeholders, including world-class entrepreneurs, are involved in efforts to save nature. Environmental pollutants is a extreme hassle everywhere in the world, inflicting bad externalities and challenges, in the end affecting the lives of people and the improvement of the nation. More and greater literature is investigating elements of environmental pollutants which includes monetary improvement, political system, commercial structure, in addition to electricity use and electricity efficiency.

Theoretically, environmental overall performance is causally connected to renewable strength use, because, in assessment with conventional strength reassets which include crude oil and coal, the usage of renewable strength creates few emissions and its era is environmentally friendly. Thus, renewable strength could have an effect on environmental overall performance. From any other perspective, carbon dioxide (CO₂) emissions can have an effect on strength intake and for that reason set off shocks to smooth strength investment, which could have an effect on the proportion of renewable strength to overall strength intake (Chang & Wang, 2021). One of the Sustainable Development Goals (SDGs) of the 2030 Agenda is SDG 7 - Affordable and Clean Energy, a goal related to renewable energy. UNDP [9] presented data on the energy and renewable energy sectors and emphasized that energy accounts for 73% of greenhouse gas emissions. The renewable energy sector employed 11.5 million people in 2019 (Florea et al., 2021). Reducing the use of carbon-based fuels and sources helps reduce the scale of global warming. Therefore, renewable energy-based multi-generational systems provide alternative solutions (Bicer & Dincer, 2016).

Planetary resources are being used unplanned to fuel the world economy, without considering the impact of the environment on human activity. This is completely impossible due to the increased risk of climate change, as well as increasing environmental disasters and pollutant emissions. Renewable energy projects help reduce global warming, meet the need for cheap energy, achieve prosperous economic growth, while achieving cleaner, greener impacts (Maqbool et al., 2020). The use of renewable energy sources to generate renewable energy is becoming an integral part of global climate and energy policy (Morina et al., 2021). It is well known that the development of the new energy economy is closely related to financial markets, especially the stock market. Their interactions show a high degree of interdependence. In short, investing in renewable energy can diversify the equity portfolio and mitigate the resulting portfolio risk. On the contrary, the stock market provides a stable flow of financial support for the development of the new energy economy. Therefore, investing in renewable energy through the stock

market can play an important role in achieving economic sustainable development and climate goals. Currently, more than 80 renewable energy companies are listed on the Chinese stock exchange, producing in various renewable energy fields such as wind, solar, solar power, new energy vehicles and other renewable energies doing. These renewable energy companies not only promote the sustainable development of the energy industry, but also achieve rising stock prices on the Chinese stock exchange. Stocks of renewable energy companies are being followed by more and more investors. With the rapid development of the energy industry, investors can make significant profits by investing in renewable energy stocks. However, as emerging markets China's stock market is highly price volatile, individual equity investments can suffer from very high levels of market risk. Second, investors buying shares in renewable energy companies in China are reliable and profitable, playing an important role in reducing the risk of loss for investors and accelerating the development of the energy industry. Building a portfolio strategy is important (Bai et al., 2019).

The debate over whether increased renewable energy capacity could impact a utility's financial performance can be seen as part of a broader debate about a company's environmental protection and its profitability (Ruggiero & Lehkonen, 2017). However, Indonesia has begun encouraging industry to implement green industry practices since 2010. This began to show results in 2017, when two renewable energy companies entered the Indonesian capital market through an Initial Public Offering (IPO). Initial public offering (IPO) is an important step in a company's life to raise investor awareness of the value of an initial public offering in a highly uncertain environment of initial public offering. Companies are trying to demonstrate that they are meeting the expectations of investors, including the expectations of corporate governance (Filatotchev et al., 2018). Initial public offerings are not the stage at which every company will reach at some point, but it is an important stage in the growth process (Honjo, 2021).

The development of Indonesia's capital markets is increasing in relation to the number of companies listed on the Indonesian stock exchange, often referred to as initial public offerings (IPO) (Nisak & Budiono, 2020). IPO is an external source of funding for a company. Initial public offering is an important moment in a company's development process, and owners are motivated by various motivations when deciding to start a stock transaction (Pastusiak et al., 2016). This includes selling a portion of a company's stock to a public investor and listing it on the stock exchange. Prior to selling a company's stock, the company was considered "private" and had a small number of investors, including: When converted to a public company, the issued shares will be offered to those interested in investing in the company, eventually increasing the number of investors. Therefore, the company trades on the stock exchange and investors can buy and sell stocks.

The decision to publish is one of the most important decisions a company can make. There are many reasons to publish, but the main reason is to raise money. This is the main benefit of this process. Some companies are open to expanding their market position against competitors. When a company goes public, it gains more market share than its competitors. When a company is listed, shareholders diversify risk, and profits fluctuate more than if they were owners of

a private company. Companies that go public will improve their investment, sales, total assets, fixed assets, and profitability compared to the year before the IPO. This means that companies looking to increase their investment or adopt more risky market strategies to improve their position in the market tend to be publicized (Maglad et al., 2019). It is important for IPO company shareholders to know if the maturity structure will change after an IPO, as switching between different maturity debt certificates has costs and benefits. The resulting benefit is the availability of numerous new sources of funding that enhance the image of the company, which also impacts the value of the company. As far as the consequences borne by the issuer are concerned, the company will be a transparent and professional company and is obliged to comply with all applicable capital market regulations. (Khan, 2021)

By analyzing the financial performance of renewable energy companies after conducting an IPO, it can be considered by investors to invest in the company, become a consideration for company policies, and become a consideration for other renewable energy companies in obtaining additional funds by conducting an IPO. In addition, we can also find out whether the decision to conduct an IPO is the right and beneficial decision. Furthermore, with the phenomenon of renewable energy companies conducting IPO and the potential financial performance gains that will be obtained by companies when conducting an IPO, the researcher aims to analyze the performance of renewable energy companies before and after conducting an IPO on the Indonesia Stock Exchange. Here is a hypothesis of this research.

H₁: There is a difference in the company's performance before and after conducting the IPO.

The hypothesis that there is a difference in performance is proposed considering that there are not many renewable energy companies that have conducted IPOs in Indonesia, the relatively recent IPO date in 2017 and the limitations of data availability. This study is also carried out as the first step of similar subsequent studies that will use renewable energy companies that have conducted IPOs in Indonesia as objects.

Arfandi & Taqwa (2018)'s research result report that there is a difference in performance conditions before and after the IPO. According to Maglad et al., (2019)'s research, Initial Public Offering (IPO) has an effect on company performance. Juliana & Sumani (2019) stated that there was a significant difference in financial performance after the IPO. This is also reinforced by Sholichah & Filianti (2020) and Dewi et al., (2020)'s research which said that there were differences in company performance before and after the IPO. Afriyani et al., (2020)'s research also explains that there are differences in company performance before and after IPO. On the other hand, Wahyono (2018)'s research result reported there is no significant difference in the financial performance of SMEs before and after the IPO. Research conducted by Junior et al., (2020) also shows that there is no difference in company performance before and after IPO. Yusmaniarti et al., (2020) and Mahfiro et al., (2020)'s research also said the same thing that there was no difference in performance before and after IPO. Reinforcing the results of previous research, Dwisono et al., (2021)'s research also confirms that there is no significant difference in the company's performance before and after the IPO.

This study aims to analyze the differences in the performance of renewable energy companies before and after the Initial Public Offering (IPO). From an academic point of view, this research is used as a reference for further researchers who will examine similar topics and practically this research can be a reference for the community, company stakeholders and even the government in making decisions regarding the steps and strategic plans to be taken.

The novelty of this research lies in the object of research that focuses on the performance of renewable energy companies listed on the Indonesia Stock Exchange. This is also the difference with previous studies. Here is the theoretical framework of this research.

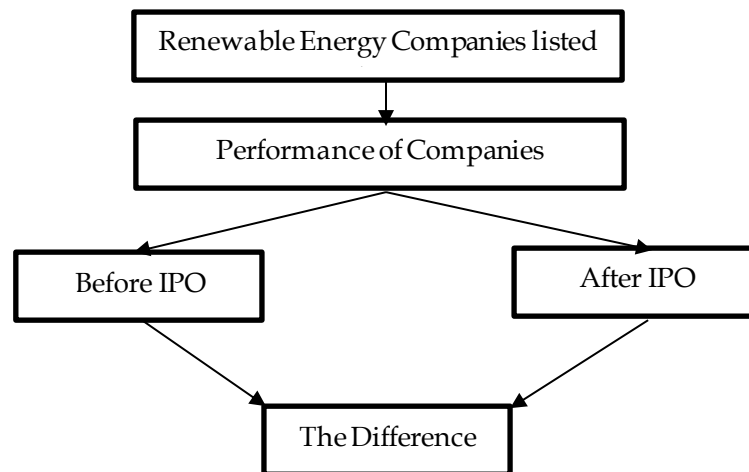


Figure 1. Theoretical Framework

Sources : ResearchData, 2015-2018

RESEARCH METHODS

This type of study is a comparative study that compares two sets of variables over different time periods. This study uses a quantitative approach with a statistical approach. Data acquisition techniques using secondary data in the form of the company's annual financial statements and documentation techniques serve as the data source.

The population in this study is a renewable energy company that conducts an IPO on the Indonesia Stock Exchange with a total of 3 companies. While sampling using purposive sampling technique as many as 2 companies with the criteria of pure companies engaged in renewable energy and have complete financial data before and after conducting the IPO. Based on these two criteria, the two companies used as samples in this study are PT Terregra Asia Tbk (TGRA) which is listed on the IDX on May 16 2017 and PT Megapower Makmur Tbk (MPOW) which is listed on the IDX on July 5 2017. Operational variables in this study are as follows Current Ratio (CR). The Current Ratio is used to measure the ability of current assets to cover current liabilities of a company. The current ratio represents the liquidity ratio in this study. The greater the current ratio, the higher the company's ability to cover short-term obligations.

$$= \frac{\text{current assets}}{\text{current liabilities}} \dots\dots\dots(1)$$

Debt to Equity Ratio (DER). Debt to Equity Ratio is used to see how much a company's debt is compared to the capital of the company or its shareholders. Debt to Equity Ratio is the leverage ratio. The higher the leverage, the higher the interest expense compared to the liability, and the higher the liquidity risk of the company.

$$= \frac{\text{total liabilities}}{\text{total equity}} \dots\dots\dots(2)$$

Debt to Asset Ratio. Debt to asset ratio is obtained from the comparison of total debt divided by total assets. The lower the debt to assets ratio, the better because it is safe for creditors during liquidation.

$$= \frac{\text{total liabilities}}{\text{total assets}} \dots\dots\dots(3)$$

Return On Assets (ROA). Return On Assets is used to measure the effectiveness of the company as a whole in generating profits with available assets. The ratio of return on assets represents the ratio of profitability in this study. The higher the return on assets, the better the company's ability to manage its assets.

$$= \frac{\text{Net Profit}}{\text{Total Assets}} \dots\dots\dots(4)$$

Return On Equity (ROE). Return On Equity is used to see the level of efficiency of the company in managing its investment to generate the company's net profit. The higher the return on equity, the better the company's performance in terms of equity.

$$= \frac{\text{Net Profit}}{\text{Total Equity}} \dots\dots\dots(5)$$

Net Profit Margin (NPM). Net Profit Margin is used to determine the company's ability to generate net profits, in other words to measure the rate of return of net profits to net sales. The net profit margin is between 0 and 1. If the net profit margin value is closer to 1, the more efficient the costs incurred, meaning the greater the rate of return on net profits.

$$= \frac{\text{Net Profit}}{\text{Sales}} \dots\dots\dots(6)$$

Working Capital Turnover (WCT). Working capital turnover measures or assesses the effectiveness of the company's working capital over a certain period. If the working capital turnover is low, it means that the company has excess working capital. This may be due to low inventory turnover or accounts receivable turnover or an oversized cash balance. If the working capital turnover is high, it may be due to high inventory turnover or accounts receivable turnover or a cash balance that is too small.

$$= \frac{\text{Sales}}{\text{Current Asset} - \text{Current Liabilities}} \dots\dots\dots(7)$$

The method used in this research is different test. The first step that must be done is to perform a normality test using the Kolmogorov-Smirnov test. This is done with the aim of determining the different tests that will be used in this study. If the results are normally distributed data, then the paired sample t-test will be used. However, if the results are not normally distributed, the Wilcoxon signed rank test will be used. Basis of decision making, if the Asymp. Sig. value > 0.05 then then the data is normally distributed, if the Asymp. Sig. value < 0.05 then then the data is not normally distributed.

If the sample is normally distributed, then the different test that will be used in this study is the paired sample t-test as parametric test. However, if the

sample is not normally distributed, the non-parametric Wilcoxon sign test will be used. Basis of decision making as the following, if the significance value < 0.05 degree of error, it can be confirmed that there is a significant difference after the IPO, so we can accept H_1 and reject H_0 , if the significance value > 0.05 degree of error, it can be confirmed that there is no significant difference after the IPO, or we can accept H_0 and reject H_1 .

RESULTS AND DISCUSSION

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CR	8	0.25	3.86	1.190	1.199
DER	8	0.08	3.40	1.561	1.443
DAR	8	0.08	0.77	0.471	0.300
ROA	8	0.00	0.30	0.051	0.099
ROE	8	0.00	1.16	0.202	0.392
NPM	8	0.01	0.19	0.088	0.080
WCT	8	0.00	24.46	4.118	8.470
Valid N (listwise)	8				

Sources : Research Data, 2015-2018

Table 1 shows the maximum, the minimum, standard deviation, and mean of the eight survey items (4 years before the IPO and 4 years after the IPO) of the two companies for which the test results of the descriptive statistical analysis were obtained. Based on the table of normality test results, it can be seen that the data used in this study has an Asymp. Sig. value of 0.558, which the value is greater than 0.05. This indicates that the data used in this study is normally distributed. Therefore, the different test used in this study is the paired sample t-test.

Table 2. Result of Normality Test

	Unstandardized Residual
N	8
Normal Parameters ^{a,b}	
Mean	0E-7
Std. Deviation	0.816
Absolute	0.280
Most Extreme Differences	
Positive	0.266
Negative	-0.280
Kolmogorov-Smirnov Z	0.792
Asymp. Sig. (2-tailed)	0.558
a. Test distribution is Normal.	
b. Calculated from data.	

Sources: Research Data, 2015-2018

Table 3. Result of Paired Sample T-test

Variables	t	df	Sig. (2-tailed)
CR	-0.698	3	0.536
DER	2.592	3	0.081
DAR	1.445	3	0.244
ROA	1.025	3	0.381
ROE	1.052	3	0.370
NPM	1.062	3	0.366
WCT	1.187	3	0.321

Sources: Research Data, 2015-2018

Table 3 shows that none of the significance values of all variables is smaller than 0.05. Current Ratio is 0.536, Debt to Equity Ratio is 0.081, Debt to Asset Ratio is 0.244, Return on Assets is 0.381, Return on Equity is 0.370, Net Profit Margin is 0.366 and Working Capital Turnover is 0.321. These results reveal that H1 is rejected and H0 is accepted.

It turns out that by conducting an IPO or not, there is no significant difference in the performance of renewable energy companies. This can be caused by three things. First, the high initial investment cost in the renewable energy industry makes it less attractive to the public and investors to invest their capital. According to the Energy Investment Needs in Indonesia compiled by the Institute for Essential Services Reform (IESR) and the Indonesian Institute for Energy Economics (IIEE), the need for fossil energy investment in Indonesia until 2025 is estimated at USD 20.9 billion, which is much lower than the previous year renewable energy investment needs are estimated at USD 72.5 billion. Whereas the renewable energy industry is a promising industry because renewable energy sources are almost inexhaustible and always available, in contrast to fossil energy which is very limited in availability and cannot be renewed. In addition, renewable energy does not damage the environment and can reduce carbon emissions so as to minimize unplanned additional costs. Listed publishers need to aggressively expand their investment channels, change the situation of holding large amounts of cash, while further improving their stock ledger management and actually mitigating stock price risk. Listed publishers also need to aggressively expand their funding channels and increase their financial leverage in order to increase the value of the company (Yang, 2016).

Second, the government's low attention and utilization of the renewable energy sub-sector. The government has a major role in this. This can be seen through the Electricity Supply Business Plan of PT. PLN 2018-2027 which revealed that the target for the energy mix from renewable energy will increase from 12.4% in 2018 to 23.0% in 2025, but will then decrease to 20.4% in 2027. The composition of electricity production per year Indonesia's primary energy types are projected in 2027 to be 58.6% coal, 20.6% natural gas (including LNG), 9.8% geothermal, 9.3% hydropower, 0.4% fuel and 1.3%. This means that from 2018 to 2027 the increase in the use of renewable energy is only 8%. Although later revised in the Electricity Supply Business Plan of PT. PLN 2021-2030 which states the renewable energy mix target in 2030 is 24.2%, but coal is still the main choice. Changes in government regulation and collective bargaining policy have emerged as common factors that determine the future of the company. Tariff rates and policies for renewable energy companies must be designed to encourage companies to increase their investment in clean energy production (Rastogi *et al.*, 2020).

Third, the quality of management and ongoing commitment will lead to improved corporate performance and future viability of the renewable energy sector. Company management is directly responsible for setting the corporate culture, policies, and organizational vision of implementing the company. Administrators also need to set measurable and specific goals to meet the needs and expectations of end users and improve performance. Renewable energy organizations need to focus on reducing variability in the marketing process in order to improve performance. Improving performance requires a close

relationship between business process integration, employee motivation, and quality of management (Busu & Nedelcu, 2018).

Based on Table 3, it can be seen that there is no single significant indicator of the 7 indicators used in this study. This is due to the main purpose of conducting an IPO of the 2 companies sampled in this study, namely PT Terregra Asia Energy Tbk and PT Megapower Makmur Tbk. PT Terregra Asia Energy Tbk conducted an IPO with the main objective of supporting the business of its subsidiaries (www.cnnindonesia.com), however until the end of 2018 most of its subsidiaries were still in the pre-operation stage so that the indicators for the financial performance of subsidiaries that could be consolidated were not significant. Meanwhile, PT Megapower Makmur Tbk has the main objective of conducting an IPO, namely 50% of the funds from the IPO are used to pay debts and the rest is used as working capital (investasi.kontan.co.id), but until the end of 2018 there has been no strategic step to develop the company's performance and is only limited to committing to business expansion.

Of course, the results of this study are a contradiction, considering that Indonesia has tremendous wealth and potential for renewable energy sources. Meanwhile, the world, through the Sustainable Development Goals, is actually carrying out a campaign to replace non-environmentally friendly energy into green energy and a green economy to tackle climate change and the climate crisis. Furthermore, the results of this study are in line with the research of Viana Junior et al., (2020), Yusmaniarti et al., (2020), Mahfiro et al., (2020) and Dwisono et al., (2021) which stated that there was no difference in company performance before and after the IPO. On the other hand, the results of this study are not in accordance with the research conducted by Arfandi & Taqwa (2018), Maglad et al., (2019), Juliana & Sumani (2019), Sholichah & Filianti (2020), Dewi et al., (2020) and Afriyani et al., (2020) which explained that there were indeed differences in company performance before and after the IPO.

CONCLUSION

Based on the results of the Paired Sample T-test above, it can be seen that there is no significant difference in the performance of renewable energy companies before and after the IPO. Of the 7 variables used, none of them shows any difference in company performance. This could be due to the high initial investment costs in the renewable energy industry, the Government's low attention and utilization of renewable energy and the quality of management.

Furthermore, the limitations in this study are the amount and period of data used. This study only uses data for 4 years, namely 2 years before the IPO and 2 years after the IPO. This is due to the lack of data availability on the IDX. Further research can use different data analysis methods, such as Panel Data Regression or Vector Error Correction Model. This difference in data analysis methods can make research on the performance of renewable energy companies richer and dynamic so that they have the potential to create new and better knowledge.

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