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Analyzing the Capital Structure, Economic Value Added, Firm Value, and Environmental Performance in Indonesia

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Abstract

The palm oil industry is one of Indonesia's largest foreign exchange earners and is directly associated with the Job Creation Act had divided opinions regarding the job creation law. Positive reactions were exhibited, particularly by palm oil entrepreneurs, because one of the purposes of the law is the ease of obtaining business permits, which will facilitate investor attraction. This study provides empirical evidence in improving the capital structure, economic value added, firm value, and environmental performance of plantation companies listed on the Indonesian Stock Exchange after implementing Indonesian Act No.39 of 2014 concerning plantations. A total of 10 plantation companies listed on the Indonesian Stock Exchange from 2010-2019 were used as the sample, and the independent t-test was the analytical method employed. Subsequently, the research found an improvement after implementing Indonesian Act No.39 of 2014 concerning plantations. These results are expected to provide useful information and contributions for prospective investors of plantation companies, as well as assist in the formation of laws by the government.

1. Introduction

The Constitutional Court of Indonesia granted the request to revise Indonesia Act No. 11 of 2020 concerning Job Creation at the end of November 2021. Furthermore, The Job Creation Act, known as Omnibus Law, was declared conditionally unconstitutional and eligible for revision within two years. This led to different reactions in the community, as some supported the declaration and wished for its immediate implementation, while others requested that the act be suspended. Following the enactment of The Job Creation Law, the problem of low wages, protection of workers' rights, and the ease of business permits are issues that are expected to be resolved.

Meanwhile, the palm oil industry, as one of the largest foreign exchange earners in Indonesia and directly associated with the job creation act, had divided opinions regarding the job creation law. Positive reactions were exhibited, particularly by palm oil entrepreneurs, because one of the purposes of the law is the ease of obtaining business permits, which will facilitate investor attraction. However, negative responses were voiced by many workers and palm oil observers. One of the highlights was the alteration or abolition of several regulations in The Job Creation Act, such as Indonesian Act No.41 of 1999 concerning Forestry, Indonesian Act No.18 of 2003 concerning the Prevention and Eradication of Forest Destruction, and Indonesia Act No.39 of 2014 concerning Plantations (Jonathan et al., 2021).

One of the objectives of implementing the job creation law is to facilitate the acquisition of business licenses to attract more investors within and outside the country. Generally, capital structure is a term that describes the amount of investment in a business by examining the long-term funding sources based on the comparison of total long-term debt to the total capital (Ratnawati et al., 2015). Previous research showed a significant difference in Debt Equity Ratio (DER) before and after the third period of tax amnesty (Ariani & Mawardi, 2018). Meanwhile, Indonesia Act No.39 of 2014 concerning Plantations is the replacement of Indonesia Act No.18 of 2004 concerning Plantations. The new law was expected to provide optimal results and increase the added value

of the national plantation businesses. This business-added value, which measures non-financial performance, can be determined by the Economic Value Added (EVA). Previous research at PT. Garuda Indonesia Tbk found a negative value of EVA in 2017-2019 (Irawan & Manurung, 2020).

Another factor to measure the success of the new law is capital structure, which describes the amount of investment in a company. Investors are attracted by increased firm value, which is the shareholder's perception of a company's level of success and is often associated with stock prices. Optimizing the value of a company refers to achieving its main goal (Rumain dkk., 2019). Research showed that the Price Book Value (PBV) significantly reduced after the implementation of the M&A than before (Maryani, Desi, Siregar, Hermanto, and Andati, 2017). One of the laws amended in the Job Creation Act is Indonesian Act No. 39 of 2014 concerning Plantations. The new law abolished the articles regarding AMDAL documents and company environmental permits. The AMDAL in a company can be examined using various factors, such as environmental performance, which focuses on activities to preserve the environment and reduce the impacts arising from its operations (Kusmiyatun & Ramdhani, 2018). The result of previous research noted a low performance of 24% based on the Triple Bottom Line in Indonesia(Latifah, 2019).

Furthermore, the public interest theory stated that regulations are the response to public demand to correct market failures (Scott, 2015). The existing regulations should improve the welfare and quality of life of society. Many disagree with the ratification of the Job Creation Law and consider the previous law better and unnecessary to change. Therefore, this research was conducted to determine the need to eliminate the Job Creation Law due to the effectiveness of Indonesian Act No.39 of 2014 concerning Plantations. The purpose of this research was to provide empirical evidence for increasing capital structure, economic value added, firm value, and environmental performance in plantation companies listed on the Indonesian Stock Exchange after the implementation of Indonesia Act No.39 of 2014 about Plantations.

2. Literature Review

2.1. Underlying Theory

2.1.1. Public Interest Theory

The public interest theory describes regulations as the response to public demand to correct market failures (Scott, 2015). It encompasses several problems, including the difficulty of determining the number of appropriate regulations and the motivation of regulators to monitor their implementation. Weak motivation may signify private rather than public interests as the motive for creation (Astika, 2008).

2.1.2. Trade-off theory

In the trade-off theory, profitability or net income becomes higher after an increase in debt, reducing the tax burden and agency costs. The direct benefits of using debt can improve the value of a company when used to expand the business, supposing the amount owed is greater than the incurred sacrifices (Hamidy et al., 2015).

2.2. Hypothesis Development

2.2.1 Capital Structure

Capital structure describes a company's long-term funding sources by comparing long-term debt to equity (Ratnawati, Aryanti, and Sinarjadi, 2015). Previous research discovered a significant difference in DER before and after the third period of tax amnesty (Ariani & Mawardi, 2018), while another found this difference before and after acquisition (Yunia & Al Baab, 2017).

H1: There is a significant increase in the capital structure after the implementation of Indonesia Act No. 39 of 2014 concerning Plantations.

2.2.2. Economic Value Added

The added value of a business, which is used to measure non-financial performance, can be determined using EVA. The results of previous research indicate differences in EVA at PT. Telekomunikasi Indonesia, Tbk. and PT. Indosat, Tbk. in the last 10 years (Andarwati & Hermuningsih, 2017). Another research found a difference in EVA at mining companies listed in Indonesian Stock Exchanges 2010-2017 after the implementation of Government Regulations of 2014 (Rokhmawati dkk., 2019).

H2: There is a significant increase in Economic Value Added (EVA) after the implementation of IndonesiaAct No. 39 of 2014 concerning Plantations

2.2.3. Company Value

Firm value is the shareholder's perception of a company's level of success and is often associated with stock prices. Hence, optimizing the value of a company denotes achieving its main goal (Rumain dkk., 2019).Previous research showed that the PBV significantly reduced after the implementation of M&A compared to before (Maryani, Desi, Siregar, Hermanto and Andati, 2017). Also, research on PT Semen Indonesia (Persero) Tbk found an increase in the firm value of PT Semen Indonesia (Persero) Tbk after the acquisition of PT Holcim Indonesia Tbk (Irawan & Dwijayanti, 2020).

H3: There is a significant increase in firm value after the implementation of Indonesia Act No. 39 of 2014 concerning Plantations

2.2.4. Environmental Performance

Environmental performance focuses on a company's efforts to preserve the environment and reduce the impact arising from its activities (Kusmiyatun & Ramdhani, 2018). Research indicated a low performance based on the Triple Bottom Line in Indonesia at 24% (Latifah, 2019). Another showed a positive influence on environmental performance after the implementation of Indonesian Ac tNo. 47 of 2012 (Putra & Lindrianasari, 2020).

H4: There is a significant improvement in environmental performance after the implementation of Law no. 39 of 2014 concerning Plantations.

3. Materials and Methods

This study used quantitative methods, which are based on the paradigm that science, particularly information obtained from experiences, is the only valid knowledge (Kurniullah et al., 2021). The data used were obtained from secondary sources, comprising capital structure, economic value added, firm value, and environmental performance certificate data, which were represented by DER, EVA, PBV, and ISO 14001, respectively. This information was obtained from the company's annual and sustainability reports, alongside stock price data from www.idx.co.id, yahoo finance, and the company's website. The population in this research involved all palm oil companies listed on the Indonesia Stock Exchange from 2010-2019. The sample was selected using the purposive sampling method with the conditions that the oil palm company was listed on the Indonesia Stock Exchange from 2010-2019, business was operating before 2010, and was still functioning by 2019. The final sample of 10 palm oil companies was divided into 2, namely before and after the implementation of Indonesia Act No. 39 of 2014 about Plantations, to be reviewed by 2010-2014 and 2015-2019, respectively.

3.1. Variables

Capital Structure - This research used the Debt Equity Ratio (DER) variable as an indicator of capital structure. DER is the ratio of total debt to total equity owned by a company, and this research used data from 2010-2019 for the estimation.

EVA - EVA was used as an indicator of the economic value-added variable. It was measured by the operating profit after tax (NOPAT) minus the product of the weighted average capital (WACC) with invested capital. The operating profit, capital, income, debt, tax, and interest data from 2010-2019 were used in the estimation. The formula used was:

$$EVA = NOPAT - (WACC \times IC) = \{EBIT (1 - T)\} - \{[(wdrd (1-T)) + (were)] \times [cash + working\ capital + fixed\ assets]$$

Where:
EVA = Economic Value Added

NOPAT = Net operating profit after tax (operating profit after tax)
WACC = Weight Average Cost of Capital (weighted average capital)
EBIT = Earnings before Interest and Tax (income before deducting interest and taxes)
T = Tax
wd = Proportion of debt
rd(1- T) = Cost of debt after tax
we = Equity Proportion
re = Cost of equity

Company Value - The firm value variable was measured using the PBV (Price Book Value) as an indicator. This was calculated by dividing the price per share by the book value per share. The stock price and book value per share at the close of the year concerned from 2010-2019 were the data used.

Environmental Performance can be measured via several indicators, including ISO 14001 certificate and PROPER scoring. Using the ISO 14001 certificate, this research assessed environmental performance through a dummy, where a score of 1 was given for companies with the certificate and 0 for those without between 2010 and 2019.

3.2. Data Analysis

The analytical method used was the independent sample t-test difference test, estimated through the IBM SPSS 26 software. The normality test, to verify the normal distribution of the data, and hypothesis testing was conducted. Subsequently, an independent sample t-test was performed to determine an increase after the implementation of Indonesia Act No. 39 of 2014 concerning Plantations.

4. Results and Discussions

4.1. Normality test

Using IBM SPSS 26, this research examined improvements in capital structure, economic value added, company value, and environmental performance in plantation companies listed on the Indonesia Stock Exchange after the implementation of Indonesia Act No.39 of 2014 concerning Plantations. The total number of observations used in this research was 100. First, the normality test was performed to determine that the data was normally distributed. This was conducted using the Kolgomorov-Smirnov test with condition that p-value (Sig) > 0.05 indicates normal distribution. The results obtained a significance value of 0.255 meaning the data used was normally distributed.

4.2. Hypothesis testing

Decision-making on the independent sample t-test difference test was performed by observing the t-value in the t-test for the Equality of Means column and the significance value (Asymp. Sig. (2-tailed)). A negative (-) t-

value indicates an increase after the implementation of Indonesia Act No. 39 of 2014 concerning Plantations, while a positive (+) score denotes a decrease. Meanwhile, a significance value of > 0.05 indicated that H0 was accepted while a value of <0.05 implied a rejection. The hypotheses were as follows:

Table 1. Result of hypothesis testing

Variable(s)	t-stat	Asymp. Sig. (2-tailed)	Decision
DER	-2.244	0.027	Accepted
EVA	-1,647	0.103	Accepted
PBV	5,669	0.000	Accepted
EPF	-0.595	0.553	Accepted

Table 1 above shows that the variables DER, EVA, and Environmental Performance had negative (-) t-values, indicating an increase after the implementation of Indonesia Act No. 39 of 2014 concerning Plantations, while PBV signified a decrease due to its positive (+) value. The H_0 was rejected or the Ha was accepted for the DER and PBV variables based on significance values<0.05 in the Asymp. column. Sig (2-tailed), suggesting a significant difference after the implementation of the act. Conversely, the significance values of EVA and Environmental Performance variables were> 0.05, and the H_0 was accepted or Ha rejected, denoting an insignificant difference after the act was implemented.

Table 1 also shows the DER value was -2.244 with Sig (2-tailed) = 0.027 < 0.05, implying a significant increase of 2.244 in the capital structure after the implementation of Law no. 39 of 2014 concerning Plantations. This indicates a greater use of corporate debt than equity after the law was implemented, signifying creditors' trust and willingness to lend to Indonesian plantation companies increased. The EVA value obtained was -1.647 with Sig (2-tailed) = 0.103> 0.05, meaning there was an insignificant increase of 1.647 in EVA after the implementation of this law. These results support the public interest theory, stating that regulations are the result of public demand for repairs to market failures (Scott, 2015). Following the implementation of Indonesian Act No. 39 of 2014 about Plantations, there was an increase of 1.647 in the EVA value.

Also, the PBV value estimated was 5.669 with Sig (2-tailed) = 0.000< 0.05, suggesting a significant decrease of 5.669 in firm value after the implementation of Indonesian Act No. 39 of 2014 concerning Plantations. The decline in firm value indicates a lower stock price compared to the book value per share, possibly because some companies experienced a decrease in total equity and an increase in total debt. As the trade-off theory states, the use of debt can increase the value of the company to a certain point, after which it reduces. The environmental performance value obtained was -0.595

with Sig (2-tailed) = 0.553> 0.05, denoting an insignificant increase of -0.595 in environmental performance after the implementation of Indonesia Act No. 39 of 2014 concerning Plantations. After the implementation of the act, the value of environmental performance increased, all be it insignificantly. This indicates a need to improve the level of environmental performance in Indonesia, which the enactment of the job creation act is expected to significantly increase in the future.

5. Conclusions

This study concludes that there is a significant improvement in the capital structure after the implementation of Indonesia Act No. 39 of 2014 concerning plantations. Besides that, economic value added is not significant after the implementation of Indonesia Act No. 39 of 2014 concerning Plantations. In addition, this study indicates that there a significant decrease in the value of the company after the implementation of Indonesia Act No. 39 of 2014 concerning Plantations.

Meanwhile, this study found that the environmental performance not significant after the implementation of Indonesia Act No. 39 of 2014 concerning Plantations. The purpose of this research was to provide empirical evidence of increased capital structure, economic value added, firm value, and environmental performance in plantation companies listed on the Indonesian Stock Exchange after the implementation of Indonesian Act No. 39 of 2014 about Plantations. These variables were represented using DER, EVA, PBV, and ISO 14001, respectively.

However, many indicators can be used in future research, such as Tobin's Q as a firm value indicator or PROPER score to determine environmental performance. This research was also limited to oil palm plantation companies listed on the Indonesia Stock Exchange from 2010-2019. Further research can explore companies in other fields or increase the number of years of observation.

As the public interest theory states, the creation of regulations is a response to the public demand for the correction of market failures (Scott, 2015). Therefore, this research is expected to provide suggestions for the Indonesian government regarding the implementation of several laws. The amendment of Indonesian Act No. 18 of 2004 to Act No. 39 of 2014 concerning Plantations has led to an increase in economic value added of companies, as well as the possibility to improve environmental performance in accordance with the objectives of the Job Creation Act as a replacement for Indonesia Act No. 39 of 2014 concerning Plantations.

This research is also expected to provide suggestions for company management regarding the significant increase

in DER, which enable better debt management. However, the increased debt and decrease in total equity reduce firm value. According to the trade-off theory, the use of debt can increase the value of a company to a certain point, after which it reduces.

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