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FINANCIAL PERFORMANCE ANALYSIS OF INDONESIAN PUBLIC LISTED COAL COMPANIES REGARDING DMO PRICE POLICY

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Abstract. Indonesia has a great potential in natural resources in term of coal resources. The average ratio of the nation's coal production being exported from 2000 to 2014 is 75.4%. With a high ratio of national coal production being exported rather than for domestic market, Indonesia is currently leading the global coal exporters with a total contribution to global coal exports of 28.59%. In March 2018 the government are issuing the DMO price policy written in Government Regulation No. 8/2018 and Ministry of Energy and Mineral Resources Regulation No. 19/2018 related to guidance of the determination of the coal price for electricity that is supplied in the public interest protect domestic market needs. This research aims to obtain empirical evidence about the differential in the financial performance of Indonesian Public Listed Coal Companies before and after the Domestic Market Obligation price policy. This research will be using difference-in-difference method with Return on Asset ratio using 2 period of event window which was 2 quarter before and after the regulation was issued. The analysis indicates that the short term effect of the Domestic Market Obligation price policy issued by the government did not give a significant impact towards the financial performance of Indonesian Public Listed Coal Companies.

Keywords: Financial Performance; Coal Industry; Profitability Ratio; Difference-in-Difference

INTRODUCTION

Indonesia has a great potential in natural resources in term of coal resources. The coal production in Indonesia has increased rapidly from 77 million ton in 2000 to 458 million ton in 2014 (Kementerian Energi dan Sumber Daya Mineral, 2015). The average ratio of the nation's coal production being exported from 2000 to 2014 is 75.4% (Kementerian Energi dan Sumber Daya Mineral, 2015). With a high ratio of national coal production being exported rather than for domestic market, Indonesia is currently leading the global coal exporters countries by ranked number 2 after Australia, with a total contribution to global coal exports of 28.59%. (The Global Economy, 2016). From a total of 891 billion ton of global coal reserves, Indonesia has only around 37 billion ton coal reserves or 4.15% of total global coal reserves (British Petroleum , 2018). Based on that matter, on 8th March 2018, Minister of Energy and Mineral Resources issued a number of regulations related to guidance of the determination of the coal price for electricity that is supplied in the public interest which is written in Government Regulation No. 8/2018 and Ministry of Energy and Mineral Resources Regulation No. 19/2018. The government issued the regulations to protect domestic market needs because Indonesian coal producers sell most of their production for export.

Based on the problem statement, the objective of this research is to analyze and measure the short term impact of DMO pricing policy (1395K/30/MEM/2018) towards the financial performance of Indonesian public listed coal companies. This research will be using Return on Assets and Return on Equity ratio to analyze the financial performance of the company and difference-in-difference method to analyze the effect of DMO price policy towards financial performance.

LITERATURE REVIEW

DMO Price Policy in Indonesia

On 8 March 2018, PerMen 19/2018 was issued as the second amendment of PerMen 7/2017. Based on PerMen 19/2018, the Minister of Energy and Mineral Resources shall determine the selling price of coal for domestic needs based on the quality of the coal. The Minister of Energy and Mineral Resources considers the public interest in determining the coal price. On 9 March 2018, KepMen 1395K/30/MEN/2018, concerning the "Coal Selling Prices for Electricity Supply for Public Interest", was issued as an implementing regulation of PerMen 19/2018 and PP 8/2018.

Financial Statement Analysis

According to Munawir (2007), financial statements are the results of the accounting process which is used as a tool to communicate between the financial data with related parties. Financial Statement Analysis is the process of analyzing financial statement with the aim of providing additional information for the management to be used for decision making, or for other parties such as investors and shareholders to analyze the condition of the company.

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Financial Ratios Analysis

Financial ratios are common analytical tool to analyze the overall firm's financial performance. Financial ratios are very important and effective tool for external parties who wanted to assess a company based on the financial statements.
Financial ratios divided into categories, which are profitability, liquidity, efficiency, and leverage ratio. In this research, the author will only focusing on profitability ratios. According to Gitman (2012), profitability ratios is a tool to measure the overal firm's efficiency in generating profits, with a certain level of sales, total assets, or the owner's investment as a group. Financial ratios which are categorized as profitability ratios are:

- Return on Assets, this ratio is a tool to analyze how effective a company is in generating profits by utilizing its assets (Investopedia, 2019). The formula is as stated below:

$$\text{Return on Assets} = \frac{\text{Net Profit}}{\text{Total Assets}}$$

- Return on Equity, this ratio is a tool to measure the firm's ability to earn a return on their equity investments (Investopedia, 2019). The formula is as stated below:

$$\text{Return on Equity} = \frac{\text{Net Profit}}{\text{Total Equity}}$$

Difference-in-Difference Method

The Difference-in-Difference (DiD) method is a research design for estimating causal effects. The DiD design is usually based on comparing de facto four different groups of objects. Three of these groups are not affected by the treatment. In many applications, "time" is an important variable to distinguish the groups. (Lechner, 2011)

METHODOLOGY

Data Collection

The data used in this study are secondary data, because the data taken indirectly from the source but obtained from the second party or third party by collecting financial report from the Bursa Efek Indonesia website and the companies' annual report. The data needed for this research consist of the annual and quarterly financial statements for the period of 2017 to 2018.

Calculate Financial Ratios

The financial ratios chosen to represent the companies condition is Return on Assets, the data is chosen from 2nd quarter of 2017 to 4th quarter of 2018. The data was collected from the annual and quarterly report. The Return on Asset equation used to this research is as follows:

- $\text{Return on Assets} = \frac{\text{Net Profit}}{\text{Total Assets}}$

The dependent variable is the Return on Assets and Return on Equity ratio, because the ratios will respond to the changes of the independent variables which are Net Profit, Total Assets, and Total Equity.

Difference-in-Difference Analysis

The author use difference-in-difference method to evaluate the impact of Domestic Market Obligation price regulation towards the Indonesian public listed coal companies financial performance represented by the ROA ratio by comparing the pre- and post-intervention change. The period of event window is -2 quarters before and +2 quarters after the event date. The event window was chosen since the government issued Domestic Market Obligation price regulation at March 2018.
The data that are being processed for difference-in-difference comparison were divided into two groups and separated by two different time period. These group consists of treatment group and historical control group. Historical control group is the type of control group that are currently receive a treatment (Lechner, 2011).
The treatment group is the financial ratio of Indonesian public listed coal companies after the government issued Domestic Market Obligation price regulation and the control group is the financial ratio of Indonesian public listed coal companies before the government issued Domestic Market Obligation price regulation.

FINDINGS AND ARGUMENT

The analysis outcome using difference-in-difference method stated that the issuance of Domestic Market Obligation price policy did not give a significant impact towards the financial performance of Indonesian Public Listed Coal Companies represented with the Return on Assets ratio. The table below is the outcome of difference-in-difference analysis using StataMP software:

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Table 1. Difference-in-Difference Analaysis

Source	SS	df	MS	Number of obs	=	68
				F(3, 64)	=	1.85
Model	.077378467	3	.025792822	Prob > F	=	0.1471
Residual	.892549125	64	.01394608	R-squared	=	0.0798
				Adj R-squared	=	0.0366
Total	.969927592	67	.014476531	Root MSE	=	.11809

roa	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
dtr	.0121915	.0405057	0.30	0.764	-.0687281	.093111
dt	.0756982	.0405057	1.87	0.066	-.0052214	.1566177
did	-.017806	.0572838	-0.31	0.757	-.1322435	.0966315
_cons	.0722657	.0286419	2.52	0.014	.015047	.1294844

Table 1 presents the estimation result of difference-in-difference estimation analysis, the focus of interest in above table is the ρ-value of the DID which exhibits the number of 0.757. The difference-in-difference ρ-value is greater than the significant level being used for the analysis which is 0.05, it means that there is no significant difference between the Return on Assets of Indonesian Public Listed Coal Companies before and after the göverment issued the regulation.

CONCLUSIONS

Based on the research done by the author, the conclusion of this study is that the analysis indicates that the short term effect of the Domestic Market Obligation price policy issued by the government did not give a significant impact towards the financial performance of Indonesian Public Listed Coal Companies.

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