

## THE EFFECT OF THE INCREASE IN FUEL PRICE IN 2022 ON ABNORMAL RETURN IN THE OIL MINING COMPANY SUB-SECTOR

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**Abstract** – The fuel subsidy provided by the Central Government is beneficial for the community to get affordable prices. The amount of fuel subsidies from year to year, which in general is increasing, of course, has an impact on the increasingly heavy burden on the state budget. The very significant increase in fuel subsidies in 2022 resulted in the government reducing fuel subsidies which caused an increase in fuel prices on September 3, 2022. One of the impacts of the increase in fuel prices is abnormal returns. This study aims to examine the effect of rising fuel prices in 2022 on abnormal stock returns in the oil mining companies sub-sector. This study uses a quantitative method with the method of analysis of event studies. The research period used was 37 days. The sampling technique used nonprobability sampling technique with purposive sampling method. The number of samples used is 5 companies. The analysis technique used is a different test or paired sample T-test which has been processed using SPSS 27 software. The results show that there is no difference in abnormal stock returns before and after the 2022 fuel price increase in shares of companies in the mining subsector. oil. There is no difference because the sample which represents the population of the mining company sub-sector has no direct relationship with the increase in fuel prices. The results of this study can be used as a reference, consideration, and additional knowledge.

**Keywords:** Increase in fuel prices, abnormal returns, event studies, oil mining companies.

### I. INTRODUCTION

Fuel oil is a commodity that is needed by all levels of society, both for developed and developing countries. One of the commonly used fuels in Indonesia is as vehicle fuel. Currently, the Government of Indonesia provides fuel subsidies in the form of 2 types of Indonesian oil and mining company oil (PERTAMINA), namely "Pertalite" products and "Solar" products.

There is a significant need for fuel subsidies (BBM) in 2022 due to rising crude oil prices on the global market and high domestic demand for fuel. The following is data on the realization of energy subsidy spending during 2019-2022:

**Table 1.** Subsidy Spending 2019-2022 (In trillions)

	2019	2020	2021	2022
Subsidi Energi	Rp144,4	Rp108,8	Rp188,3	Rp551,2

Based on these data, it appears that there will be an increase of up to three times in 2022 for energy subsidies. This energy subsidy includes fuel subsidies, LPG gas subsidies, and electricity subsidies.

The Indonesian government is taking steps to reduce fuel subsidies (BBM) with the aim of alleviating subsidized energy spending,

increasing the efficiency and effectiveness of routine spending, and considering other factors. One of the policies taken is to increase the selling price of fuel. The government has decided to adjust the selling price of fuel which will take place on Saturday, 3 September 2022 at 14.30 WIB. With the price of subsidized pertalite fuel which was originally priced at Rp. 7,650 per liter increased to Rp. 10,000 per liter, then diesel which was originally Rp. 5,150 per liter to Rp. 6,800 per liter.

The increase in fuel prices, it is possible for an exponential impact to occur for all industrial sectors and all levels of society in Indonesia. Part of the affected industry is the capital market industry. The capital market is a means for investors or owners of capital to invest. In the development of the capital market in Indonesia which shows a meeting between capital owners with excess funds and those who need funds. The role of the capital market is very strategic for national development as well as a source of financing. One of the descriptions of capital market players is that stock prices fluctuate. Share prices can occur or are formed because of the strong demand and strong supply of a share, where if the amount of demand for shares increases and is accompanied by a fixed value assumption, the share price can increase.

Abnormal return is one of several indicators of securities trading transactions on the IDX that can be identified to measure the reaction of the capital market to the announcement of an increase in fuel prices. Abnormal returns according to (Hartono, 2017) namely excess over real returns occur in normal returns, or it can also be interpreted that abnormal returns are the difference between real returns and expected returns. Expected return is the estimated return, while normal return is the return desired by investors. Return is positive if the return obtained is more than the desired return. On the other hand, the return is negative if the return obtained is less than the desired return (Mujiani et al., 2020).

The abnormal return function is to measure the magnitude of the influence of events on stock prices. Abnormal return can be negative or positive. If certain events do not occur, such

that the actual return generally does not differ significantly from the expected return. But on the contrary, when certain events occur that may have an impact on changes in cash flows in the future, such that the market can react to this information. This has implications for actual return values that are different compared to expected returns (Kusdarmawan & Abundanti, 2018).

In the mining sector listed on the Indonesia Stock Exchange, there are 5 (five) Company sub-sectors. Each of these company sub-sectors has a core business that is directly affected because it has a relationship with rising or falling oil prices and is not directly affected because it is not used as the main component of sales for the company. If the shares in the oil and gas sub-sector companies are related to fuel information, when the government changes its policy regarding the increase or decrease in fuel prices, it will get a quick response from investors or market players.

Based on this phenomenon, it is in line with research conducted by Lukman (2023) that the share prices of several land transportation companies in the timeline window event have no effect on information on the increase in subsidized fuel prices on September 3, 2022. Then the same is the case with research by Kusdarmawan & Abundanti (2018), and Anisah et al. (2017), that is, there is no difference in abnormal returns before and after the announcement of the decline in fuel prices. However, in the research conducted by Hadyansyah (2013) explained that there are positive changes that are not significant for abnormal returns. This was caused by information leakage within the issuer's scope.

Contrary to some of the research above. Research conducted by Kusnandar & Bintari (2020) states that the market reacts to announcements or information about changes that have occurred. This market reaction is indicated by the abnormal returns obtained by capital market players, especially investors. This is the same as the research conducted by Asmas (2018) where the results showed that there was a significant difference between the abnormal return (AR) in the event before and after the fuel price increase.

Based on the information above and some of the results of previous studies that are still inconsistent, this study intends to re-examine whether there are differences before and after the 2022 fuel price increase in the abnormal returns on shares of companies in the petroleum mining sub-sector, either positively or negatively. This research differs from previous research, in that the researcher used company shares in the mining sub-sector as the object of research.

The hypothesis of this research is in line with the results of research conducted by Kusnandar & Bintari (2020) which states that the market reacts to announcements or information about changes that have occurred. This market reaction is indicated by the abnormal returns obtained by capital market players, especially investors. As well as research conducted by Asmas (2018) where the results of the research show that there is a significant difference between abnormal returns (AR) in the events before and after the fuel price increase.

Based on the formulation of the problem, literature study, previous research that has been described and the framework that has been made above. So the hypothesis in this study is as follows:

H1: There is a difference in abnormal returns before and after the increase in fuel prices (BBM).

## II. METHODS

The method applied in this study is the event study method. The research period used is 37 exchange days consisting of an estimation period and an event period. The estimation period used in this study is 30 days. While the event period used is 7 days, consisting of 3 days before the announcement, on the day of the announcement of the fuel price increase and 3 days after the announcement. The timing of the events carried out in this research is the date of issuance of the announcement of the increase in subsidized fuel on September 3<sup>rd</sup>, 2022.

This study uses a method with a quantitative approach. the population in this study are mining sub-sector companies listed on the IDX in 2019-2023. In this study using nonprobability sampling technique. Nonprobability sampling is a sampling technique that does not give each element or member of the population the same opportunity to be selected as a sample. The method used is purposive sampling, namely the technique of determining sample criteria with certain considerations. The criteria for determining the sample in this study are listed as follows:

1. Companies that have consistently joined the mining sector on the Indonesia Stock Exchange (IDX) during the 2019-2023 research period.
2. Companies in the mining sector that have gone IPO.
3. Mining sector companies consistently report annual reports.
4. Companies that have a stock price of 1000-5000.

The results of the sample selection process found five samples of companies in the mining sub-sector to be studied. These samples are:

**Table 2.** Research Sample

No.	Nama Perusahaan	Indeks Saham Perusahaan
1.	PT Samindo Resources TBK	MYOH
2.	PT Bukit Asam TBK	PTBA
3.	PT Pertosea TBK	PTRO
4.	PT Super Energy TBK	SURE
5.	PT Timah TBK	TINS

The table above is the name of the company along with the company's stock index that will be used as a sample in this research. From all existing samples, a comparison of abnormal stock returns before and after the 2022 fuel price increase will be analyzed.

The type of data applied in this research is secondary data. Data processing and data analysis in this study used SPSS 27 software. The tests carried out in this study included

descriptive statistical analysis, data normality test and difference test as a hypothesis test as described below.

### III. RESULTS AND DISCUSSION

Hypothesis testing was carried out in this study using the Paired Sample T-Test. This test was conducted to compare two variables that are interconnected. It is also carried out if the data is normally distributed, so that after carrying out the data transformation, and the data is normally distributed, all of them can use this test. The results of the paired sample t-test are as follows:

**Table 3.** Different Test Results

Paired Samples Test								
	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error	95% Confidence Interval of				
				Mean	Lower			
Pair 1   AARSBLM - AARSSDH	-0,002870017	0,010086606	0,004510867	-0,015394192	0,009654159	-0,636	4	0,559

Based on the results of the different test conducted using the paired sample T-test that then and the results of the significance value (two-tailed)  $0.559 > 0.05$  ( $\alpha = 5\%$ ), the decision is H1 is rejected, meaning that there is no difference in the average abnormal return between before and after the 2022 fuel price increase. Having a significance value of 0.559 allows that the five sample companies have no direct influence on the 2022 fuel price increase.

Based on testing the hypothesis using a paired sample t-test, the results show that the hypothesis is rejected, which means that there is no difference in abnormal stock returns for companies in the oil mining sub-sector both before and after the increase in fuel prices in 2022.

There is no difference in the abnormal return on shares of oil mining sub-sector companies both before and after the 2022 fuel price increase. There are five sample companies used in this study, namely PT Samindo

Resources TBK, PT Bukit Asam TBK, PT Pertosea TBK, PT Super Energy TBK, PT Timah TBK. Based on the five samples, it is known that the core business of these companies is not directly affected by the increase in fuel prices.

The next reason is that there is no difference in the abnormal return on shares of companies in the oil mining sub-sector both before and after the increase in fuel prices in 2022, namely the government's strategy of conducting socialization in advance which states that there will be an increase in fuel prices before September 3, 2022. With this information this socialization, oil mining sub-sector companies have prepared strategies to maintain their performance.

The results of this study reinforce the research that was previously carried out by Lukman (2023) entitled "Response of Land Transportation Share Prices to the 2022 Increase in Subsidized Fuel Oil". From this study, the results stated that the stock prices of ground transportation companies before and after had no influence on the announcement of the increase in subsidized fuel prices on September 3, 2022.

### IV. CONCLUSION

The results of data processing show that the increase in fuel prices on September 3, 2022 has no effect on the abnormal return on shares of companies in the petroleum mining sub-sector. It can be concluded that the sample in this study has no influence on the increase in fuel prices in 2022 because the core business in the company sample is not directly affected.

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