



## Factors affecting the policy for determining the retail selling price of gas oil in Indonesia



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### ABSTRACT

Presidential Regulation No. 191/2014, regulates the subsidy policy for Gas Oil, which is a fixed subsidy. Meanwhile, the retail selling price of Gas Oil will fluctuate in the society according to the formula calculation. However, since April 2016 the price of Gas Oil has been fixed. In certain cases, the determination of the retail selling price may differ from the calculation of the formula considering the state's financial capacity, the purchasing power of the people, and the real economy. This research will examine the influence of the state's financial capacity, the purchasing power of the people, and the real economy, either partially or simultaneously, on the policy of determining the retail sale price, and its impact. The test was carried out through multiple linear regression analysis using IBM Statistics 20. The results showed that the state's financial capacity and the real economy had a significant effect on the retail selling price policy for JBT Solar Oil. Meanwhile, people's purchasing power does not have a significant effect. The determination of the retail selling price of Gas Oil that is not in accordance with the calculation formula may give an impact on society, business entities, and the government.

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## Introduction

In order to allocate more beneficial budget to the society, the Government has reformed the fuel subsidy policy as outlined in Presidential Regulation Number 191 of 2014 concerning the Supply, Distribution and Retail Selling Price of Fuel as amended by Presidential Regulation Number 43 of 2018. Important changes regulated in the Presidential Regulation are the revocation of the Gasoline subsidy and the change of the Gas Oil subsidy scheme, from floating subsidy to fixed subsidy. The implementation of this policy has a significant impact on the fuel subsidy budget allocation in the state budget which has been significantly lower since 2015. Regarding the Gas Oil fixed subsidy policy, the Minister of Finance has set the Gas Oil subsidy amounting to IDR 2,000.00 (two thousand rupiah) per liter effective January 1 2018, then become IDR 1,000.00 (one thousand rupiah) per liter effective from January 1, 2020.

With the application of fixed subsidy for Gas Oil, the retail selling price of Gas Oil will move following the movement of the product market price. However, since April 2016 until now the retail selling price of Gas Oil has not changed, which is IDR 5,150.00 per liter. Thus, the application of a fixed subsidy policy for Gas Oil is followed by a fixed retail selling price. This is not an ideal condition, because it will create a gap between the retail selling price according to the calculation and the retail selling price determined by the Government. When setting the retail selling price for Gas Oil at IDR 5,150.00 per liter, the price may already be the same as the price according to the formula calculation, or lower so that a subsidy is needed, or it may even turn out that the price is higher than it should be.

Several researchers have conducted research on the impact of changes in fuel prices at the national macroeconomic level. Hartono in his research entitled "The Impact of Rising Fuel Prices on the World Market is a challenge for the Indonesian Economy" states that

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the increase in subsidized fuel prices will provide large savings for the state budget (Setyo Hartono, 2011). Furthermore, in the research entitled "The Impact of Changes in Oil Fuel Prices on Agricultural Sector Performance" stated that the inflation elasticity of fuel prices was 0.044%. This means that if the fuel price is increased by 1%, inflation will increase by 0.044% (Simatupang & Priyatno, 2016). Meanwhile, Hasan in his research entitled "The Impact of Revocation of Fuel Subsidies for Indonesian State Finances in Good Governance Perspective", said that the increase in fuel prices led to an increase in the number of unemployed which led to an increase in poverty rates in Indonesia (Hasan, 2018).

However, research on the factors that influence the selling price policy of Gas Oil has never been done. Therefore, this study will examine the effect of the state's financial capacity, people's purchasing power, and the real economic conditions, either partially or simultaneously, on the determination of the retail selling price of Gas Oil in the society. These three variables are factors in determining the retail selling price of fuel as regulated in Article 14 Paragraph (8) of Presidential Regulation Number 43 of 2018. In addition, this research will also examine the impact of the implementation of the Gas Oil fixed subsidy policy on the society, business entities, and the government. This research was conducted on the determination of the retail selling price of Gas Oil since 2018 (according to the entry into force of Presidential Decree Number 43 of 2018) until 2020. This research is expected to be useful for policy makers, especially related to subsidy policies and policies for determining the retail price of fuel.

Based on the explanation above, the hypotheses in the research can be submitted as follows:

*H1: The state's financial capability has a significant positive effect on the decision to determine the retail selling price of Gas Oil.*

*H2: The ability of people's purchasing power has a significant negative effect on the decision to determine the retail selling price of Gas Oil.*

*H3: Real economic conditions have a significant positive effect on the decision to determine the retail selling price of Gas Oil.*

*H4: The state's financial capacity, people's purchasing power, and real economic conditions simultaneously have a significant effect on the decision to determine the retail price of Gas Oil.*

The organization of this text will be as follows: Literature Review, Methodology, Empirical Data and Analysis, Results and Discussion, and Conclusions.

## **Literature Review**

### **Public Policy**

Thomas R. Dye stated that public policy is whatever the government chooses to do and not do. Meanwhile, William N. Dunn, said that public policy is a series of interrelated choices made by government agencies or officials in areas related to government tasks, such as defense and security, energy, health, education, public welfare, crime, urban and others (Tambunan & Bratakusumah, 2016). Public policy comes with the aim of regulating the aspired common life (R. Nugroho, 2020). The policy to do something is usually stated in the provisions or laws and regulations made by the government so that it has a binding and coercive nature. For example, the policy of reducing energy subsidies, both electricity subsidies and fuel subsidies.

At this time, regulatory policy is suggested to be based on four issues, with regard to the necessity public needs and interests; monopoly or oligopoly; based on the nation economic assets; and with regard to state safety (R. Nugroho, 2020). Furthermore, specific regulations require the existence of special regulatory policies, even if it is necessary to form a regulatory commission, including those relating to the energy sector (electricity and fuel). In simple terms, public policies can be grouped into three categories (R. D. Nugroho, 2006):

- i. Public policies that are macro or general or basic, in the form of the 1945 Constitution of the Republic of Indonesia, Laws / Government Regulations in Lieu of Laws, Government Regulations, Presidential Regulations and Regional Regulations.
- ii. Public policies that are meso or medium in nature, in the form of explanations of policy implementation, can be in the form of Ministerial regulations, Governor and Regent or Mayor regulations.
- iii. Micro public policies, such as policies whose regulations are issued by public officials under the Minister, Governor, Regent or Mayor.

### **Policy Implementation**

There are two options for implementing public policies, firstly by directly implementing them in the form of programs and secondly by formulating derivative policies from these public policies (R. D. Nugroho, 2006). Implementation of a policy will not be separated from the issues and pros and cons. The existence of resistance fluctuations, for example when there is an increase in the basic price of electricity, fuel prices, or prices for basic commodities is a natural thing and indeed risky (Setyawantika & Wiranto, 2016). Meanwhile, Merilee S. Grindle in her theory states that the success of implementation is influenced by two major variables, namely the content of the policy and the context of implementation. Meanwhile, Ripley and Franklin stated that the success of policy implementation was seen from the successful implementation leading to satisfactory performance for all parties, especially the expected beneficiary groups (Rositoh, 2015).

### **Fuel Subsidy**

Subsidies are payments made by the government to companies or the public with the aim of encouraging higher production or consumption or pushing prices lower (Milton & Orley, 1993). In addition, subsidies are also defined as payments made by the government to producers or distributors in an industry to avoid a decline in the performance of the industry concerned (Todaro & Smith, 2009). Subsidies can be divided into two forms, firstly in the form of money (cash transfers) and secondly subsidies in the form of goods or in-kind subsidies (Suparmoko, 2003). There are two models of subsidy financing in the context of fiscal policy:

- i. The direct subsidy model is a direct subsidy program that is received by a group of targets (targets) such as rice subsidies for the poor.
- ii. The indirect subsidy model is a subsidy program implemented for market intervention (market intervention). Usually in the form of subsidies to product prices, such as fuel subsidies and fertilizer subsidies.

In accordance with the provisions of Article 16 paragraph (2) of Presidential Regulation Number 191 of 2014, the subsidy policy for Gas Oil is to be given a fixed subsidy. Furthermore, referring to the provisions of Article 2 paragraph (1a) of the Regulation of the Minister of Energy and Mineral Resources Number 40 of 2018, the Minister of Finance sets the amount of the Gas Oil subsidy of IDR 2,000.00 (two thousand rupiah) per liter, effective from January 1, 2018. Then, the amount of the Gas Oil subsidy is set at IDR 1,000.00 (one thousand rupiah) per liter, effective January 1, 2020.

### **Retail Selling Price Calculation**

The determination of the retail selling price of Gas Oil as referred to in Article 14 paragraph (1) of Presidential Regulation Number 43 of 2018 is calculated based on the base price plus Value Added Tax (VAT) minus subsidies and added Motor Vehicle Fuel Tax (PBBKB). In Article 2 paragraph (1) of the Regulation of the Minister of Energy and Mineral Resources Number 40 of 2018 further regulates the calculation of the retail selling price of Gas Oil per liter is determined by a formula according to the base price plus VAT minus subsidies of a maximum of IDR 2,000.00 (two thousand rupiah) and added PBBKB. The amount of PBBKB is 5% (five percent). Furthermore, the retail selling price shall be rounded up in the amount of IDR 50.00 (fifty rupiah).

In Article 2 Paragraph (4) of the Regulation of the Minister of Energy and Mineral Resources number 40 of 2018 it is regulated that the retail selling price of Gas Oil is determined by the Minister of Energy and Mineral Resources every 3 (three) months or if deemed necessary the Minister of Energy and Mineral Resources can set it more than 1 (one) time every 3 (three) months. Regular fuel price determination aims to keep fuel prices close to real prices and close to national fuel prices with fuel market price) (Yusgiantoro, 2000).

Regarding the determination of the selling price of public goods, there are options for the government in providing public goods for the society, which can be sold at market prices, sold at a certain price level that is different from the market price, or given free of charge to consumers. Referring to the provisions in Article 14 paragraph (8) of Presidential Regulation Number 43 of 2018, in certain cases the Minister of Energy and Mineral Resources may determine the retail selling price of fuel that is different from the formula calculation, by considering state financial capacity, people's purchasing power, and/or the real economic and social society condition.

### **State Financial Capacity**

The state's financial condition can be described through a budget deficit or surplus, that is the difference between government revenues and government expenditures. Fiscal policy in Indonesia adheres to a budget deficit, which is government spending is greater than government revenue. Economists tend to calculate the state budget deficit not from absolute numbers, but rather from the ratio of the state budget deficit to Gross Domestic Product (GDP).

One way to overcome the deficit is through subsidy reduction. If subsidies are reduced, it will result in an increase in the price of the subsidized goods (Kunarjo, 2001). With the reduction of subsidies, the burden of subsidies in the state budget will also be reduced. The determination of the selling price of fuel can consider the budget deficit in the previous months. If there is a fairly wide budget deficit, the Government may consider increasing the selling price of fuel in the society through reducing subsidies.

Hartono in his research suggests that raising the price of subsidized fuel will provide big savings for the state budget. Furthermore, it is said that the increase in fuel prices will reduce fuel subsidies to tens of trillions of rupiah (Setyo Hartono, 2011). Meanwhile, Rivani in his research stated that the swelling of fuel subsidies will encourage the widening of the fiscal deficit so that it can disrupt the national economy (Rivani, 2014). In addition, Purwanto in his research reveals that the way to overcome the deficit is by removing subsidies or increasing subsidized fuel prices (Purwanto, 2013).

Thus, the state's financial capacity as reflected in the budget deficit has a positive effect on the decision to determine the retail selling price of Gas Oil. The higher the deficit, the determination of the retail fuel selling price will be closer to or even the same as the selling price according to the formula calculation.

### **People's Purchasing Power**

People's purchasing power is the ability of people as consumers to buy goods or services needed (Pawenang, 2016). One indicator that can be used to measure purchasing power is inflation (Septiadi, 2018). Inflation is defined as a process of increasing prices in general and continuously due to an imbalance in the flow of goods and money due to the increase in fuel prices set by the Government (Masrum, 2014). As an indicator that reflects changes in prices, inflation based on the consumer price index (CPI) is the most commonly used inflation indicator both in Indonesia and a number of other countries.

If people's purchasing power declines, some economists advise the government to prepare programs that directly touch the veins of the people's economy or pro-society programs (Hernaningsih, 2018). Thus, the determination of the selling price of fuel can consider the inflation rate in the previous months, so that inflation in the following month can be controlled. If inflation is high enough, the Government can take the option not to increase the selling price of fuel so that inflation can be controlled.

Hasan in his research said that the increase in fuel prices in Indonesia caused the prices of goods and services to rise, resulting in inflation in the Indonesian economy (Hasan, 2018). Besides, Simatupang and Friyatno in their research suggest that the inflation elasticity of fuel prices is 0.044%. This means that if the fuel price is increased by 1%, inflation will increase by 0.044% (Simatupang & Friyatno, 2016).

Thus, the purchasing power of the people as reflected by the inflation rate has a negative effect on the decision to determine the retail selling price of Gas Oil. In order to maintain people's purchasing power does not get worse when inflation is high, the Government will set the selling price of Gas Oil lower than the selling price based on the calculation of the formula.

### **Real Economic Conditions**

The endogenous growth theory developed by Paul Romer in the late 80s views that the existence of infrastructure, laws and regulations, political stability, government policies and bureaucracy as important factors that also affect economic growth (Ma'ruf & Latri, 2008). Government spending as one of the important instruments of fiscal policy is expected to be able to encourage economic activity and increase economic growth. Economic growth is an effort to increase production capacity to achieve additional output, which is measured using Gross Domestic Product (GDP) (Rahardjo, 2013).

In determining the selling price of fuel, the Government can consider the expected economic growth. The determination of the selling price of fuel can consider the economic growth in the previous months, so that the economic growth in the following month can be on target. If economic growth is not too high, the Government can take the option not to increase the selling price of fuel so that economic growth is not hampered.

Thus, the real economy as reflected by economic growth has a positive effect on the decision to determine the retail selling price of Gas Oil. When economic growth is not too high, the Government will tend to set the retail selling price of Gas Oil lower than the selling price based on the formula calculation. This is done to encourage better economic growth.

### **Research and Methodology**

This type of research is quantitative research that emphasizes theory testing through measuring research variables with numbers and analyzing data using statistical procedures. This research is focused on the implementation of the Gas Oil fixed subsidy policy which is reflected in the determination of its retail selling price. This research was conducted to examine the state's financial capacity, the purchasing power of the people, and the real economic condition in determining the retail selling price of Gas Oil, which will be tested through multiple linear regression analysis. In addition, this study will also explain the impact of the policy on determining the retail selling price of JBT Solar Oil on the society, business entities, and the government.

The sample in this study is the determination of the retail selling price for Gas Oil since the enactment of Presidential Regulation Number 43 of 2018 which has been amended by Presidential Regulation Number 191 of 2014. The research period was chosen between January 2018 to December 2020. This is because the data in that period is the latest data and has a higher level of completeness of information.

This research is a research using quantitative data. Meanwhile, the source of data used in this study is secondary data. Sources of secondary data in this study obtained from:

- i. APBN Kita document, which is found on the official website of the Ministry of Finance, for data on the percentage of the budget deficit.
- ii. Official Statistical News Document released by the Central Statistics Agency for data on the percentage of the inflation rate and the percentage of economic growth.
- iii. The official website of the Directorate General of Oil and Gas at the Ministry of Energy and Mineral Resources for basic price data for Gas Oil and retail selling price for Gas Oil.

In this study, the dependent variable is the policy of determining the retail selling price of Gas Oil. This policy is measured by the percentage difference between the retail selling price according to the formula calculation and the retail selling price determined by

the government. Meanwhile, the independent variables consist of the state's financial capacity, the people's purchasing power, and real economic conditions. The variable of the state's financial capacity is measured by the percentage of the budget deficit to GDP. Furthermore, the variable of people's purchasing power is measured through the inflation rate. Meanwhile, real economic variables are measured through the rate of economic growth. The measurement of the variables in the regression test entirely uses a ratio scale.

This study uses a quantitative approach in the form of associative. Quantitative approach sees the relationship of variables to the object being studied (causality) (Saputra & Suaryana, 2016). Then, we will examine how much influence the independent variable has on the dependent variable (Sugiyono, 2013).

Data analysis was carried out through descriptive analysis and statistical analysis. Descriptive analysis was performed using descriptive statistics (minimum, maximum, mean and standard deviation). Meanwhile, statistical analysis used is partial regression coefficient analysis (t test), simultaneous regression coefficient analysis (F test), and coefficient of determination analysis. All analyzes were performed using the IBM SPSS Statistics 20 program. However, before carrying out a regression analysis, the data quality will be tested first. This test is carried out through the classical assumption test which aims to ensure that the model meets the Best Linear Unbiased Estimator (BLUE) criteria. So, there are 7 (seven) test for this research results as follows:

- i. Normality Test
- ii. Multicollinearity Test
- iii. Autocorrelation Test
- iv. Heteroscedasticity Test
- v. Multiple Linear Regression Test
- vi. Simultaneous Hypothesis Test (F)
- vii. Coefficient of Determination

The model of data analysis in this research is as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e$$

Where:

Y = Variable of decision to determine the retail price of Gas Oil (KEB)

a = Constanta

b1, b2, b3 = Regression Coefficient

X1 = Variable of state financial capability (DEF)

X2 = Variable of people's purchasing power (INF)

X3 = Variable of real economic condition variable (GRO)

e = Standard Error (error rate) 5%

Furthermore, an analysis will be carried out regarding the impact of determining the retail selling price of Gas Oil which is not in accordance with the calculation formula. The analysis is carried out by providing an overview and explanation regarding the impact of the implementation of the Gas Oil fixed subsidy policy which is reflected in the determination of its retail selling price from the financial side to the public, business entities and the government.

## **Result and Discussion**

### **Descriptive Analysis**

During the research period, the retail selling price of Gas Oil set by the government did not change, which was IDR 5,150.00 per liter. Meanwhile, the retail selling price according to the formula calculation, fluctuates every month following the movement of the market price of fuel products. Thus, during this period the retail selling price of Gas Oil by the government is always different from the calculation results of the formula.

Based on descriptive analysis, it is known that the number of observed data (N) is 36 data. The calculation of the retail selling price of Gas Oil has an average of IDR 5,923.61 per liter, with the lowest value of IDR 3,150.00 per liter and the highest value of IDR 7,650.00 per liter. Meanwhile, the retail selling price of Gas Oil, which is determined by the Government, did not change, that is IDR 5,150.00 per liter.

**Table 1:** Descriptive Analysis Results

	N	Range	Min	Max	Mean	Std. Deviation
<b>Retail selling price according to the formula calculation</b>	36	4500	3150	7650	5923,61	1128,81
<b>Retail selling price determined by the government</b>	36	0	5150	5150	5150	0
<b>KEB</b>	36	,9617	-,3268	,6349	-,092698	,2132361
<b>DEF</b>	36	,0588	,0021	,0609	,015275	,0148107
<b>INF</b>	36	,0095	-,0027	,0068	,002081	,0023480
<b>GRO</b>	36	,0924	-,0419	,0505	,006205	,0296920
<b>Valid N (listwise)</b>	36					

### Normality

The test results through Kolmogorov-Smirnov show a significance value of Sig (2-tailed) is 0.389. This value is greater than 0.05. It can be concluded that the data used in this study was normally distributed.

**Table 2:** Normality Test (One-Sample Kolmogorov-Smirnov Test)

	Unstandardized Residual	
<b>N</b>	36	
<b>Normal Parameters<sup>a,b</sup></b>	Mean	0E-7
	Std. Deviation	,18110019
<b>Most Extreme Differences</b>	Absolute	,150
	Positive	,150
	Negative	-,114
<b>Kolmogorov-Smirnov Z</b>	,903	
<b>Asymp. Sig. (2-tailed)</b>	,389	

### Multicollinearity Test

The results of data processing from multicollinearity test is presented in the following table:

**Table 3:** Multicollinearity Test

<b>Model</b>	<b>Collinearity Statistics</b>	
	Tolerance	VIF
DEF	,990	1,010
INF	,961	1,040
GRO	,970	1,031

The test shows the tolerance value of the state financial capability variable (DEF) is 0.990; the people's purchasing power variable (INF) is 0.961; and real economic condition variable (GRO) is 0.970. The tolerance value of all variables used in this study is greater than 0.10. Meanwhile, the VIF value of the DEF variable is 1.010; INF variable is 1.040, and GRO variable is 1.031. The VIF value of the three independent variables in this study is less than 10. Thus, it can be concluded that the regression model in this study is free from multicollinearity problems.

### Autocorrelation Test

The results of data processing from autocorrelation test is presented in the following table:

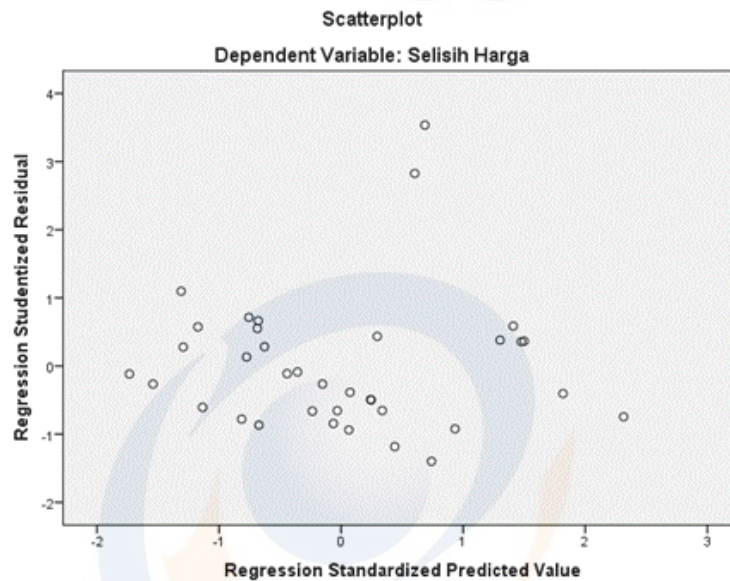
**Table 4:** Autocorrelation Test

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
,167	,028	-,069	,12925842	1,922

The value of the Durbin Watson (DW) test is 1.922, that is close to 2 (two), which reflects that there is no autocorrelation in the observational data. Based on the criteria (Sulaiman, 2002), if  $1.65 < DW < 2.35$  it can be concluded that there is no autocorrelation. The results of the DW test in this study resulted in a value of 1.922 which fell into the range  $1.65 < DW < 2.35$ .

**Heteroscedasticity Test**

How to predict heteroscedasticity in a model can be seen using Scatterplot pattern below:



**Figure 1:** Heteroscedasticity test.

Based on the scatterplot graph, it can be said that there is no heteroscedasticity. This opinion is based on the reason that the points in the image do not form a wavy pattern that widens then narrows and widens again, and does not form a certain clear pattern (not patterned).

**Regression Analysis**

To examine the influence of the dependent variable on the independent variable both partially and simultaneously, a regression test was carried out with a significance level of  $\alpha = 5\%$ . The t-test used to test whether there is a significant impact between independent variables and dependent variables separately.

**Table 5:** Regression Test Result

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	-,183	,061		-3,022	,005
DEF	5,034	2,172	,350	2,317	,027
INF	-12,959	13,906	-,143	-,932	,358
GRO	2,680	1,227	,333	2,183	,036

Based on the results of the regression analysis, the regression model in this study can be arranged as follows:

$$KEB = -0,183 + 5,034 DEF - 12,959 INF + 2,680 GRO + e$$

The negative constant value indicates the positive effect of the independent variable from DEF and GRO is smaller than the negative effect of the independent variable INF. If the independent variable increases or has an effect in one unit, the KEB variable will decrease.

**Partial Effect of DEF on KEB (Hypothesis 1)**

The significance value (Sig.) of DEF in this study is 0.027. This value is smaller than the significance value of  $\alpha = 5\%$ . From the results of the regression analysis obtained t-value of 2,317. With the two-sided test criteria, the t-table value is 2.037. The calculated t-value is 2,317, which is greater than the t-table value. Based on the significance value and t-value, then H1 is accepted. The relationship between the variables is positive. It means that the higher the budget deficit, the retail selling price of Gas Oil tends to increase closer to the price based on the formula calculation.

**Partial Effect of INF on KEB (Hypothesis 2)**

The significance value (Sig.) of INF in this study is 0.358. This value is greater than the significance value of  $\alpha = 5\%$ . From the results of the regression analysis obtained t-value of -0,932. With the two-sided test criteria, the t-table value is 2.037. The calculated t-value is -0,932, which is smaller than the t-table value. Based on the significance value and t-value, then H2 is rejected.

**Partial Effect of GRO on KEB (Hypothesis 3)**

The significance value (Sig.) of GRO in this study is 0,036. This value is smaller than the significance value of  $\alpha = 5\%$ . From the results of the regression analysis obtained t-value of 2,183. With the two-sided test criteria, the t-table value is 2.037. The calculated t-value is 2,183, which is greater than the t-table value. Based on the significance value and t-value, then H3 is accepted. The relationship between the variables is positive. It means that the higher the real economic conditions, the retail selling price of Gas Oil tends to increase closer to the price based on the calculation of the formula.

**F Test (Simultaneous)**

Below are the results of hypothesis tests simultaneously from the variables in this research:

**Table 6:** F-Test Result

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,444	3	,148	4,121	,014
	Residual	1,148	32	,036		
	Total	1,591	35			

Based on the test results, it is known that the probability value of the dependent variable (DEF, INF, and GRO) in this study is 0.014. This value is smaller than the significance value of  $\alpha = 5\%$ . The ANOVA test obtained F-value of 4.121. Furthermore, one-sided testing criteria obtained F-table of 2.89. Because F-value (4,121) > F-table (2,89), then H4 is accepted that simultaneously there is a significant effect of DEF, INF, and GRO on KEB. Thus, it can be concluded that the dependent variables (DEF, INF, and GRO) together are relevant to explain the retail pricing policy of Gas Oil.

**Coefficient of Determination****Table 7:** Coefficient of Determination Coefficients

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,528 <sup>a</sup>	,279	,211	,1893991

Based on the regression test, the coefficient of determination (Adjusted R2) is 0.211. The Adjusted R2 value of 0.211 means that there is a 21.1% contribution from the DEF, INF, and GRO variables to the policy of determining the retail selling price of Gas Oil. While the remaining 78.9% is explained by other variables not examined in this study.

**Discussion****Effect of State Financial Capacity on Determination of Gas Oil Retail Selling Price**

This finding shows that the government's decision to set the retail selling price of Gas Oil is in accordance with the provisions in Presidential Regulation Number 43 of 2018, that is by considering the state's financial capacity. The findings of this study are in line with the results of research conducted by Rivani (2014) and Hartono (2011) which essentially states that increasing subsidized fuel prices or reducing subsidies will provide savings for the state budget.

Based on the research results, when the budget deficit is high, the retail selling price of Gas Oil will tend to get closer to the selling price based on the calculation of the formula. This aims to reduce the potential difference between the retail selling price set by the Government and the price based on the formula calculation. In addition to bearing the burden of the Gas Oil subsidy in the state



budget, the lack of a difference due to the determination of the retail selling price of Gas Oil that is not according to the formula calculation also has the potential to increase the burden on the state budget in the future.

Referring to the provisions of the state-owned enterprise Law, the Government must provide compensation for the lack of revenue for business entities due to the difference in the retail selling price of Gas Oil resulting from the fixed subsidy policy. As a result, the goal of reducing the burden of fuel subsidies in the state budget cannot be fully achieved, because the Government still has to provide compensation to business entities.

#### **Effect of People's Purchasing Power on Determination of Gas Oil Retail Selling Price**

This finding shows that the Government has not considered the purchasing power of the society in making policies to determine the retail selling price of Gas Oil. Thus, the government's decision to set the retail selling price of Gas Oil is not in accordance with the provisions in Presidential Regulation Number 43 of 2018. The findings of this study are not in line with the research conducted by Hasan (2018) and (Panglima Saragih, 2011) which in essence stated that the removal of subsidies, which means increasing subsidized fuel prices, has an effect on increasing inflation.

Gas Oil is only intended for certain sectors, most of which are public vehicles for transportation of people or goods, public service vehicles, sea transportation with certain criteria, as well as land transportation in the form of trains. Meanwhile, the user sector of Gas Oil for goods transportation does not include the transportation of plantation and mining products with more than six wheels.

With the limited user sector of Gas Oil and the various factors that determine inflation, the Government pays little attention to the purchasing power factor in determining the retail selling price of Gas Oil. Moreover, since April 2016 there has been no change in the retail selling price of Gas Oil, which is feared to affect the people's purchasing power. However, it is possible that in the policy of setting prices for certain other commodities, for example the price of basic necessities in the form of food, the Government makes the purchasing power of the people an important factor considering that these commodities have a large enough contribution to the movement of the inflation rate.

#### **Effect of Real Economic Conditions on Determination of Gas Oil Retail Selling Price**

This finding shows that the Government considers real economic conditions in making policy on determining the retail selling price of Gas Oil. The findings of this study are in line with the findings of research conducted by Hasan which states that an increase in fuel prices will increase the number of unemployed which causes an increase in poverty (Hasan, 2018). In addition, Saptanto in his research suggests that the increase in fuel prices can reduce the level of business profits which has an impact on real economic conditions (Saptanto et al., 2016).

Based on the research results, when the economic growth rate is not too high, the retail selling price of Gas Oil will tend to be lower than the selling price based on the formula calculation. It aims to encourage economic growth to continue to increase. This is in line with the endogenous growth theory developed by Paul Romer which states that the existence of infrastructure, laws and regulations, political stability, government policies and bureaucracy are important factors that also affect economic growth. Government spending as one of the important instruments of fiscal policy is expected to be able to encourage economic activity and increase economic growth.

The policy set by the Government for Gas Oil is in accordance with the issues presented by (R. Nugroho, 2020), that Gas Oil is a type of fuel that relates to the lives of many people and naturally applies monopoly or oligopoly. In addition, a special policy for Gas Oil is needed because it relates to the energy sector.

#### **Effect of State Financial Capacity, People's Purchasing Power, and Real Economic Conditions Simultaneously on Determination of Gas Oil Retail Selling Price**

This finding indicates that the Government considers the state's financial capacity, the people's purchasing power, and the real economy in making policy on determining the retail price of Gas Oil. Thus, the government's decision to determine the retail selling price of Gas Oil is in accordance with the provisions in Presidential Regulation Number 43 of 2018.

Based on the Adjusted R2 value, it can be said that there are other variables other than the dependent variable in this study, which can explain the policy of determining the retail price of Gas Oil. This can be caused by the following:

- i. That the variables used in this study only include the state's financial capacity, the people's purchasing power, and the real economy. Of the three variables, only the state's financial capability and the real economy have a significant influence on the policy of determining the retail price of Gas Oil. While the variable of people's purchasing power does not have a significant effect on the retail selling price policy of Gas Oil.
- ii. That there are other variables such as social conditions of society, political interests, and so on that are not used in this study. It can be assumed that if these variables are used in research, the value of the coefficient of determination can increase.

Thus, the regulation in Article 14 paragraph (8) of Presidential Regulation Number 43 of 2018, needs to be refined. Other factors that can be taken into consideration in determining retail selling prices may include political stability, financial condition of the BBM distributor business entity, and seasonal cycles (e.g. religious holidays, new school year periods, and year-end holidays that inflation generally is quite high).

#### **The Impact of the Policy on Determining the Retail Price of Gas Oil on the Society**

The absence of a change in the retail selling price of Gas Oil can prevent mass actions that generally occur when there is an announcement of an increase in the selling price of fuel. When the retail selling price of Gas Oil is set lower than the price based on the calculation formula, public can get Gas Oil at a cheaper price. From a political point of view, the cheap retail price of Gas Oil can increase public satisfaction with the Government's performance because it can help grow the economy and improve welfare. The stable and cheap retail price of Gas Oil supports economic, political and social stability for the society.

However, the absence of a change in the retail selling price of Gas Oil can also harm the public if the retail selling price of Gas Oil is set higher than the price based on the formula calculation. This condition occurs during April until December 2020, where the price based on the formula calculation results lower than the retail selling price of Gas Oil set by the Government. Thus, during that period, people bought Gas Oil at a higher price than the price it should have been. In this condition, the retail selling price set by the Government can be said to be inaccurate because it seems the Government is taking advantage from the society.

#### **The Impact of the Policy on Determining the Retail Price of Gas Oil on the Business Entities**

When the retail selling price of Gas Oil is set higher than the price based on the formula calculation, the Business Entity receives higher sales revenue than it should. The income earned by the Business Entity is income that comes from the society. Referring to the provisions of Article 14 paragraph (10) of Presidential Regulation Number 43 of 2018, the Government will establish policies, either in the form of deposits to the State Treasury or set-off with the Government's obligations to Business Entities. This policy can only be determined after the BPK RI Audit Report is available. With this condition, the Business Entity has time to use the excess revenue to finance its operational needs.

On the other hand, when the retail selling price of Gas Oil is set lower than the price based on the formula calculation, the Business Entity will bear the loss. Similarly, if there is an excess of revenue, the policy will be determined by the Government after there is a BPK RI Audit Result Report, which is at  $t+1$ . For these problems, the Government may establish a policy to provide compensation for the lack of revenue, or vice versa, decide not to provide compensation. If no compensation is given, then the Business Entity must bear the loss in its financial statements. This condition will have an impact on the performance of the Business Entity in the future. For business entities in the form of SOEs, this loss can have an impact on reducing tax payments and dividends to the state.

#### **The Impact of the Policy on Determining the Retail Price of Gas Oil on the Government**

If the Government decides to provide compensation for the lack of Business Entities' revenue, the Government must provide a budget to pay it. This budget will burden the state budget, especially on Central Government Expenditures. Thus, although the subsidy budget has become lower with the fixed subsidy policy for Gas Oil, an additional budget is still needed to pay for losses suffered by business entities due to the price difference. It can be said that this condition is almost the same as when the Gas Oil subsidy policy was still in the form of floating subsidy.

On the other hand, if the Government decides not to provide compensation for the lack of Business Entities' revenue, the Government does not need to provide other budgets other than the subsidy budget. However, this is very detrimental to the Business Entity that receives the Gas Oil distribution assignment from the Government. If this continues, then the financial condition of the Business Entity will be disrupted and may have an impact on the implementation of Gas Oil distribution assignments given by the Government.

### **Conclusion**

Based on the research, it can be said that the fixed subsidy policy for Gas Oil does not completely reform the floating subsidy policy that previously applied. It is because the Government still need an additional budget to pay compensation for Business Entities due to the lack of revenue caused by the determination of the retail selling price of Gas Oil. However, providing compensation to Business Entities is a setback policy. In addition, based on the results of the research, we recommend to revise the Presidential Regulation Number 43 of 2018, especially regarding the factors considered in determining the retail selling price of fuel, for example political stability, financial condition of the business entity, and seasonal cycle.

The use of only three dependent variables (state financial capacity, people's purchasing power, and real economic condition) is one of the limitations of this study. Future research can use more diverse dependent variables, such as political stability and social conditions of the community, which are thought to have an effect on the retail selling price policy of Gas Oil. In addition, further research can examine the factors that influence the determination of retail selling price of other types of fuel.

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