

The Impact of Subsidized Fuel Price Increases on Public Consumption in Kendari City

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Abstract

The purpose of this study was to determine the impact of the increase in the price of subsidized fuel oil on the food consumption of people who received the Family Hope Program (PKH) in Kendari City after the removal of subsidized fuel oil. This study used the descriptive statistics method. The results stated that the average fuel consumption expenditure of PKH beneficiary societies was smaller before the subsidized fuel price increase occurred, namely IDR 167,737.37/month, while the average after the increase in subsidized fuel prices was greater, namely IDR 192,888.89/month. The average food consumption expenditure for staple food types of PKH beneficiaries was smaller before the increase in subsidized fuel prices, namely, IDR 42,242.42 per day, while the average after the increase in fuel prices was larger, namely IDR 57,828.28 per day. Thus, based on the results, it can be concluded that there was an increase in the price of subsidized fuel oil (BBM) which had an impact on the consumption of fuel oil and consumption of staple food types in every household in Kendari City in 2014. 2022 and it provided a significant impact on the consumption of food types in the society of Kendari City which received PKH in 2022.

Keywords: *Consumption of Fuel Oil, Consumption of Staple Food Types, Subsidized Fuel Oil.*

INTRODUCTION

The economic development and development of a country or region is inseparable from economic activities that can be seen from various business sectors to generate income to meet the needs and improve the welfare of each community. Relations between countries can also determine the fate and good condition of a society and its territory, such as a country's free and active relationship with other countries in the international order. It is not easy to adjust immediately as a developing country, such as Indonesia. There is a need for true policy integration.

The Government of Indonesia is mature and pro-people. The government as a policy maker, both at the central and regional levels, is said to be good if it has made maximum efforts to maintain the hope of public consumption to the most remote layers. However, after the revocation of fuel subsidies by the government, fuel prices have fluctuated again and tend to increase on consumer goods in the market. The existence of the subsidy revocation policy, the government is considered not in favor of the people because the people have just faced the problem of the Covid-19 Pandemic outbreak. So many workers were laid off, on the other hand, they had to support their families, as a result, they found it difficult to maintain their consumption expectations because they lost their jobs.

As for the reality that occurs in the community many subsidy policies from the government are not on

target, such as refueling transportation intended for small and poor people, but consumed by vehicles classified as Sport Utility Vehicles (SUV), not least in Kendari City at several public filling stations (SPBU). This is what is increasingly creating the failure of the role of fuel subsidies in society. People with a lower-middle-class economy tend to use their income to continue consuming the fuel they usually consume without reducing the amount, and reduce the amount of savings to maintain their household consumption expectations as usual before the fuel price increase. By doing so, people can fulfill their basic food needs, such as rice and sago, corn, vegetables and fruits, meat (beef and chicken), milk, sugar, salt containing iodine and iodine, cooking oil and margarine, and kerosene or LPG gas. Therefore, this study aims to determine the impact of the subsidized fuel price increase on the date of 03 September 2022 on the food consumption of people who received the Family Hope Program (PKH) subsidy in Kendari City after the removal of fuel subsidies.

Some previous studies that are relevant to this research include a) Kamal (Kamal, 2015) with a study entitled The Impact of the Increase in Fuel Oil (BBM) on Nine Basic Materials (Sembako) in Makassar City; b) Indra Rizaldi with the title of his research The Effect of Fuel Oil Price Subsidy Policy (BBM) on Increasing Sales Volume at PT Loka Energi SPBU 74.924.01 Bantaeng Regency in 2004 (Rizaldi, 2014); c)

Achmad Afandi (Afandi, 2006) with research entitled *The Impact of Fuel Price Increase on Food and Non-Food Consumption of Students of Muhammadiyah University of Malang (UMM) in 2006*; d) Anadia Rahmadini (Rahmadini, 2007) has a research entitled *The Impact of Subsidized Fuel Price Increases on Household Income and Consumption Expenditures in Bogor City in 2007*; e) Muhammad Said (Said, 2015) with the research title *Analysis of Changes in Household Consumption Patterns: The Impact of Changes in Subsidized Fuel Prices (Case Study of Kemuning Subdistrict, Palembang, in 2015)*.

The hypothesis in this study is that there is a change in the amount of staple food consumption in the community due to the increase in subsidized fuel prices. Based on the premise of these variables, the hypothesis or temporary conjecture in this study can be found that the increase in the price of subsidized fuel types of pertalite and diesel affects the consumption of staple food types in accordance with the Law on Food (Law on Food, 2012) in the form of rice and sago, corn, vegetables and fruits, meat (beef and chicken), milk, sugar, salt containing iodine and iodine, cooking oil and margarine, and kerosene or LPG gas in the people of Kendari City in 2022. Then, the method used in this research is descriptive statistical analysis through observation data, questionnaires, and literature research.

The results of this study state that the average fuel consumption expenditure of PKH recipients was smaller before the subsidized fuel price increase, namely Rp167,737.37/month. Meanwhile, the average fuel consumption expenditure after the subsidized fuel price increase was greater, namely Rp192,888.89/month. The average expenditure on food consumption of staple foods for PKH beneficiaries was smaller before the increase in subsidized fuel prices, namely Rp42,242.42 per day. Meanwhile, the average expenditure on food consumption of staple foods for PKH beneficiaries was greater after the increase in fuel prices, namely Rp57,828.28 per day.

Kotler and Armstrong (Kotler & Armstrong, 2020) state that consumer purchasing decision behavior focuses more on the process of purchasing goods and services carried out by consumers both individually and in households that are used for personal use or for resale. Consumers of subsidized fuel oil, be it diesel and/or pertalite, some are resold by retail and some are only limited to personal consumption, as well as food

consumption of food types who buy in raw condition and then resell either in the form of semi-finished or finished form that is ready for consumption. In line with Kotler, consumption is also defined as an action that aims to reduce and spend the value of the function or economic use on an object in the economy. Consumption is the total expenditure to acquire goods and services in an economy within a certain period of time (within one year) of expenditure (Bannock et al., 1998).

In his book entitled *The General Theory of Employment, Interest, and Money*, John Maynard Keynes explains that consumption is a person's expenditure on consumption, and savings is influenced by his income. The greater a person's income, the more the level of consumption will be, and the level of savings will also increase. Conversely, if a person's income level is getting smaller, then all of his income is used for consumption so that the savings rate is close to zero (Keynes, 2018).

The relative income hypothesis consumption theory was coined by James Duesenberry in his book *"Income, Saving and The Theory of Consumer Behavior"* in 1949 (Duesenberry, 1949). According to this theory, the consumption pattern of a person or household is basically divided into 2, namely: a) the highest income ever achieved and when income decreases in a certain period, consumers will not reduce consumption expenditure much, they tend to reduce the amount of savings. In the long run consumption will change in proportion to income, but in the short run consumption changes in a smaller proportion than changes in income. In addition to income levels, environmental conditions around where consumers live also affect the consumption patterns of a consumer. A person will always try to live like a neighbor, when income falls, the person will not reduce his consumption as if his income rises, but will maintain his consumption level not too far from the highest consumption level he has ever achieved; b) short-term consumption patterns will show the relationship between consumption levels and income, but in the long run consumption will change proportionally due to changes in income. If the short-term consumption curve is drawn together with the long-term consumption curve, it will resemble a saw.

According to Milton H. Spencer and Orley M. Amos, Jr. in their book entitled *"Contemporary Economics"*, a subsidy is a payment made by the

government (payment in any form) in a certain companies or households in order to achieve a certain goal that can be lighten the burden on the recipient (Spencer & Amos, 1993).

METHODS

This research uses a purposive sampling technique with a homogeneous sample because the researcher has determined the characteristics of respondents in the Kendari City community, namely the largest Family Hope Program or PKH in Southeast Sulawesi, precisely located in Abeli District, with a sample size of 99 respondents. The types of data include primary data and secondary data. Primary data was obtained through direct interviews using questionnaires with people who received PKH subsidies in 2022 in Kendari City and own vehicles whose fuel is subsidized fuel, such as pertalite and diesel. Secondary data were obtained from the archives of the Central Statistics Agency (BPS) of Southeast Sulawesi Province, the Kendari City Social Service, and relevant references that can be accounted for. The data collection methods used in this research are observation, questionnaires, and library research. The data analysis method used in this research is descriptive statistical analysis (Abubakar, 2021; Sugiyono, 2019; Syahza, 2021).

RESULTS AND DISCUSSION

This study looks at the impact of subsidized fuel price increases on the food consumption of the people of Kendari City, especially those who receive the PKH assistance program from the government. This study shows that PKH recipients are dominated by people who work as housewives and entrepreneurs with elementary, junior high, and high school education levels.

Table 1. Distribution of Respondents Based on Occupation

Jobs	Total	Percentage
Self-employed	5	5,05
Housewife	94	94,95
Total	99	100%

From Table 1, it can be seen that most of the people who are registered areas recipients of PKH subsidy assistance have jobs as housewives with a total percentage of the sample of 94.95%, and as self-employed at 5.05%. This is based on the criteria for PKH recipients, namely based on the number of dependents of children attending school, pregnant women, and the elderly (elderly) whose names are mostly represented by housewives or wives instead of husbands' names, even if the husband's name is only in a small number.

Furthermore, the education level characteristics of PKH recipients from the Kendari City government in 2022. This data is needed because the respondent's level of education can affect the mindset of consumption and the way the respondent allocates the amount of consumption to spend on consumer goods. The following data characterizes respondents based on their level of education, namely:

Table 2. Distribution of Respondents Based on Education

Education	Total	Percentage
SD	21	21,21%
SMP	64	64,65%
HIGH	14	14,14%
Total	99	100%

Based on the data in Table 2, it can be seen that the recipients of PKH subsidies have an education that is dominated by the junior high school level with a percentage of 65.65%, followed by people with an elementary school level of education with a percentage of 21.21%, and a high school level of 14.14%. The data illustrates that most people with higher educational backgrounds have better economic conditions.

Researchers have conducted research on 99 PKH recipient respondents in Abeli District and obtained primary data studied on these 99 respondents, related to the amount of expenditure on basic food consumption shows a variety of values according to the needs and income of the community. Furthermore, the Saphiro-Wilk normality test was carried out which showed that the data was not normally distributed with a significance value <0.05, namely <0.001. So the Wilcoxon rank-sign test was carried out as follows:

Table 3. Wilcoxon Test Results on Total Basic Food Consumption Expenditure

		<i>Ranks</i>		
		<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
AFTER THE INCREASE	<i>Negative Ranks</i>	0 ^a	0,00	0,00
FUEL PRICES -	<i>Positive Ranks</i>	97 ^b	49,00	4.753,00
BEFORE THE INCREASE	<i>Ties</i>	2 ^c		
FUEL PRICE	Total	99		

- a. AFTER THE FUEL PRICE INCREASE < BEFORE THE FUEL PRICE INCREASE
- b. AFTER THE FUEL PRICE INCREASE > BEFORE THE FUEL PRICE INCREASE
- c. AFTER THE FUEL PRICE INCREASE = BEFORE THE FUEL PRICE INCREASE

Based on the Wilcoxon *Ranks* Test (table 3), before and after the increase in subsidized fuel prices or the revocation of fuel subsidies on 99 respondents who received PKH program assistance, 0 respondents experienced a decrease in the amount of their basic food consumption expenditure, automatically the average decrease was 0.00. However, on the other hand, the amount of basic food consumption expenditure increased for 97 respondents with an average increase in the amount of basic food consumption expenditure of 49.0 and a total *ranks* of 4,753.00. There were 2 respondents who experienced no change in the amount of consumption expenditure on staple food both before and after the removal of fuel subsidies. This means that after the increase in subsidized fuel prices, the amount of staple food consumption expenditure is relatively the same as the amount of staple food consumption expenditure before the increase in fuel prices. Therefore, based on the results of the analysis of statistical table 4.16, the hypothesis in this study can be answered in the description of the processed output statistical data table from SPSS software as follows.

Table 4. Statistical Test Results of Wilcoxon Difference Test on Total Consumption Expenditure

Staple Food	
<i>Test Statistics^a</i>	
	After fuel price increase – Before fuel price increase
Z	-8.593 ^b
<i>Asymp. Sig. (2-tailed)</i>	< 0.001

- a. *Wilcoxon Signed Ranks Test*
- b. *Based on negative ranks*

It can be seen in Table 4.15 above that the Z value on *Asymp. Sig. (2-tailed)* or the significance value is at -8.593 which means it is worth less than 0.05, then according to (Sugiyono, 2019) the basis for making decisions on the test Wilcoxon is based on the Z number, the calculated statistic (output z number) has a value of -8.593 and if based on the probability the value is <0.05. So it can be concluded that the hypothesis of this study which suspects that there is an effect of the revocation of fuel subsidies or an increase in the price of subsidized fuel on the food consumption of the people of Kendari City is accepted or in other words the ***hypothesis in this study is accepted.***

To find out more about proving the hypothesis of this study, it is necessary to have a descriptive statistical measurement that serves to see a picture of food consumption of staple foods for people who receive PKH program assistance in general. Based on the primary data that has been studied, the results show the amount of food consumption expenditure on staple food types in 99 PKH recipient respondents, both before and after the subsidized fuel price increase, and then analyzed with descriptive statistical analysis (table 5).

The results show that: a) Before the increase in subsidized fuel prices, the amount of food consumption expenditure on staple foods of people who received PKH had a *range of* Rp55,000, the lowest amount of consumption expenditure per day was Rp15,000 and the largest was Rp70,000, with the amount of average consumption expenditure on staple food amounting to Rp42,242.42 with a description of the spread of data against the average (standard deviation) of Rp14,280.064. This means that the amount of food consumption expenditure of staple food types in 99 respondents before the increase in fuel prices has a) standard deviation that is smaller than the average

consumption of the community and the variance value (the square of the variance) is obtained. standard deviation amounted to Rp203,920,222.635; and b) After the increase in fuel prices

In terms of subsidized food, the total consumption expenditure on staple food for people receiving PKH has a *range* of Rp75,000, with the lowest consumption expenditure per day being a fixed value of Rp15,000

and the largest consumption expenditure of Rp90,000, the average consumption expenditure on staple food is Rp57,828.28. The picture of the distribution of data on the average amount of consumption expenditure on staple food (standard deviation) amounted to Rp19,485.233 or greater than the average consumption of staple food with a variance value (the square of the standard deviation) of Rp379,674,293.960.

Table 5. Descriptive Statistical Test Results on Total Food Consumption Expenditure

Principal							
<i>Descriptive Statistics</i>							
	<i>N</i>	<i>Range</i>	<i>Min.</i>	<i>Max.</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>Variance</i>
BEFORE							
FUEL PRICE HIKE	99	55.000	15.000	70.000	42.242,42	14.280,064	203.920.222,635
AFTER FUEL PRICE HIKE	99	75.000	15.000	90.000	57.828,28	19.485,233	379.674.293,960
<i>Valid N (listwise)</i>	99						

The data above can be depicted in a histogram, that the *mean* or average value. The average expenditure on food consumption of staple foods for people receiving PKH program assistance was smaller before the increase in subsidized fuel prices, namely Rp.42,242.42 per day. Meanwhile, the *mean* or average value of food consumption expenditure of staple food

types of community beneficiaries of the PKH program is greater in the amount of consumption expenditure after the increase in fuel prices, namely Rp.57,828.28 per day. Changes in food consumption patterns of staple foods in Kendari City, both before and after the subsidized fuel price increase, can be depicted in the following histogram.

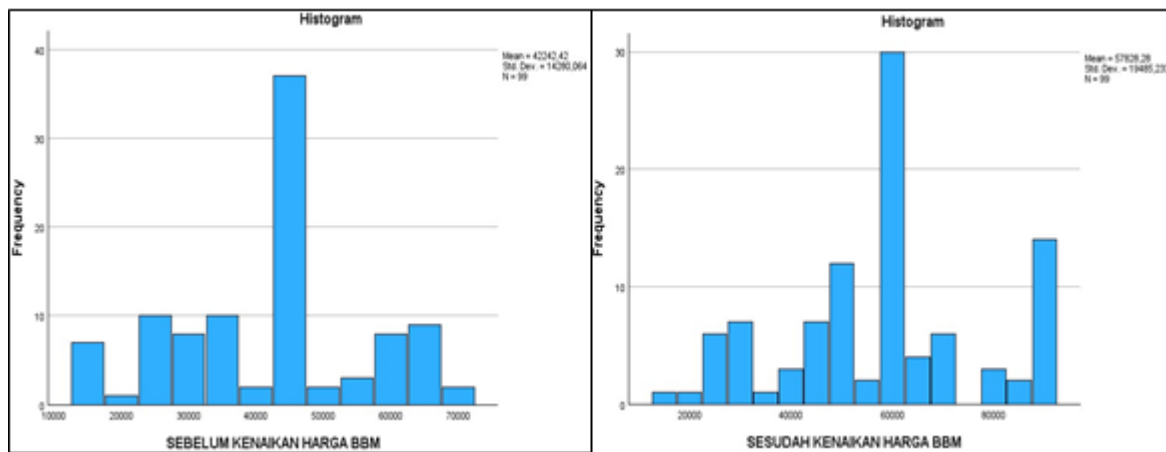


Figure 1. Histogram of Total Food Consumption Expenditure of the Community Before and After Subsidized Fuel Price Increase

In this study, the fuel oil in question is subsidized fuel consisting of diesel and pertalite. The fuel is consumed by people who receive PKH program assistance from the government in 2022. Data analysis

was obtained from supplementary data in the form of data on the amount of subsidized fuel consumption expenditure by PKH beneficiaries in 2022 before and after the increase in fuel prices or when the fuel subsidy

is removed. The results obtained the amount of community fuel consumption expenditure that occurred in 99 respondents experienced a shift in consumption patterns.

Before the increase in subsidized fuel prices, the amount of fuel oil consumption expenditure of people who received PKH had a *range of* Rp432,000, while after the increase in subsidized fuel prices, the amount of fuel oil consumption expenditure of people who received PKH had a *range of* Rp484,000. So it can be said that this research is in line with previous research (Rahmadini, 2007) that the increase in subsidized fuel prices has a negative and significant effect on household income, as well as this research shows that the increase in fuel prices or the withdrawal of fuel subsidies has a negative and significant impact on household fuel consumption expenditure of PKH beneficiaries in Kendari City in 2022.

The change in the amount of fuel consumption expenditure has a correlation with the amount of staple food consumption expenditure of the people of Kendari City in 2022 because income in the community must be allocated greater on consumption expenditure, both fuel and staple food this is without exception the result of the subsidized fuel price hike.

In this study, it appears that the dominant staple foods consumed by the community at the research location are rice, vegetables, milk, salt, cooking oil, and LPG gas. It is known that the value of food consumption of staple food types of people who receive PKH program assistance before and after the subsidized fuel price increase has changed significantly, in accordance with (table 4) statistical tests with a significance value <0.05 , which is -8.593 and the probability value is <0.05 . So it can be concluded that the hypothesis of this study which suspects that there is an effect of the revocation of fuel subsidies or an increase in subsidized fuel prices on the food consumption of the people of Kendari City is accepted.

Before the subsidized fuel price increase, the total food consumption expenditure for staple foods of people receiving PKH had a *range of* Rp55,000, with the lowest consumption expenditure per day of Rp15,000 and the largest of Rp70,000, with an average consumption expenditure for staple foods of Rp42,242.42. After the subsidized fuel price increase, the total consumption expenditure on staple food for people who received PKH had a *range of* Rp75,000,

with the lowest consumption expenditure per day remaining at Rp15,000 and the largest consumption expenditure at Rp90,000, with an average consumption expenditure on staple food of Rp57,828.28. There are also people who choose to reduce the amount of their basic food consumption expenditure after the revocation of fuel subsidies, this is in accordance with previous research (Kamal, 2015) which explains that the increase in fuel still has an impact on the community economically.

This shows a change in people's consumption patterns due to the increase in market prices for fuel oil consumed by the community in their vehicles in the aftermath of the removal of fuel oil subsidies. This research is also in line with the theory of consumer behavior which explains that PKH beneficiaries continue to consume staple foods such as rice, vegetables, and others because they cannot replace rice and vegetables with other substitute goods (Keyness, 2018).

CONCLUSION

Based on the results of the research and discussion, it can be concluded as follows: 1) The results showed that there was an increase in price subsidized fuel oil (BBM) which had a significant impact and positive impact on the consumption of subsidized motor vehicle fuel oil, namely pertalite and diesel and the impact on the consumption of staple foods, namely rice, vegetables, milk, salt, cooking oil, and LPG gas in each household in Kendari City in 2022; 2) Then, cumulatively and collectively, the increase in the price of subsidized fuel oil (BBM) has a significant and positive impact on the consumption of staple foods in Kendari City in 2022 such as rice, vegetables, milk, salt, cooking oil, and LPG gas in Kendari City residents who receive PKH program assistance in 2022.

REFERENCES

- Abubakar, R. (2021). *Introduction to Research Methodology* (1st Edition). SUKA-Press UIN Sunan Take care.
- Afandi, A. (2006). Impact of Fuel Price Increase on Food and Non-Food Consumption of Students of Muhammadiyah University of Malang (UMM). *Public Knowledge Project*.



- Bannock, G., Baxter, R. E., & Davis, E. (1998). *Dictionary of Economics* (6th ed.). John Wiley & Sons Inc.
- Duesenberry, J. S. (1949). *Income, Saving, and the Theory of Consumer Behavior* (Vol. 87). Harvard University Press.
- Kamal. (2015). *The Impact of the Increase in Fuel Oil Prices (BBM) on Nine Basic Ingredients (SEMBAKO) in Makassar City*. University of Muhammadiyah Makassar.
- Keyness, J. M. (2018). *The General Theory of Employment, Interest, and Money* (1st ed.). Palgrave Macmillan Cham.
- Kotler, P. T., & Armstrong, G. (2020). *Principles of Marketing (Global Edition) 18th Edition* (18th ed.). Pearson.
- Rahmadini, A. (2007). *Impact of Subsidized Fuel Price Increase on Household Income and Consumption Expenditure in Bogor City*. Bogor Agricultural University.
- Rizaldi, I. (2014). *The Effect of Fuel Oil Price Subsidy Policy (BBM) to Increase Sales Volume at PT.Loka Energi Gas Station 74.924.01 Bantaeng Regency*. University of Muhammadiyah Makassar.
- Said, M. (2015). Analysis of Changes in Household Consumption Patterns: The Impact of Fuel Price Changes (Case Study of Kemuning District Palembang). *Competitive Journal*, 4(2), 62-74.
- Spencer, M. H., & Amos, O. M. (1993). *Contemporary Economics* (8th ed.). Worth Publishers Inc.
- Sugiyono. (2019). *Research and Development Methods* (IV Edition). Alfabeta.
- Syahza, A. (2021). *Research Methodology* (Revised Edition). UR Press Pekanbaru.
- Law on Food, Pub. L. No. 18, Central Government (2012).