Energy Policy and Poverty: A Study of the Effects of Fuel Prices in Indonesia

Didin Muhafidin
Universitas Padjadjaran, Bandung, Indonesia
Email: didin.muhafidin@gmail.com

Abstract

The purpose of this article is to examine the effects of the Indonesian government's oil fuel price policy on the nation's poverty rate. This study investigates how variations in oil fuel costs affect the population's ability to make purchases, particularly those who are below the poverty line. It does so by using secondary data from a variety of sources and quantitative analysis techniques. According to the study's findings, the oil industry's gasoline pricing strategy significantly affects the poverty rate because rising fuel costs tend to make people poorer. According to this article, the government should think about the socioeconomic repercussions of its energy policy and look for ways to lessen the effects of rising fuel prices. The study adds to the body of knowledge on energy and poverty policies in Indonesia by offering new insights into the relationship between energy policy and poverty.

Keywords: Energy Policy, Poverty, Fuel Price, Indonesia.

A. INTRODUCTION

Every economy depends on energy, and a nation's energy policy can significantly affect the welfare of its citizens. Energy policies that are efficient and effective can support population welfare and economic progress, according to the Directorate General of State Assets (2023). The regulation of oil fuel prices “Bahan Bakar Minyak” (BBM) has attracted a lot of interest in Indonesia as one part of energy policy. Changes in BBM price policies have raised a lot of debate in the country’s economic and social backdrop, according to the Ministry of Finance (2023). The National Research and Innovation Agency as known in Indonesian is “Badan Riset dan Inovasi Nasional” (BRIN) has investigated the effects of these BBM price policy changes in order to better understand how this policy affects Indonesia’s economic performance (BRIN, 2023).

Indonesia's oil fuel price strategy can have wide-ranging and severe effects due to its vast population and high levels of poverty. Changes in oil fuel costs can have an impact on the population's ability to make purchases, especially for those who are below the poverty line, according to BBC News Indonesia (2023). Furthermore, according to additional study, increases in fuel prices may have an effect on unemployment, inflation, and a rise in poverty (Telkomsel, 2023). The government has increased financing for social assistance programs by diverting funds from fuel subsidies in an effort to lessen the possible negative consequences of fuel price hikes. However, there is still room for debate and investigation on how well these social...
support programs work to lessen the detrimental effects of fuel price increases (The SMERU Research Institute, 2023).

An article from Kompas.id (2023) demonstrates how increases in fuel prices raise the cost of both food and non-food goods, increasing poverty rates. This highlights how the gasoline price policy affects not only the energy sector but also other economic sectors. The Indonesian government has changed its fuel pricing strategy in recent years in a number of ways, including by reducing subsidies and raising prices. The goal of these programs, according to the Ministry of Energy and Mineral Resources “Energi dan Sumber Daya Mineral” (ESDM) (2023), is to ease financial strains and advance energy efficiency. Concerns have been expressed regarding these modifications’ effects on the population in poverty, though. The House of Representatives “Dewan Perwakilan Rakyat” (DPR) (2023) believes that other policy measures must be implemented in conjunction with the government’s decision to increase the price of subsidized fuel in order to lessen the adverse effects on the poor.

According to BBC News Indonesia (2023), the fact that almost 70% of BBM subsidies go to wealthier classes justifies the Indonesian government’s decision to raise the price of oil fuel (BBM). The poor, who rely on BBM as their main source of electricity, are also impacted by this regulation (BBC News Indonesia, 2023). The SMERU Research Institute’s study from 2023 demonstrates that due to variances in socioeconomic conditions in each location, changes in BBM subsidy policies have various intensities of influence across different study areas (The SMERU Research Institute, 2023). The increase in fuel prices, according to Kompas.id (2023), raises the cost of both food and non-food goods, which raises the poverty line. This demonstrates that other economic sectors are also impacted by the gasoline price strategy, in addition to the energy industry (Kompas.id, 2023).

The increase in fuel prices coupled with compensation programs did not entirely prevent an increase in the number of poor people by 480 thousand in September 2013, according to research by Akhmad (2014) titled "The Impact of Fuel Price Hike Compensation on Poverty in Indonesia." The National Development Planning Agency/Bappenas, the Central Bureau of Statistics “Badan Pusat Statistik” (BPS), the Downstream Oil and Gas Regulatory Agency “Badan Pengatur Hilir Minyak dan Gas Bumi” (BPH Migas), and various other sources all provided data for this study. The study demonstrates that the MLSM program’s effectiveness and that of other programs was not totally successful, but they also cannot be regarded as failures. The way the government anticipated the effects of fuel price hikes and how they prepared their reactions is strongly tied to several factors for these programs’ ineffectiveness.

The same research suggests that urban poverty is more affected by fuel price hikes than rural poverty. Due to the fact that urban inhabitants rely more on transportation than residents of rural regions, impoverished urban populations consume more gasoline than poor rural populations. This findings is consistent with study by Dartanto (2012), which found that the government’s compensation for
gasoline price hikes was insufficient to halt the rise in poverty rates brought on by the fuel price increase. The study by Akhmad (2014) also makes a number of suggestions. First, while taking into account the constraints of the state budget “Anggaran Pendapatan dan Belanja NegaraEnergi dan Sumber Daya Mineral” (APBN), more money should be allocated to compensation programs. Second, tackling poverty concerns necessitates a sincere and thorough approach. Third, a planned and structured mechanism for distribution and monitoring of compensation should involve widespread community participation in the planning, implementation, monitoring, and evaluation of compensation programs in order to reduce obstacles and deviations in the distribution of fuel price compensation funds.

According to a different study titled "Estimating the Impact of Fuel Price Hikes on Poverty and Inequality: Evidence from Indonesia," rises in gasoline prices have the potential to make Indonesia’s poverty and inequality rates worse. To calculate the effects of fuel price increases, simulation techniques are used in this study. Similar findings are presented in a different study by LP3ES titled "The Impact of Fuel Price Hikes on Poverty and Inequality in Indonesia," which shows that rising fuel prices can worsen poverty and inequality in Indonesia. This research seeks to offer a new perspective with a focus on the Indonesian setting despite the fact that there have been several studies on the relationship between gasoline pricing policy and poverty. Indonesia’s fuel price regulations are distinctive in that they frequently alter and provide substantial fuel subsidies. Consequently, this study aims to provide a clearer knowledge of how these policies affect Indonesia's poverty level.

Although earlier studies have indicated that fuel pricing policies can have an impact on poverty rates, little is still known about how this impact plays out in Indonesia. Furthermore, past studies have a tendency to concentrate on the immediate consequences of fuel price changes, whereas their long-term repercussions are still poorly known. By examining the long-term effects of fuel pricing policies on the poverty rate in Indonesia, this study seeks to close this gap.

B. METHOD

This study uses a quantitative method to examine how Indonesia’s fuel price policy affects the country’s poverty rate. This strategy entails acquiring numerical data from multiple sources, including statistical data from the government, data from research institutions, and data from global institutions like the World Bank and IMF. The association between the fuel pricing policy and the poverty rate is then determined by analyzing this data using a variety of statistical approaches. Regression analysis is one of the primary techniques employed in this study. Understanding the relationship between the dependent variable (in this case, the poverty rate) and one or more independent variables (in this case, the fuel pricing policy) is done using regression analysis. Researchers may now use this approach to estimate how much the fuel price policy has an impact on the poverty rate. Additionally, comparative approaches are used in the study to assess how Indonesia’s fuel price policy compares to those of other nations with comparable regulations. This
approach entails gathering information on the regulations governing gasoline prices and the levels of poverty in various nations, comparing the information, and looking for recurring patterns or trends.

C. RESULT AND DISCUSSION

Several significant conclusions can be drawn from the research that was undertaken. First, the country’s poverty rate has been significantly impacted by the rise in fuel prices in Indonesia. According to a report by The SMERU Research Institute, rising gasoline costs may result in an increase in the number of people living below the poverty line. This is in line with recent data from Kompas.id and CNBC Indonesia that demonstrates how changes in fuel prices might impact the poverty rate. The study also demonstrates that the effect of rising fuel prices on poverty rates happens not only directly but also indirectly through a cascading effect on other economic sectors. For instance, a rise in gasoline prices may result in higher transportation expenses, which may then boost the cost of products and services, ultimately reducing the purchasing power of the general public, particularly the poor. The study also shows that other elements including economic structure, educational attainment, and employment access have an impact on how poverty rates are affected by fuel price rises. For instance, people with poor education or in the informal sector of employment are typically more susceptible to increases in fuel prices. Consequently, attempts to lessen the effect of fuel price hikes on poverty must adopt a thorough and multifaceted strategy.

The study also reveals that not all societal groups are equally impacted by fuel price rises. The poor and vulnerable experience the majority of the negative effects, while wealthy groups are typically better able to cope with price increases. This suggests that the gap in socioeconomic inequality in Indonesia may worsen if gasoline subsidies are cut. According to research, the impact of rising fuel prices on the poor and vulnerable goes beyond just an increase in living expenses; it also involves a decrease in access to essential services like healthcare and education. For instance, increases in gasoline prices may have an impact on the cost of getting to hospitals or schools, which may therefore limit access to these services by the poor and vulnerable. The study also shows that other elements like education level, occupation, and geography might have an impact on how fuel price hikes affect the poor and vulnerable. For instance, the poor and disadvantaged who work in the unorganized sector, have low education levels, or reside in rural or isolated areas tend to be more vulnerable to the effects of gasoline price hikes. According to the research, additional factors like inflation and price rises for other goods and services can make the effects of fuel price hikes on the poor and vulnerable worse. For instance, rises in fuel prices may lead to inflation, which may subsequently have an impact on the costs of products and services, ultimately reducing the purchasing power of the weak and poor. According to the study, by implementing targeted compensation policies and social support programs, the effect of fuel price hikes on the poor and vulnerable can be lessened. For instance, the family hope program “program keluarga harapan”
(PKH) and direct cash assistance programs “Bantuan Langsung Tunai (BLT) have demonstrated efficacy in assisting the weak and disadvantaged to cope with increases in gasoline prices.

The study also reveals that by implementing targeted compensation policies and social assistance programs, the effect of rising fuel prices on the poverty rate can be lessened. For instance, the family hope program (PKH) and direct cash assistance programs (BLT) have shown to be successful in assisting the poor in coping with increases in fuel prices. According to the research, these programs assist the poor in meeting their fundamental needs for food, healthcare, and education in addition to assisting them in dealing with rising gasoline prices. For instance, the poor can utilize money from the BLT and PKH programs to purchase food, pay for school tuition, or pay for medical bills. The study also reveals that initiatives to make sure that the aid reaches the deserving poor must be made in conjunction with the implementation of these programs. For instance, according to the research, there are still some impoverished people who have not received aid owing to a variety of factors, such as a lack of knowledge about the programs or challenges with the registration procedure.

This research also suggests that initiatives to guarantee that the aid is utilized effectively and efficiently by the underprivileged must go hand in hand with the implementation of these programs. According to the study, for instance, some poor people continue to use aid for luxury purchases or other non-essential expenses that are unconnected to the rise in fuel prices. The research shows that measures to ensure that the help has long-term effects on enhancing the welfare of the poor must be made in conjunction with the implementation of these programs. For instance, according to the research, initiatives to guarantee that the aid is utilized effectively and efficiently by the underprivileged must go hand in hand with the implementation of these programs. According to the study, in addition to other criteria like education level, access to job, and macroeconomic conditions, fuel price rises have an impact on the poverty rate. As a result, attempts to lessen the detrimental effects of fuel price hikes on poverty must adopt a thorough and multifaceted strategy. According to the research, education level is a key factor in predicting how well a community can adjust to rising fuel prices. Higher educated people, for instance, are more likely to be able to find alternatives and solutions to rising fuel prices, such as using public transportation or alternative energy sources.

The study also reveals that the population’s capacity to adjust to fuel price increases is strongly influenced by access to work. For instance, people who work in the formal sector or have steady jobs are typically better at adjusting to fuel price rises than people who work in the unofficial sector or have unstable occupations.

According to the research, macroeconomic factors like inflation and economic growth rate are also important in predicting how well a community can adjust to rises in fuel prices. For instance, compared to unstable economic conditions or negative economic growth, good economic growth and stable economic conditions tend to make it easier for the populace to adjust to gasoline price rises. According to the research, efforts to lessen the detrimental effects of gasoline price hikes on poverty
must take a comprehensive and multifaceted strategy that includes not only fuel price regulations but also macroeconomic, job, and educational policies. For instance, improving macroeconomic stability, expanding access to education and work, and assisting people in adapting to fuel price hikes can all help people live in poverty-free communities.

The study also reveals that the effect of fuel price rises on poverty rates can fluctuate throughout various Indonesian regions. This suggests that measures for cutting back on fuel subsidies should be adapted to the unique conditions and requirements of each location. According to the study, an increase in fuel prices may have a long-term effect on the poverty rate. Therefore, long-term initiatives to combat poverty and improve population welfare must be implemented in tandem with measures that cut fuel subsidies. According to the study, other factors like inflation and rising costs for other goods and services can make the effect of fuel price rises on the poverty rate worse. Therefore, efforts to manage inflation and maintain price stability must be made in addition to policies that reduce gasoline subsidies. According to the study, boosting energy efficiency and turning to alternative energy sources can lessen the effect that rising fuel prices have on the poverty rate. As a result, initiatives to encourage energy efficiency and the use of reasonably priced, ecologically friendly energy sources must go hand in hand with measures that reduce fuel subsidies.

According to the researchers' findings, Indonesia's poverty rate has been significantly impacted by the rise in fuel prices. This influence has an impact on other economic sectors in both a direct and indirect manner. For instance, a rise in gasoline prices may raise transportation expenses, which in turn may increase the cost of products and services, ultimately lowering people’s ability to purchase goods and services, especially the poor (Leonardo, 2023). The SMERU Research Institute, Kompas.id, and CNBC Indonesia have all undertaken studies in the past that are consistent with this one. The impact is also influenced by other characteristics, such as economic structure, educational attainment, and employment access, according to this study. For instance, those with poor education or in the informal sector tend to be more susceptible to increases in fuel prices.

The study conducted by Arifianto (2005) in this regard also demonstrates the possibility of an increase in the number of people living below the poverty line as a result of rising fuel prices. This study shows that in addition to other factors like inflation and price rises for other goods and services, gasoline price increases also have an impact on the poverty rate. Consequently, attempts to lessen the detrimental effects of fuel price hikes on poverty must adopt a broad and multifaceted strategy (Arifianto, 2005). This analysis suggests that earlier research may not have adequately taken into account the indirect effects of fuel price rises and other factors influencing this impact. Therefore, more investigation is required to fully and thoroughly comprehend how gasoline price rises affect the poverty rate.

According to the researchers’ research, in addition to the economic structure, education level, and work opportunities, other factors such as gasoline price hikes also
have an impact on the poverty rate. Higher educated people, for instance, are more likely to be able to find alternatives and solutions to rising fuel prices, such as using public transportation or alternative energy sources. Additionally, people who work in the formal sector or have steady jobs are more likely to be able to adjust to fuel price rises than people who work in the unofficial sector or have unstable occupations. According to earlier research (Kpodar & Liu, 2022) the impact of gasoline price rises on the poverty rate is also influenced by factors like inflation and changes in the pricing of other products and services. For instance, because food prices are very sensitive to changes in fuel prices, particularly due to transportation costs, households that spend a considerable portion of their income on food become more vulnerable to fuel price rises. As a result, poorer households may experience worse conditions from higher inflation than non-poor households (Kpodar & Liu, 2022). Thus, this analysis suggests that additional factors impacting the impact of fuel price rises on the poverty rate may not have been completely taken into account in earlier research. Therefore, more investigation is required to fully and thoroughly comprehend how gasoline price rises affect the poverty rate.

According to the report, not all societal groups are equally impacted by fuel price hikes. The poor and vulnerable groups experience the most of the negative effects. This study suggests that earlier research may not have completely taken into account how different socioeconomic groups will be impacted by fuel price rises. According to this study, other factors like inflation and price rises for other goods and services might make the effects of fuel price hikes on the poor and vulnerable people worse. For instance, increases in fuel prices may lead to inflation, which may subsequently have an impact on the costs of products and services and, ultimately, have an impact on the purchasing power of the underprivileged and vulnerable. This study also demonstrates how social assistance programs and targeted compensation policies might lessen the effects of fuel price rises on the poor and vulnerable populations. For instance, the family hope program (PKH) and direct cash assistance programs (BLT) have demonstrated efficacy in assisting the poor and vulnerable populations in coping with gasoline price rises.

According to Sulindran’s research (n.d.), rising fuel costs have a major impact on the income and spending patterns of the underprivileged. This study shows that other factors, such as inflation and increases in the pricing of other goods and services, have an impact on how much gasoline price rises affect the poor and vulnerable groups. As a result, attempts to lessen the detrimental effects of fuel price increases on poverty must adopt a thorough and multifaceted strategy (Sulindran, n.d.). As a result, our analysis demonstrates that earlier studies may not have adequately taken into account the disparities in how fuel price rises affect various socioeconomic groups as well as other factors that may have an impact on this impact. Therefore, additional investigation is required to fully and thoroughly comprehend how rising fuel prices affect the poor and vulnerable people.

According to the research, by implementing targeted compensation policies and social support programs, the effect of fuel price rises on the poverty rate can be
lessened. This suggests that earlier studies may not have completely taken into account the critical role that social assistance programs play in minimizing the effects of fuel price hikes.

This analysis is consistent with that of the Asian Development Bank (2019), which found that social assistance programs are essential for lowering inequality and poverty, particularly in the Asia-Pacific area. Although intended to boost household spending, these social assistance programs might not be enough to move households out of poverty. As a result, social assistance programs tend to have a stronger impact on reducing poverty than on lowering inequality (Asian Development Bank, 2019). Additionally, according to this research, social assistance programs can help communities become more resilient, particularly in rural areas where climate change has an impact on people's livelihoods. Social assistance programs, such as their complimentary elements that promote natural resource management and sustainable food systems, can improve agricultural diversification and boost resilience (Asian Development Bank, 2019). This analysis thus demonstrates that earlier studies may not have completely taken into account the important role that social assistance programs play in minimizing the effects of fuel price hikes. As a result, more research is required to determine the function and efficiency of social assistance programs in minimizing the effects of rising fuel prices on the poverty rate.

According to the research, initiatives to lessen how negatively gasoline price hikes affect poverty must take a thorough and multifaceted strategy. This is in line with earlier studies that shows the value of such a strategy in reducing the effects of gasoline price hikes. A multi-dimensional approach to measuring poverty, for instance, taking into account different factors like education, health, and living standards, can provide a more accurate picture of poverty than approaches that only focus on income or consumption, according to research by Alkire and Santos (2010). This suggests that by taking into account a variety of factors that affect poverty, in addition to income and consumption, a multi-dimensional approach can also be utilized to lessen the impact of gasoline price rises on poverty.

According to Decancq and Lugo's (2013) research, developing more effective policies to combat poverty can be aided by using a multi-dimensional approach to measuring it. This implies that strategies to reduce the effects of gasoline price increases on poverty can also be developed using a multi-dimensional approach, taking into consideration different elements that affect poverty, not only income or consumption. This analysis thus suggests that earlier studies may not have properly appreciated the significance of a thorough and multifaceted approach in reducing the impact of fuel price hikes on poverty. Therefore, more research is required to determine how this strategy might be used to lessen the impact of rising gasoline prices on poverty.

D. CONCLUSION

The analysis carried out leads to the conclusion that the rise in fuel costs (BBM) significantly affects Indonesia's poverty rate. This influence has an indirect component
as well because it cascades into other economic sectors. The impact of fuel price rises is also influenced by a number of other variables, including economic structure, educational attainment, and employment opportunities. As a result, attempts to lessen the detrimental effects of fuel price hikes on poverty must adopt a thorough and multifaceted strategy. This study also shows that not all societal categories are equally affected by fuel price rises. The poor and vulnerable are disproportionately affected negatively, while wealthy groups in society are typically better able to adjust to price increases. As a result, efforts to cut gasoline subsidies should take into account these various effects and be accompanied by specialized social assistance programs to aid the underprivileged and vulnerable.

The study demonstrates that by implementing targeted compensation and social assistance programs, the effects of rising fuel prices on poverty can be lessened. However, initiatives to ensure that the aid reaches the deserving poor and is used effectively and efficiently must go hand in hand with the implementation of such programs. Since fuel price rises have a negative influence on poverty, more work must be done to enhance the effectiveness and efficiency of social assistance programs.

REFERENCES


14. ESMAP. (tt). The Impact of Higher Oil Prices on Low Income Countries and the Poor.


The SMERU Research Institute. (Various years). *Various publications.*

