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The Elimination of Fuel Subsidies to Increase the Education Budget in Indonesia

Y. Sri Susilo
Department of Economics, Atma Jaya Yogyakarta University
Jl. Babarsari 43 Yogyakarta 55281, Indonesia
*Email: yssusilo@gmail.com

Abstract

Government so far seems hesitant to reduce fuel subsidies, moreover to eliminate them. This paper is intended to determine the impact of reducing the fuel subsidies on the economy. Several study results simulated with KUT Indorani Model shows that the reduction of fuel subsidies indeed has a negative impact on the economy in short term, in this case especially macro-economy and inflation. The impact from magnitude aspect is relatively small. The reduction of fuel subsidies that have consequence in raising the fuel prices will bring the domino or spiral effect that is bringing the impact on the raise of other goods and service prices. The negative impact of reducing the fuel subsidies in short term can be reduced by implementing the combination of fiscal and monetary policy. Fiscal policy implemented by applying social safety net by government. On the other hand, monetary policy by Bank Indonesia can be implemented by reducing the money supply through the instrument by raising the interest rate of Sertifikat Bank Indonesia (SBI). By looking at the objective conditions, the government should not hesitate to reduce the fuel subsidies and then eliminate them. The budget for fuel subsidies can then be allocated to increase the education budget. By increasing the budget so the availability of educational infrastructure both in quantity and quality can be improved. Next, the quality of teaching and learning process at all levels of education will increase. This process in turn will produce a better quality output. In other words, the increase in education budget will accelerate the development in education sector. In addition, the increase in education budget can also boost the economic growth.

Keywords: fuel subsidies, education budget, education infrastructure.

1. Introduction

The Indonesian government has been providing the food subsidies, fertilizer subsidies, electricity tariff subsidies, and fuel (BBM) subsidies[21]. For fuel subsidies, it is awarded since the fiscal year 1977/1978. The government has several times lowered the subsidies through the instrument of raising the fuel prices. The reduction of fuel subsidies that is reflected by the increase in fuel prices is last done by the government in May 24, 2008. At that time the government raised the subsidized fuel prices, premium, diesel fuel and kerosene[22]. The increase of subsidized fuel prices were in the percentage at 33.3%, 27.9%, and 25.0% (Kurtubi, 2008).

The increase of fuel prices policy is based on the raise of world's crude oil price that has reached 135 US$ per barrel. The increase of crude oil price have an impact on the raise of fuel subsidies to be born by the government. If the fuel prices were not raised so the fuel subsidies burden to be born for Fiscal Year 2008 reached Rp 240 trillion. Based on these objective conditions, the government then lowered the fuel subsidies by the consequences of raising the fuel prices. For Fiscal Year 2008, 2009, 2010, and 2011, realization of fuel subsidies each has reached Rp 126.8 trillion, Rp 100.6 trillion, Rp 109.1 trillion and Rp 165.2 trillion respectively (http://www.fiskal.depkeu.go.id).

[21] Bahan Bakar Minyak (BBM) is a kind of fuel produced from refining the crude oil (Nugroho, 2005a). Crude oil from bowel of the earth is processed in refinery first to produce oil products, including BBM. Besides producing BBM, crude oil refinery also produces various other products range consist of gas, to the other products such as naphtha, light sulfur wax residue (LSWR) and asphalt.

[22] In the beginning the kinds of fuel subsidized by the government were Premium, Diesel Fuel, Kerosene, Fuel Oil, and Diesel Oil. Then the only subsidized were Premium, Diesel Oil, and Kerosene. Along with the kerosene conversion program, the fuels subsidized are only Premium and Diesel Oil. The other kinds of fuel that unsubsidized are avgas and jet fuel.

As known, the subsidies, although can lower the selling prices, still raised the so-called Dead-weight Welfare Loss (DWL). As it is known the DWL theoretically reflected inefficiencies in the economy (Pindyck and Rubinfeld, 2003). Several empirical studies show that the impact of subsidies in addition to inefficiencies in the economy can also lead to overconsumption for the subsidized products. The fuel subsidies so far are also not appropriate for the target. The fuel subsidies are in fact more widely enjoyed by the 40% of people with the highest incomes, including subsidy for kerosene (Sri Susilo, 2005). The simplest example is the car drivers will enjoy fuel subsidies greater than the motorcycle riders. In this case, the car owners that consume premium generally have higher incomes that in fact enjoy the fuel subsidies greater than the motorcycle owners that generally have lower incomes.

The government should dare to eliminate the fuel subsidies immediately and do not have to wait until the next 5 years. As with the policies applied in the manufacturing sectors, which since August 2005 are no longer consuming subsidized fuels (Sri Susilo, 2008). If the government has the courage to eliminate the fuel subsidies, the budget for fuel subsidies can be allocated to other sectors such as increasing the budget in the education sector.

How is the impact of the fuel subsidies reduction on the economy? To answer that question this paper conducted a literature study, especially the result of the research conducted by the author himself. The result of the research used the simulation based on Applied General Balance Model (KUT) Indorani. This paper also describes that the government should not hesitate to reduce the fuel subsidies and then to eliminate the fuel subsidies. Delaying the policy of fuel subsidies reduction and elimination would further burden the State Budget (APBN). This condition if it continues, it will also be the burden of State Budget (APBN) of the next new government. If the fuel subsidies reduction and elimination is applied then the budget for fuel subsidies can be allocated to the education budget.

2. Literature Study

To describe the impact of the imposition of subsidy to a product, including fuel, can be explained with partial approach and general balance approach. Here is the explanation with the general equilibrium approach. Subsidy is an assistance given by the government to producers or consumers so that the goods or services produced have lower prices with more number of people can afford. (Sri Susilo, 2002; 2004). The amount of the subsidy is usually fixed for each unit of goods. With the subsidy, the government expected to lower the price of goods (Handoko dan Patriadi, 2005). In this case, the government bears some of the costs of production and marketing. In effect the subsidies given to help groups of people who have a weak economic capacity, not for groups of people who have a higher economic capacity (Sri Susilo, 2004).

Subsidies in general equilibrium model can be explained by de Janvry & Deravajan (2000) as shown in Figure 2.4 (Sri Susilo, 2002; 2003). In macroeconomic equilibrium model, the external shock on one of the quadrants will cause a shift of the curve in the other quadrants. For example, an increase occurred in the relative domestic prices to imported goods of p^d / p^M due to certain reasons such as the increase in production costs due to reduction in input subsidies, as shown in Figure 1.

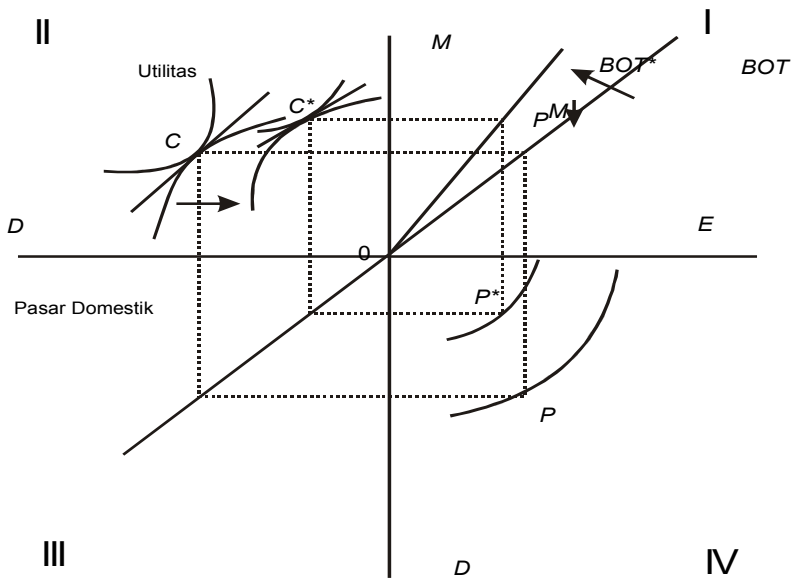

Figure 1. The Increase of Relative Domestic Prices to Imported Goods

Notes:

- On the consumption side, imported and domestic products are perfect substitutes.
- The real exchange rate is appreciated : $p^E / P^d \downarrow$
- Export *E* drops and domestic sales *D* is fixed

Assuming that the price of similar goods in the international market is fixed and the relationship between domestic goods and imports are perfect substitutes, this causes the BOT (balance of trade) curve in quadrant I moved to the left. The increase in the relative price p^d / p^M in the domestic market means opportunities for imported goods substitute domestic goods. On the production side, the change in relative prices will shift the allocation of sales, where exports *E* drops otherwise domestic sales *D* are fixed. This caused domestic manufacturers to compete with imported products out of business, and this is reflected by the shift of the production possibilities of frontier in quadrant IV. Furthermore, consumption of a new equilibrium is at *C**, where the level of consumption of domestic goods *D* drops while imports *M* increases.

3. Research Method

This study utilized literature study. The findings of the literature review were then analyzed by descriptive approach. From the results of several studies that have been done by the author with a simulation that uses KUT Indorani model were then analyzed descriptively. KUT INDORANI (or INDORANI Applied General Equilibrium Model in English) developed by the Center for Economic Studies and Public Policy UGM (formerly PAU Studi Ekonomi UGM Yogyakarta).

In general, the KUT model used in this study was constructed to simulate the economic and social impacts (in this case an endogenous variable) of exogenous variable changes (shocks). In general, the coverage of exogenous variables includes (Sri Susilo, 2002; 2004): (1). External shocks (foreign shocks), such as changes in exchange rates, the decline in foreign loans, and changes in the international market. (2). Domestic economic policy

(domestic shock), such as changes in the level of taxes, subsidies, tariffs, transfer expenditures, and government investment. (3). Changes in domestic economic and social structures, such as changes in the level of technology in the sector of the economy, redistribution of assets, and resource formations. Shock built from certain exogenous variables change, as mentioned above, will be used as a simulation scenario.

KUT model performed a calibration process on relations between exogenous and endogenous variables through a system of simultaneous equations. Basically KUT models are static models, which showed equilibrium at a specific time period. The results of this model's calculation are in the form of percentage change of the endogenous variables, which used as a descriptive analysis[23].

In the research using descriptive analysis essentially identifies the characteristics of the observed phenomenon or exploring possible relationship between two or more phenomena (Leedy and Ormrod, 2005). Another understanding, in the descriptive analysis gives consistent patterns in the data, so the results can be studied and interpreted in a brief and full of meaning (Kuncoro, 2009). Further in the descriptive analysis data interpretation and relationships that exist in the study is conducted. Descriptive analysis can also be conducted with a relatively simple statistical techniques, such as using tables, graphs, and a measure of central tendency that is the average, median, and mode (Kountur, 2003). Thus, even if the method of analysis used in this study is relatively simple, but it can provide sufficient information in accordance with the objectives of the study.

4. Results and Discussion

Here are some results of the study related to the impact of the fuel subsidies reduction that has implications for the policy of the increase in fuel prices on the economy. The results of study by the author in the following using simulation of the INDORANI Applied General Equilibrium Model (KUT INDORANI) developed by Center of Economic and Public Policy Studies UGM (formerly PAU Studi Ekonomi UGM Yogyakarta).

4.1. Impact on the Macroeconomic[24]

During the period 2005 to 2008, the government of SBY - Kalla had raised the price of fuel oil (BBM) subsidies 3 times[25]. The increase in fuel prices occurred in March and October 2005, and in May 2008. The main reason of increasing the fuel prices was the skyrocketing prices of oil (crude oil) in the world market. The increase of oil prices will certainly burden the subsidies to be borne by the government. These conditions will reduce the government's ability to finance the programs oriented for the poor, such as education, health and infrastructure. In addition, it turned out to be poorly targeted fuel subsidies, where 40% of high income families benefit from 70% of the subsidies, while 40% of the lowest incomes only enjoy 15% of the subsidies (INDEF, 2008).

[23] This KUT Model has some limitations, namely (Sri Susilo, 2003; 2005): (1) the model is static, (2) does not explicitly include in the equation the financial markets, (3) the parameters used are not fully estimated econometrics, and (4) the model is too complex and requires a lot of data

[24] The simulation results derived from Sri Sri Handoko and Susilo (2008) and Sri Handoko and Sri Susilo (2006) with some additional notes.

[25] Fuel (BBM) that was subsidized by the government is Premium, Diesel Oil and Kerosene consumed by the household sector (non-industrial) and the transport sector. For the industrial sector since August 2005 are no longer using subsidized fuel, the government has raised fuel prices for the sector by 93-150 percent (Tirambintang, 2008). That means the price of fuel for the industrial sector has been fully followed world oil price movements and without subsidies from the government.

Table 1. The Results of Simulation on Macroeconomic

(% change)

Variable	The Price Increase October 1, 2005 (126%)	The Price Increase May 23, 2008 (29%)
Growth :		
Real GDP	-1.15	-0.21
Aggregate Exports	-0.40	-0.07
Aggregate Imports	-0.76	-0.16
Employment	-2.89	-0.68
Stability :		
Inflation	1.92	0.42
Competitiveness	-2.83	-0.67
Equity :		
Aggregate Transfers to the Owners of Capital	-7.38	-1.79
Aggregate Transfers to the Land Owners	-5.32	-1.30
Aggregate Transfers to Labor	-2.52	-0.61

Source: The Results of INDORANI Simulation (summarized)

The increase in fuel prices in the simulation is based on the average price increase per October 1, 2005 (126%) and an increase in the average price per May 23, 2008 (29%). The macroeconomic impact in this analysis is categorized into 3 (three) aspects, namely: (1) aspects of growth, (2) aspects of stability, and (3) aspects of equity (Table 1). Aspects of growth include real GDP, aggregate exports, aggregate imports and employment. While aspects of stability are include inflation and competitiveness. Aggregate transfers to the land owners, the owners of capital and owners of labor belong to the aspects of equity.

Further increases in fuel prices also led to decrease in employment. Decline in employment could mean rising unemployment. Decline in employment that occurred is at 2.89% (price increase per October 1, 2005) and 0.68% for the increase in the price per May 23, 2008. Decline in employment in more detail above can also be seen from the rural and urban areas and of group work (see Table 2).

Increase in fuel prices per October 1, 2005 provoked the decrease of *employment* as many as 2.24% in the rural areas and -2,86% in the urban areas. In the case of fuel prices increase per May 23, 2008, they caused decline at -0.60% in rural areas and -0.71% in urban areas in a short term. One can generally find out that the urban areas suffered greater employment decrease than that in the rural areas (see Table 2). It is a reasonable circumstance when the sectors, which are closely related to the fuel prices increase, are mostly located in the urban areas. Manufacturing and transportation sectors are directly affected by the increase in fuel prices, which led to the decline in production activities and eventually to decrease in employment. In other words, it led to increase in unemployment.

Table 2. Impact on the Employment (% change)

Variable	*Increase in Price* 1 October 2005	*Increase in Price* 23 May 2008
Area:		
1. Rural	-2.24	-0.60
2. Urban	-2.86	-0.71
Employment:		
1. Civil Servants	-0.18	-0.06
2. Managerial	-1.69	-0.54
3. Administration	-0.45	-0.11
4. Sales	-6.56	-1.64
5. Services	-0.64	-0.16
6. Agriculture	-2.99	-0.75
7. Labor (manual)	-2.64	-0.66

Source: The Results of INDORANI Simulation

Any group of employments was affected by the increase in fuel prices, which formed a decline of employment in a short-time period (see Table 2). One employment group that experienced the most impact was the sales sector (6.56%) for the price increase per October 1, 2005, and 1.64% in the price increase per May 23, 2008.

In the aspect of stability, the decrease in subsidies that led to fuel prices increase actually affected the increase of good inflation. The impact of increase in fuel prices per October 1, 2005 caused the inflation to rise as many as 1.92%, and 0.42% in the fuel prices increase per May 23, 2008 (Table 1). These findings encourage an idea that the contribution of increase in administered goods prices, namely the goods which the prices are determined by the government (fuel and electricity), towards the inflation is not sufficiently significant.

In the aspect of Equity, fuel prices increase also generated a decline in aggregate transfer to the economic actors in a short period of time (Table 1). For the increase in fuel prices per October 1, 2005, income transfers that suffered the most drops are the capital owners (7.38%), and then followed by the land owners (5.32%) and the labor (2.52%). The fuel prices increase in May 23, 2008 induced a decline in income transfers which occurred mainly to land owners (1.79%), the labor (1.30%) and capital owners (0.61%). This magnitude differences appeared since the fuel prices increase per October 1, 2005 had more percentage than that in May 23, 2008. In the simulation using KUT INDORANI model, the point is to see the sign/direction (+/-) of simulation result magnitude, instead of observing the simulation result magnitude alone.

4.2. Impact on Inflation[26]

The first study was about the impact of the decrease in fuel subsidies on inflation (Sri Susilo, 2005). The government has enacted to reduce the fuel subsidies since March 1, 2005. The consequence of the reduction was the increase in average fuel prices at 29%. From the simulation result, it turned out that the fuel prices increase at 29% would cause 0.41% of inflation in a short term (see Table 3). When it is compared to Sri Susilo's study (2002), the inflation would be lower. This matter was caused that in Sri Susilo's study (2002), the simulation of the increase in fuel and electricity prices was brought together, respectively at 22% and 24%. The effect of the policy was causing inflation at 1.02% in a short-run period.

Mangiri (2001) estimated the impact of the decrease in subsidies which led to increase in fuel, electricity, and telephony prices, on the increase in goods and services prices or inflation. In this study, the increase in fuel pries at 30,10%, while the increase in electricity prices (15.45%), and telephony prices (21.65%) causes the inflation to

[26] A portion of the simulation results is based on Sri Susilo (2005) with several additional notes.

increase around 2.14%-2.56%. Then, Said *et al.* (2001) had also conducted a study analyzing the impact of increase in fuel prices. In this study, there was a simulation using KUT INDOCEEM Model[27]. This simulation was conducted with an assumption that the increase in average fuel prices caused an inflation at 0.55% - 1.28% in a short run.

When the five research findings are observed in Table 3, the impact of inflation generated by the increase in fuel and other administered goods (electricity and telephony) prices is relatively small. This situation is in line with an idea stating that the impact of increase in administired goods prices on the inflation is relatively small and insignificant (Sri Susilo, 2004). The increase at 1% of fuel and electricity administration prices index simply causing increase in inflation at 0.062%.

Table 3. The Simulation Result of the Impact of Fuel Prices Increase on Inflation in a Short Run (% change)

Variabel	Study A	Study B	Study C	Study D
Inflation	0.41	1.02	2.14 – 2.56	0.55 – 1.28

Source : Simulation result from several sources

Notes : 1) Study A (Sri Susilo, 2005) , 2) Study B (Sri Susilo, 2002),
3) Study C (Mangiri, 2001), 4) Study D (Said *et al*., 2001)

These four study results are also supported by the research findings conducted by Yoshendri (2004) and Tri Basuki (2003) [28]. Yoshendri (2004) carried out a research using econometric model with linear regression technique/OLS (Ordinary Least Square). This research finding was that the increase in fuel prices would take effect in the inflation rise to the next three months (Sri Susilo, 2005). Fuel prices increase at 5% would bring on a quarterly inflation rise at 1.3%, with an assumption that the Rupiah exchange rate and interest rate are relatively stable. If the increase in fuel prices is at 10%, this will lead to a quarterly inflation rise at 1.6% or an annual inflation at 6.4%. Furthermore, when the fuel prices increase reaches more than 15%, there is a probability that this will affect the exchange rate and interest rate, and resulting a chain effect.

Afterwards, Tri Basuki (2003) conducted a study of the effect of the electricity and fuel prices to the inflation in Indonesia. The study using dynamic econometric model of partial adjustment model (PAM) was carried out with an observation period in the year of 1991-2002. The finding says that the increase in electricity and fuel prices do not affect significantly to the inflation in Indonesia.

Based on the outcome of foreign research on the impact of fuel prices increase on inflation, it can be concluded that the result came out indifferently or in line with the study carried out in Indonesia. This case was examined by LeBlanc & Chinn (2004), Humpage & Pelz (2003), and Hooker (2002).

LeBlanc & Chinn (2004) conducted a study of the impact of fuel prices increase on inflation in five countries, namely, The United States, Germany, France, United Kingdom, and Japan. The period of observation with quarterly data was taken during 1980 Q1 – 2001 Q4. The econometric model used was the Augmented Phillips Curve Model. The estimation indicated that the fuel prices increase would lead to inflation at 0.1 – 0.8% in the five countries. Inflation in Germany, France, and United Kingdom were more sensitive to fuel prices alteration than in The U.S.A.

A study of the impact of change in energy prices, including oil, on inflation in the U.S.A. was done by Humpage & Pelz (2003). These two researchers performed a simulation utilizing Vector Autoregressive (VAR) econometric model. This study used the monthly data taken during the period of 1980 – 2000. During this period of time, the equivalent energy prices shock was at 20%. If the energy prices rise as many as 20%, accordingly, the core

[27] KUT INDOCEEM Model is a further development of KUT INDORANI Model.

[28] Another research outcome, for instance, was conducted by Budoyo (2005). The study pointed out that during the period of 1985-2001, the increase in average fuel prices at 24% will encourage inflation at 1.06%. Whereas, Bank of Indonesia predicts every 1% increase of fuel prices will increase the inflation at 0.02 – 0.05% (Budoyo, 2005)

inflation would hike at 0,4 point after a period of 12 months. One of the findings is in line with Hooker (2002) that after 1980, the effect of energy prices, including oil, on inflation was not significant.

Thereafter, Hooker (2002) carried out a research into the influence of increase in oil price on inflation in The United States. This research utilized the econometric model based on Philips Curve Framework. Data used was quarterly during the observation period of 1960Q2 – 1999Q2. Generally, this research result found out that before the period of 1980, The United States inflation was more sensitive to oil prices change compared to the period after 1980. It was possible since the presence of monetary policy was more significant after 1980, resulting the oil prices influence on inflation was smaller.

In the case of inflation control, the central bank plays a crucial role. According to Sadewa (2005), in order to control the inflation under the influence of fuel prices increase, Bank of Indonesia needs to intervene in the financial market and reduce the JUB. Intervention in the financial market is intended to stabilize Rupiah exchange rate. With the Rupiah being stabilized, the inflation rate would be relatively more controlled. Another instrument taken by Bank of Indonesia to manage inflation is to lower the JUB particularly the Primary money (Mo), by increasing SBI (Sertifikat Bank Indonesia) Interest rate. With the increasing of SBI interest rate, the banks interest rate would go up and the JUB, in turn, would go down. For instance, when the fuel prices rose in the January 2002, the Central Bank of Indonesia would tighten the growth rate of money supply (Sadewa, 2005). In the period of April – December 2002, the average growth of Mo was under 10%. If then, the inflation rate began to descend since March of 2002. The similar phenomenon was also performed by the Federal Banks in The U.S.A., with a result that after 1980, the influence of fuel or energy prices rise on inflation became insignificant (Hooker, 2002).

By referring to Sri Susilo (2005), other research findings in Indonesia and several study results in The U.S., it can be said that the influence of fuel prices increase on inflation is relatively minor or insignificant. This matter is caused by the influence of monetary policy done by the central bank. Using the monetary policy, especially with JUB instrument, the central bank attempts to control inflation rate generated by the increase in fuel/oil/energy prices.

4.3. Education Budget

To catch up with the fact that the education field have been fallen behind, in the case quality and budget, the 1945 Constitution of Indonesia (UUD 1945) declares that the education budget, other than allocated for teacher salary and service budget, is allocated 20% at minimal of the State Budget (APBN) for the education sector. It happen the same for the Regional Budget (APBD). Since the 1945 Constitution of Indonesia declares so, the education budget gets up from time to time, as indicated in Table 4. The government has been seeking to allocate 20% of State Budget for the education. Since the allocation for 2009, the education budget has reached 20% of the State Budget. The following years, 2010, and 2011, the percentage has achieved 20% and 20.2% respectively.

Table 4. Education Budget Allocation (Allocation Year 2005 – 2011)

No.	Year of Allocation	Number of Education Budget (Rp)	APBN Percentage
1	2005	33.40 trillion	8.1 %
2	2006	44.11 trillion	10.1 %
3	2007	53.07 trillion	10.5 %
4	2008	158.52 trillion	18.5 %
5	2009	207.41 trillion	20.0 %
6	2010	209.54 trillion	20.0 %
7	2011	248.01 trillion	20.2 %

Source: APBN (www.depkeu.go.id)

Educational function of APBN covers 11 sub functions, namely young children education, primary education, secondary education, non formal and formal education, service education, higher education, assistance services to education, religious education, educational research and development, youth and sport development, and other kinds of education. Budget allocation for the field of education in the years of 2005-2011 always comes in the first place, and the numbers are gradually escalated. The addition of education budget allocation is not the final achievement, but it is the first step or an additional arsenal to boost the quality of national education and expand its scope in order to be accessible to the whole society, both in modern urban areas and in remote rural areas. Furthermore, the transparent and accountable management is also one of the key to achieve the expected target.

The rising budget of education also has a multiplier effect on economic growth. This is evidence from several studies claiming that education spending hold a positive and significant impact on economic growth in a country. Musai *et al.,* (2011) performed a study analyzing budget influence or education spending on growth. The data used covers 79 countries and uses econometric model of Cobb-Douglas (CD). The study stated that the educational expenditures have a positive and significant impact on economic growth. If the spending rose at 1%, it would boost the economic growth by 0.044%, *ceteris paribus*. Another study that was conducted by Sequiera & Martins (2008) pointed out that the education budget, particularly education growth, turned out to be able to reduce unemployment and encourage the economic growth. This research was using panel data of econometric models with observations by the sample at the country level in 2004.

If the fuel subsidies are omitted and then the budget shall be allocated for education, there will be acceleration in the development of the education sector. This acceleration will eventually encourage the economic growth. In the fiscal year of 2008, 2009, and 2010, the realization of each fuel subsidy has reached Rp 126.8 trillion, Rp 100.6 trillion and Rp 88.89 trillion respectively, if the subsidy is entirely allocated for the education budget would be increased by two times. Consequently, let us see that the acceleration for boosting education field can be optimized to produce skillful and qualified human resources. This case, in turn, would significantly contribute to encourage the economic growth.

5. Conclusion and Suggestion

From the economic aspect, there is no reason for the government to cut and eventually eliminate the fuel subsidies. The study results conducted using simulation model of KUT Indorani indicated that the reduction of fuel subsidies has a negative impact on the economy in the short term. The impact on the macro economy and the inflation in the aspect of magnitude is relatively small. The negative impact in the short term may be reduced by applying the combination of fiscal and monetary policy. The fiscal policy is performed by applying the Social Safety Net and the monetary policy can be done by decreasing the money supply through increasing the interest rate of Certificate of Central Bank of Indonesia (SBI).

The compensation policy of fuel prices increase applied by the government so far has been appropriate, but not in the form of Direct Cash Assistance (BLT) or other forms of cash transfer. The more precise way is by implementing the Labor-intensive program, health and education assistance, and support for productive ventures for small and medium enterprises (UMKM), fishermen, and farmers. Then, there should be an effort to improve efficiency in fuel supply for the country, from both production to distribution aspects. In other words, Pertamina must improve its performance.

By seeing the objective conditions, the government should not hesitate to reduce fuel subsidies and eventually eliminate them. Afterwards, the budget of the fuel subsidies can be allocated to increase the education budget. With the increase in the budget, the educational infrastructure availability in both quantity and quality could be improved. Furthermore, the quality of teaching and learning processes at all levels of education will improve. This process, in turn, will produce better output quality. In other words, escalating the education budget will accelerate development in the education field. In addition, the increase in the education budget could also boost economic growth.

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