Impact of a Lower Oil Subsidy on Indonesian Macroeconomic Performance, Agricultural Sector and Poverty Incidences: A Recursive Dynamic Computable General Equilibrium Analysis
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Due to a big deficit budget in Indonesia, since 2000 the government has applied a fiscal policy namely reducing of fuel subsidy that in turn push up domestic fuel prices. Increasing fuel prices have several implications on the Indonesian economy. This study analyses the impact of the policy on macroeconomic variables, the agricultural sector, income distribution, and poverty incidences using a recursive dynamic computable general equilibrium model of Indonesian economy.

The research is important in providing information to the decision makers in the real sector, particularly in terms of the amount of tax and subsidy for agricultural and other sectors.

The results show that the reduction in fuel price subsidy tends to decline the fuel price at the producer’s level. This decrease is likely related to the reduced demand of households and industry for fuel. As an intermediate input, it will also influence prices of industrial outputs that highly depend on fuel, such as those in transportation and fishery sectors. In contrast, the change in fuel price does not influence the price of paddy. Wage of skilled labor, land rent, and capital rent decline steadily in response to the change in fuel price. Households will lose their income following the reduction in fuel subsidy, which then decreases the welfare of households. Furthermore, incomes are not evenly distributed within the society (household groups). An increased fuel price at consumer level pushes down the Indonesian real GDP.

This study recommends that the government should consider coming up with measures that compensate the effects of reduced fuel subsidy. This may be in terms of education and health funding, especially in rural areas. The compensation can be given indirectly to the poor by developing transportation and market access in rural and urban areas. However, the critical issue here is how to distribute the compensation fund efficiently. There ought to be an effective monitoring and evaluation system for the program to be successful.

Because of the lower fuel output, the country should now look at options to generate other forms of fuel energy. Indonesia has a wealth of natural resources that can be transformed into sources of energy, such as the sun, wind, running water, and agricultural products such as cassava and palm oil. Innovation, application of research and development, and people empowerment need to be tapped to gain access to alternative energy sources.

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