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The Impacts of the Domestic Fuel Increases on Prices of the Indonesian Economic Sectors

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Abstract

Fuel price subsidy policy in Indonesia has hindered other energy programs, namely energy conservation and energy diversification. This study tries to analyze the impact of fuel price hike to the economic sector. This study utilizes the IO table analysis of Indonesia in 2005, a 66 X 66 classification of domestic transactions on the basis of producer prices. This study examines the impact of the increasing 10 percent, 20 percent and 30 percent of fuel prices to the economic sector. The analysis found that the increasing fuel price would have a devastating impact on the transportation sector. The government should preserve those sectors which exposed the largest impact from the increasing of the fuel price.

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Keywords: IO table analysis; fuel prices; subsidy; economy; Indonesia.

Nomenclature

IO Table	Input Output Table Analysis
IMF	International Monetary Fund
LPG	Liquid Petroleum Gas
SUSENAS	Indonesian Social Economy Survey Statistics Data
CGE Model	Computable General Equilibrium Model
BPS	Indonesian Statistic Bureau Agency
RT Sector	Road Transport Sector

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EGW sector	Electricity, Gas and Water supply Sector
PT. PLN	Indonesian State Electricity Company
GWh	Giga Watt hour
TDL	Indonesian basic electricity tariff
AT Sector	Air Transport Sector
MC Sector	Manufacture of chemicals Sector
WT Sector	Water transport Sector

1. Introduction

International fuel prices have demonstrated a substantial volatility in recent years. Within end-2003 until the mid-2008, nominal international fuel prices heightened more than four times, with most of the growth taking place on 2007 and the first half of 2008 [1]. Many countries have been reluctant to fully infiltrate growths in world prices [2]. The mounting of world oil prices have apposed difficult policy alternatives for oil importers and exporters alike. With oil consumption persisting to soar up while the production stagnating, Indonesia has lately become a net-oil importer, a trend that has been indicated by many experts back in the 1990s.

Anxiety over fossil fuel subsidies has increased, since the importance of fossil fuel as sources of both energy and pollutants. The fossil fuel subsidy is considered as a primary stimulant of environmental problems, not only from the pollution produced by extravagant fossil fuel combustion of industry and vehicles, but also due to overweening traffic and the inconvenience it causes. The fuel subsidy also deters the advancement of a more traffic-free public transport infrastructure. In most big Indonesian cities, this condition is already become one of the major public concerns [3].

Indonesia as the country of crude oil producer, its consumption is still depends on imports fuel. This is due to the decrease of domestic crude oil production and also most of the Indonesia's crude oil is exported, as a result the domestic fuel production can not meet the public consumption. As the world crude oil prices surged, domestic fuel prices should also increased but due to the fuel as a needs of people living, the government made a policy in the provision and Petrol pricing in Indonesia, so that the domestic fuel prices are not too volatile.

Fuel subsidies are almost incessantly poorly targeted. Subsidy measures increment with income because higher-income households consume greater amounts of fuel products. For instance, the IMF survey for country studies [1] discovered that, on moderate, over 80 percent of the gains of fuel subsidies, presuming a consistent subsidy over varied products, led to the top three income quantiles. The World Bank figured that in Venezuela in the early 1990s the richest fifth of the population received 6½ times more in fuel subsidies per person than the poorest third [4, 5] also provide similar evidence for several countries.

Conditions in the Indonesian domestic fuel prices are far below of the world increasing crude oil price. Hence, in the condition of the Government still subsidizes fuel, the total subsidy would increase with the rising of the world crude oil prices. Government policy to reduce the burden on the state budget, by reducing the subsidies gradually, either through withdrawal of such subsidies on oil conversion to LPG policy or by reducing the fuel subsidy with raising the price of fuel such as gasoline (Premium) and diesel (Solar) within the country.

Alleviating subsidies can be very hard [1]. Firstly, the price and social encroachment of subsidies are often poorly realized, which hinders their evaluation and the purpose of reform. Secondly, subsidies can produce unconditional concerns that may be hard to subdue politically. Thirdly, diluting subsidies that mainly gain the rich may also adversely strike the poor and hence mitigation devices must be set. Though, some countries find out it hard to organize and manage a good mitigation schemes because of the delicate institutions and administrative capability. Lastly, even when governments cut down subsidies, they can reappear over time if governments are uneager to set prices on a standard basis.

Law no. 22 year 2001 [6], stated that the price of fuel and gas are delivered with a fairly market mechanism, eventhough this law emphasized the government to not reduce its social responsibility towards a particular group in the society. The government can provide assistance (a special subsidy) to a certain consumers for consumption certain fuel types, therefore, there are some exceptions to that fuel and gas prices that is not given to the market mechanism. The elimination of kerosene subsidized and other fuel from the first of May 2008 is expected to results in no more smuggling of fuel. Policy on this issue of fuel is very important, such conducted with distinguishing fuel prices, so that can be reached by all levels of the society. Government commits oversight in the distribution of fuel,