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Price, Legislation and Demand for Gasoline
in Malaysia

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PRICE, LEGISLATION AND DEMAND FOR GASOLINE IN MALAYSIA

ABSTRACT

The study sets out to examine the demand for gasoline in Malaysia using econometric model. The purpose is to establish the relationship between gasoline demand and price, income as well as vehicle stocks. Secondly, it is also to review the role and involvement of the government in this oligopolistic market. The hypothesis of this study is : "demand for gasoline in Malaysia is influenced by price, income level, vehicle stocks as well as legislation".

In this paper, the relationship between gasoline demand, national income, price of gasoline and vehicle stocks is empirically examined using linear regression method. The time frame of the analysis is from 1990 to 1998. It has been found that gasoline demand is inelastic for a given increase in gross national product per capita. The increase will be larger in the long run (0.745) than in the short run (0.537). Gasoline demand is also relatively inelastic to price changes, both in the long and short run at -0.245 and -0.363, respectively. Vehicle stock is also inelastic at 0.827 elasticity.

The role of government is reviewed particularly in the aspects of price control and taxation as well as environmental regulations. In overall, environmental regulation in this country does not influence gasoline consumption due to lack of legal enforcement. On the other hand, legislation on price control and taxation affects the demand for gasoline. The penetration of unleaded gasoline provided some interesting insights on how demand for a commodity can be altered by the use of tax incentive. Findings substantiate that cross elasticity between leaded and unleaded gasoline is highly elastic hence allow the use of tax incentive as a mean to promote higher diffusion of

environmental friendly fuel. The study concludes that demand for gasoline in Malaysia is determined by factors like price, income, vehicle stock, consumer preference as well as other sociological effects.

In brief, the study shows that the demand for gasoline can be managed by using tax instrument as short term strategy. However, in the long run, the gasoline market should be freed from government control to promote greater efficiency in the industry as well as the society as a whole. Consumer education and stringent regulations with strict enforcement are among the strategies recommended to achieve greater penetration of unleaded gasoline and to preserve the environment. From sustainable development point of view, it is vital for the country to look into the development of gasoline substitutes, improvement in mass transport and reduction in gasoline dependency via energy conservation.

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