Energy Switching in a Small Open Economy: An Application to Ontario Road Energy Demand

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ABSTRACT

'Within the past ten years, fuel prices have taken on a more volatile nature and consumers have been subjected to the highest gas prices ever seen. This paper proposes a model to accurately forecast future vehicle purchases, as well as; fuel consumption, environmental costs, and changes in welfare. As well, different subsidy and taxation schemes will be used. By using information regarding costs of owning a vehicle based on fuel type, it will be possible to make these predictions by looking at data from the United Kingdom. In the last twenty years, the U.K. has gone through a 'dieselization' of their vehicle stock, thus serving as a good foundation to base this model. The results of the model show that it is very unlikely that diesel vehicles will remain as an underdog within the Ontario transportation market, even in the absence of diesel subsidies. The 'dieselization' phenomenon that has swept over Europe seems to be rapidly approaching Ontario.