

Invitation to DK Guest Lecture

Would my driving pattern change if my neighbor were to buy an emissions-free car?

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SR 56.11 (Brandhofgasse 5/ 1st floor)

Abstract

Aiming to reduce the number of brown (polluting) cars on the road, several countries currently promote purchase and use of green (emission-free) cars through financial and non-financial incentives. We study how such incentives affect consumers who continue to drive a brown car. Using a simple model, we analyze the effects of policy instruments such as subsidizing green cars, taxing brown cars, and allowing green cars to drive in the bus lane. In our model, car owners are influenced by price incentives as well as by external effects from traffic (such as congestion) both in the regular lane and in the bus lane. An extension of the model also considers how change in local driving habits affects brown car driving. We find that subsidizing green cars and allowing green cars to drive in the bus lane might increase brown car driving - an unintended effect of these policies. We also report the results of a recent survey containing questions specifically designed to tap the significance of the model's core mechanisms. The results are largely consistent with propositions derived from the model. While most brown car respondents report their driving to be unchanged after the implementation of the policies to promote green cars, some - particularly in the major cities - report that these policies caused them to reduce or increase their driving. We conclude that some of the mechanisms in our model are more important than others and that certain mechanisms appear to influence different brown-car drivers in different ways. Overall, it seems that Norwegian policies to promote purchase and use of green cars have served to reduce brown car driving.

The talk is based on a paper co-authored with Erik Figenbaum, Institute of Transport Economics, and Jon Hovi, Department of Political Science, University of Oslo.