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Behavioral Economics and a Nudge to Reduce Car Usage

How can we reduce car usage without introducing mileage tax, increasing fuel duty, or raising parking charges? I propose an extremely simple solution that entails negligible implementation costs, and imposes no extra taxes or any other constraints that limit our freedom of choice.



Behavioral economics is a relatively young field that owes a great deal to the work of psychologists. It gives us a realistic view on choice behavior that conflicts with extreme assumptions such as perfect rationality and pure selfishness in the more traditional economic disciplines. Behavioral economics research is mainly descriptive: it maps behavior and tries to explain systematic imperfections with new theories about expectations, preferences, and decision processes. Even the old, renowned scientific journals have embraced the behavioral economics perspective, and a new development is happening: what we have learned is being

employed to help people to make choices that are good for themselves, for the people around them, and for society as a whole. The field has a new, prescriptive role.

The two main engines of this development are Richard Thaler and Cass Sunstein. In 2008, they released their book *Nudge*, in which they explain how our choices can be improved without any restriction to our freedom of choice. They dubbed their approach *libertarian paternalism*, a label that is not very likely to generate opposition. By using insights from psychology and behavioral economics, they show how simple adjustments to the environment or choice problems can encourage us to make better decisions, often without us even being aware of it. Think, for example, of choices in the domains of organ donation, road safety, nutrition, and saving behavior. A funny example is the image of a housefly that appears in many urinals. No restrictions are being imposed, but it still helps men to focus and adopt a hygienically responsible angle. The book has become a bestseller, and many political parties and civil services around the globe are now trying to implement the ideas.

Back to the issue of reducing car usage. What is the basic idea? To inform car owners about the fuel costs incurred after every ride. Sunstein and Thaler would call this information *a nudge*. How does it work? The idea is based on the decreasing marginal effect on utility that many of us experience when losses (and gains) increase. A large loss of, for example, \$100 feels less unpleasant than 10 separate losses of \$10 in succession. As car drivers we normally face large losses only occasionally: we experience the costs of fuel usage at the pump (e.g., \$100), but that's it. After the fuel is paid and we have accepted the loss, every time we use the car for shopping or put our foot down on the accelerator it feels as if it doesn't cost us a dime.

Showing drivers the costs of each individual ride (e.g., \$10) affects their evaluation horizon. The information will create awareness and encourage them to search for ways to avoid or limit these costs. The result is cost savings for the driver himself (and more physical exercise when he uses his bike or walks instead), less crowded roads for other drivers, and less carbon emission for the benefit of all. Of course, lease car drivers who are blessed with an employer who bears all costs are unlikely to be affected by the information, but this is also true for alternatives that impose financial penalties for car usage.

Implementation is incredibly simple and practically costless: displaying the costs on the driver's dashboard or navigation screen only requires combining the current fuel price with fuel consumption data. Prices don't need to be entered manually, as it will be a piece of cake for technicians to import this information automatically in a similar way as with traffic information. Fuel consumption is often already being measured. Even my own simple car has an onboard computer that continuously tells me the amount of gasoline that I am using.

Will anyone object to this minor change in the information provision inside our car? I don't think so, but, just in case, it might be a good thing to have the option of turning off the trip cost information. Behavioral economics is again helpful: as long as the default choice is "on", I don't think many will choose to censor themselves. After all, whose decision making is insensitive to the power of the default option?

See for more information



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