

THE IMPACT OF ENERGY COST INFORMATION ON CONSUMER PREFERENCES FOR ENERGY EFFICIENT CARS

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Overview

Consumers fail to minimize the total costs of energy consuming investments due to a range of market, behavioural and information based failures. One important reason for this, as shown in several studies (e.g., Allcott 2011, Gillingham et al. 2009), is that when consumers make purchasing decisions, they focus on the upfront costs and do not fully account for the operating costs.

Using recent insights from behavioural economics and psychology (e.g. Carroll et al. 2016, Codagnone et al. 2013, Heinzle 2012, Kallbekken et al. 2013), a study was undertaken to explore consumers' knowledge and interactions with current labelling, and whether supplementing the physical energy use information in the current EU car label with monetary information on estimated energy costs increases the effectiveness of such labels.

Methods

This research included label comparisons, attitudinal questions, and a discrete choice experiment to examine what influences the willingness to pay for more energy efficient cars based upon variations in information presentation. For the purposes of the discrete choice experiment, four attributes were included in the scenarios (purchase price, fuel consumption, safety, and luggage capacity) which were produced based upon a randomized split-sample design to identify the effect of supplementing the physical energy use information with energy cost information. The experiment was conducted on a representative sample of almost 1100 members of the Norwegian population of car buyers.

Results

Results suggest a low level of familiarity with current labelling approaches, while also suggesting the presentation of monetary information can increase levels of understanding. Our preliminary analyses indicate that providing the additional energy cost information produces a large and highly significant increase in consumer willingness to pay for fuel efficiency.

Conclusions

Our research highlights the importance of behavioural determinants of consumer choice, such as framing effects, in the design of information provision schemes. This has clear policy implications, in particular for countries with current car labelling schemes based on displaying physical energy use, such as the EU member countries. Our results indicate that adding monetary information to these labels will significantly increase demand for fuel efficient vehicles.

References

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