Hoping Grey Goes Green: Air Pollution’s Impact on Consumer Automobile Choices

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ABSTRACT

This paper examines to what extent, if any, natural environmental factors affect consumer purchase decisions regarding "green" products. We collect and combine several unique datasets to study the impact of air pollution on consumers' choices of passenger vehicles in China. Exploiting cross-city variation, we find that air pollution levels negatively affect the sales of fuel-inefficient cars on average. This relationship, though, is U-shaped over the observed air pollution levels, in that fuel-inefficient car purchases rise with air pollution beyond some threshold. Furthermore, a city’s income level is a significant factor in this non-monotonic relationship, in the sense that consumers of higher-income cities are less likely to suffer this reversal. All these results are consistent with the literature’s theoretical predictions of hope. The rich findings of our study yield important implications to both marketers and policy makers.

Keywords: Green marketing, hope, choice model, consumer behavior, environmental economics, applied industrial organization

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