Willingness to Pay for Climate Change Mitigation: Evidence from China

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Since 2006, China has become the largest emitter of carbon dioxide in the world. However, despite the often-heated debate about what responsibilities China should undertake in international climate change negotiations, little is known about the Chinese public’s willingness-to-pay (WTP) for climate change mitigation measures. This study draws upon a large national survey of Chinese public cognition and attitude towards climate change and analyzes the determinants of consumers’ WTP for energy-efficient and environment-friendly products.

The survey, which was conducted in July-September 2012, has a sample of 4,169 adults from different households over all 31 provinces of mainland China. Respondents were asked, inter alia, how much more they would be willing to pay for energy-efficient and environment-friendly products if these products were to cost more. The majority (85 percent) of the respondents indicate that they are willing to pay at least 10 percent more than the market price and the median WTP is 10-20%. Given that the stated WTP are reported in intervals, we employ an interval regression model and an ordered probit model to study the determinants of WTP for climate change mitigation. The results show that income, education, age, gender, and public knowledge and concerns about the adverse effect of climate change are important factors influencing consumers’ WTP. In particular, consumers who are more knowledgeable about climate change and more concerned about its effects have a significantly higher WTP. In comparison, income elasticity is small. Increasing consumers’ knowledge about climate change by one level is as effective as doubling the income.

If the policy goal is to increase the public’s acceptance for climate change adaptation and mitigation measures, our study suggests that improving public knowledge about climate change and its impact through efforts such as education, communication, and public awareness campaigns might be an effective way of building political support for climate policies.

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