

Price perception and electricity demand with nonlinear tariffs

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Abstract

Increasing block tariffs for electricity and water can provide a subsidy for low users and a conservation incentive for high users. However, their effectiveness depends on how well consumers understand the nonlinear structure. The costs of learning about complex pricing structures may be high and heterogeneous across consumers. We develop a novel price elicitation instrument to recover perceptions of an electricity tariff that was introduced in Central Asia in late 2014. Although most respondents were aware of the nonlinearity, only 24 percent correctly understood the increasing block structure. This group reduced their electricity consumption by more than the respondents who misperceived the tariff. They also had a better understanding of the distributional effects of the tariff. These results suggest that improving education about nonlinear tariffs can enhance their conservation benefits as well as improve their political acceptability.

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