

Increasing Block Rate Electricity Pricing and Propensity to Purchase Electric Appliances: Evidence from Natural Experiment

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Abstract

This paper provides empirical evidence on the relationship between increasing-block-rate (IBR) pricing of electricity and the propensity of households to buy major electric appliances. I use variation from a natural experiment in Russia that introduced IBR pricing for residential electricity in a number of experimental regions in 2013. The study employs household-level panel data which records, among others, whether the household has purchased any major electric appliances during the last 3 months. Using difference-in-differences specification I show that in the regions with IBR pricing the purchase of major electric appliances has increased by more than 25 percent (2 percentage points). The findings suggest that price-based energy policies may be an effective tool in shaping the behavior of households. To the best of my knowledge, this is the first study that combines household-level panel data, with variation resulting from a natural experiment to estimate the relationship between IBR pricing and the propensity of households to purchase electric appliances. Therefore, this paper can potentially close an important gap in the literature.

JEL Codes: Q3, Q4, D1, D9

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