

# Effects of Dynamic Electricity Pricing on Residential Customers

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## Abstract

This paper empirically investigates how residential customers respond to dynamic electricity pricing through a randomized field experiment in Japan. By performing a counter-factual analysis with structural estimates, we quantitatively evaluate the consumption and welfare effects of dynamic pricing programs. In addition, we conduct a simulation analysis to examine whether customer's response changes with predictive accuracy in future electricity prices. Estimation results show that the higher predictive accuracy increases consumer surplus.

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