APPLIED ECONOMICS SEMINAR

MONDAY, APRIL 9, 2018

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Title: Using a Natural Experiment in California to Estimate the Demand for Electric Vehicles in Low- and Middle-Income Households

Abstract:

Governments in much of the developed world are attempting to stimulate adoption of electric vehicles (EVs) and transition away from a fossil-powered transportation sector. In this paper we exploit a natural experiment that provides exogenous variation in the availability of large EV subsidies in California. Our unique dataset includes both vehicle transaction prices and subsidy receipts, and reflects a policy that targets the EV mass market (low- and middle-income households). We deploy a triple-difference methodology to retrieve two main statistics of policy interest: the subsidy elasticity of demand for EVs and the rate at which those subsidies are passed through from upstream players to consumers. Our estimates can be used to calculate the expected total subsidy bill that will be required for the state of California to reach its goal of 1.5 million EVs on the road by 2025.