

Do Regulatory Loopholes Distort Technical Change?  
Evidence from New Vehicle Launches under the Japanese Fuel Economy Regulation

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報告要旨

I first briefly introduce the state of the economics literature on *transportation and environment* and explain how my research agendas relate to that literature. Then I give a research talk on a paper recently accepted at *Journal of Environmental Economics and Management*. The abstract of the paper is as follows: Environmental regulation often creates regulatory loopholes that are not ideal in first-best settings. Such loopholes affect the marginal costs of alternative compliance strategies, leading to distortion in firm's compliance choice. We quantify the unintended effect of such loopholes on technical change in the Japanese automobile industry, using variant-level data on new vehicle launches. We employ a triple difference strategy, exploiting the two-fold treatment-control structures within each product segment, due to regulation-induced variations in the Japanese fuel economy standards over time. Our results indicate that regulation-induced differences in technical trade-offs have induced a distortion not only in product attributes but also in technical progress in fuel economy technology.