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Katherine Rittenhouse, Matthew Zaragoza-Watkins

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Abstract

When agents expect a change in regulation to change the relative price of new durable goods they may shift purchases forward to avoid compliance costs. In the context of new-vehicle emission standards, prior analyses have not considered this adjustment margin. We model the effects of anticipation on sales and retirements of durable goods, and test our theory's predictions empirically using the 2007 implementation of heavy-duty emission standards. We find evidence that anticipation caused a sales spike just before the policy took effect and a symmetric sales slump after implementation, which resulted in 31,164 more freight-truck sales ahead of the new standard and as much as \$118 million in environmental damages over the lifetimes of those vehicles.

JEL: C41, D92, Q58

*(Rittenhouse) Department of Economics, University of California, San Diego. Email: krittenh@ucsd.edu. (Zaragoza-Watkins) Department of Economics, Vanderbilt University. 322 Calhoun Hall, Nashville, TN 37225. Phone: (615) 322-2196. Fax: (615) 343-8495. Email: matthew.zaragoza-watkins@vanderbilt.edu. We are grateful for helpful comments from Hunt Allcott, Severin Borenstein, Lucas Davis, Gloria Helfand, Larry Karp, Michael Mehling, Reed Walker, Catherine Wolfram and two anonymous referees. We thank seminar participants at EDF, Harvard, MIT, Vanderbilt, UC Berkeley, and U.S. EPA, and participants at the MIT CEEPR workshop and the AERE Summer Conference for helpful comments. We also thank MIT CEEPR for financial support in acquiring data. All remaining errors are our own.

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