rasei
NREL
Renewable & Sustainable Energy Institute

BIG energy seminar series

Addressing the scale and complexity of the global energy challenge.

Gasoline Taxes and Consumer Behavior

Erich Muehlegger, Harvard

Date: Friday, February 1st, 2013 at 3:30–5:00 p.m
Location: Economics Building, ECON room 119
(Building is near the intersection of Broadway and College Avenue)

Abstract:

Gasoline taxes can be employed to correct externalities associated with automobile use, to reduce dependency on foreign oil, and to raise government revenue. Our understanding of the optimal gasoline tax and the efficacy of existing taxes is largely based on empirical analysis of consumer responses to gasoline price changes. In this paper, we directly examine how gasoline

taxes affect consumer behavior as distinct from tax-exclusive gasoline prices. Across a variety of specifications and estimation methods, we find that consumers respond more strongly to gasoline tax changes. Our main specification shows that a 5-cent tax increase would reduce gasoline consumption by 0.87 percent, significantly larger than the effect from an equivalent change in tax-exclusive prices. This difference suggests that traditional analysis could dra- matically underestimate policy impacts of tax changes. We further investigate the differential effect from gasoline taxes and tax-exclusive gasoline prices on both the intensive and extensive margins of gasoline consumption. We discuss implications of our findings for the estimation

of the implicit discount rate for vehicle purchases and for the fiscal benefits of raising taxes.

Campus Map: Economics Building http://www.colorado.edu/campusmap/map.html?bldg=ECON

Sponsored by The Department Economics and the Renewable and Sustainable Energy Institute (RASEI)

rasei.colorado.edu