

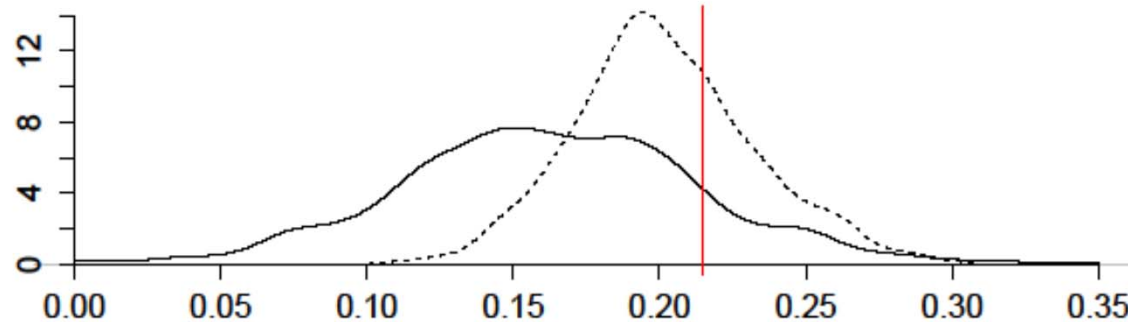
Introduction

“Modeling Gasoline Demand in the United States: A Flexible Semiparametric Approach”, *Energy Economics* (45)2014.

Highlights

- Flexibility of the gasoline consumption model
- Distribution of income elasticity estimates
- Heterogeneity in income elasticity

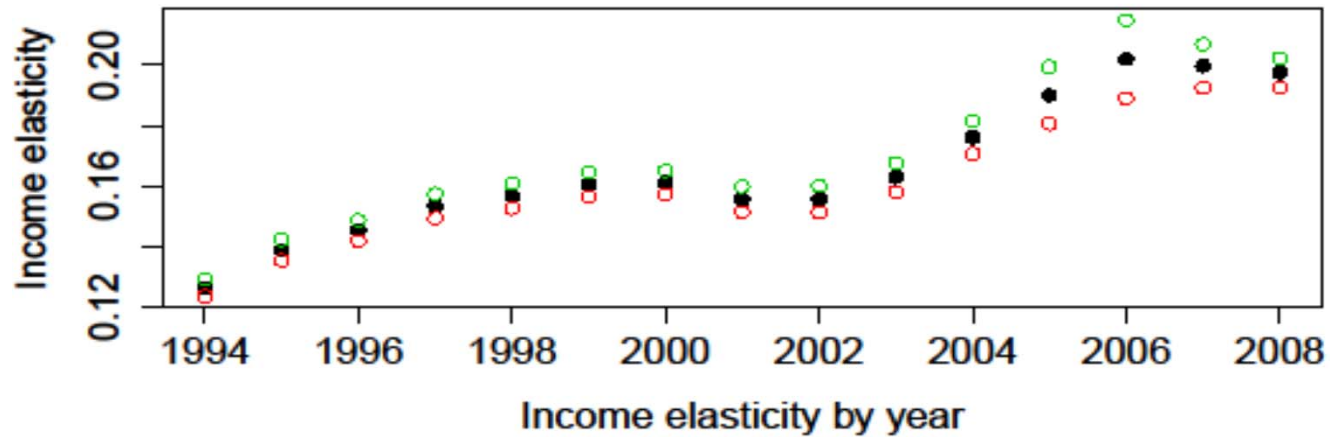
Estimates of Income Elasticity



(b) Distribution of income elasticity estimates

- Substantial heterogeneity (0.05 - 0.3)
 - Income: Higher income - lower income elasticity
 - Vehicle mix: Higher percentage of trucks on road – higher income elasticity
 - Gasoline price: Higher gasoline price - higher income elasticity
- Mean estimate of ie is smaller compared with parametric models (loglinear and tanslog)

Overtime Variation



- Average income elasticity seems to be increasing over time
- The trend tends to be disrupted by changes in macro environment