Tax Incidence in Consumer Financial Markets: Evidence from Auto Leases

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Motivation

Tax incidence is the study of how tax policies affect market prices and the distribution of utilities.

Prior studies have focused on vanilla commodities such as gasoline and cigarettes.

There is a huge gap in research regarding tax incidence on durable goods.

Why are durable goods interesting?

- Often offered by financing arrangements and have salient and non salient margins,
- The market structure is unique, featuring intermediaries that facilitate financing,
- The purchase of durable goods is subject to upgrading and down grading effects

Big-picture questions:

- To what extent are taxes passed on to consumers for durable goods?
- What are the determinants of tax pass-through for durable goods?
- How does tax policy affect consumer behavior?

Auto Lease Market

Auto leases are ideal for several reasons:

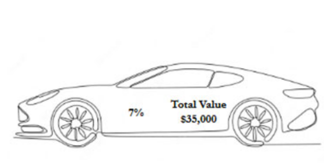
- Economically important but understudied,
- Nice shock as a quasi-natural experiment: In 2018, Georgia tax policy change led to over 60% decrease in taxes on auto lease,
- Common features with other products which gives us external validity.

Georgia Tax Policy Change Led to Substantial Tax Savings for Consumers

- For an average lessee, the new policy decreases taxes by \$1500 or 63%.!

Before 2018

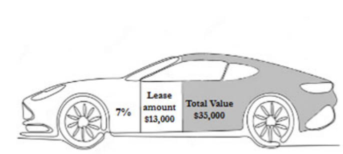
$Taxes = Vehicle\ value \times 7\%$



$Taxes = \$35,000 \times 7\% = \$2,450$

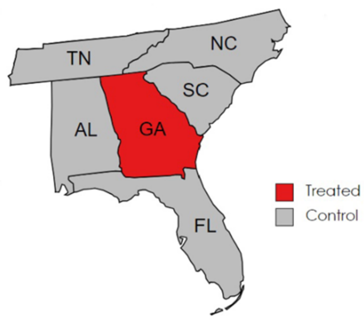
After 2018

$Taxes = (Vehicle\ value - residuals + Interest\ charges) \times 7\%$



$Taxes = (\$35,000 - \$22,000) \times 7\% = \$910$

Identification Strategy: Difference in Difference Design.

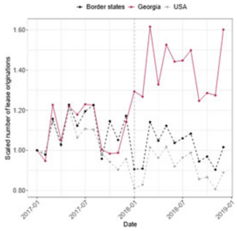


$$y_{i,t} = \alpha + \Gamma \cdot \text{Treated}_s \cdot \text{Post}_t + \delta_s + \delta_{l,t} + \delta_{c,t} + \delta_{j,t} + \delta_{v,t} + \varepsilon_{i,t},$$

$y_{i,t}$ = Log (monthly payments) or monthly payments
Treated =1 if state s is Georgia and zero otherwise
Post = 1 if year=2018 and zero otherwise
δ_s= state FE
$\delta_{l,t}$ = lessor by time FE
$\delta_{c,t}$ = credit score bin by time FE
$\delta_{j,t}$ = cosigner by time FE
$\delta_{v,t}$= Vehicle by time FE

Main Findings

- Demand for auto leases ↑ 30%



- Monthly payments ↓ 5.4% (incomplete pass-through)
- Consumers use a great portion of tax subsidy to lease a more expensive vehicle.
- Local competition among auto dealers is explaining the variation in the pass-through rate in this market.