

Lecture 14 - Sales Tax and E-Commerce

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Three papers all suggest potentially large effects on traditional and mail-order (online) retailers if there are change in sales tax law:

Goolsbee

- 1997 survey of 25,000 customers asks whether respondents had ever made an online purchase
- those who had were more likely to have come from high-tax state/area
- estimated that subjecting e-retailers to taxation could reduce online sales by 24%
 - doesn't have quantities, just whether they had purchased, so estimated elasticity might be less reliable
 - maybe "high tax" is correlated with "computer savvy", so that's the effect the analysis is picking up

Ellison & Ellison

- 2000 data of online purchases of computer components –have 1) address of every purchaser from particular firm for a year and 2) the prices & firm locations each one saw before making the purchase
- look at how differently they behave in the two scenarios:
e.g., purchasers from NJ:

\$69 NJ		\$69 CA
\$70 CA	v.	\$70 CA
\$71 NJ		\$71 NJ

- can calculate tax-inclusive prices for every customer and separately estimate how sensitive they are to prices, taxes, home-state location
- estimated online purchases would decrease by 30% if standard sales taxes were eliminated (i.e., e-commerce gets a substantial advantage from tax-avoidance motives)
- found consumers were less sensitive to tax difference than price differences, but firms still lose significant sales to out-of-state competitors
- also found consumers were willing to pay small premium to purchase from home state
- these last two results seem to be at odds, but actually, people tend to buy in-state for low-priced items and out-of-state for high-priced
- shipping time also matters: greater than 4 days and demand decreased by 20%
- for inexpensive items, there's a less concentrated retail sector than one would expect in a world without home-state preference
- if taxes were equalized across channels, home state preference could be dominated and lead to less concentrated retail

Einav, et al:

- 2008-2010 data on Buy-It-Now purchases on eBay across many product categories
- find 1% age point increase in state's sales taxes increase online purchases by 2% but decrease online purchases from home state retailers by 3-4%

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Back to four questions

- how important is tax-avoidance to consumers (and online retailers)?
 - significant motive for consumers to buy online.
- if the tax-advantaged status of mail-order retail disappears, what are the likely direct effects on mail-order retail and traditional retail?
 - don't know exactly, but the results on sensitivities suggest:
 - * 20-30% of online sales could move back to traditional retails
 - * consumers who buy online will move to in-state retailers
- are there important general-equilibrium effects (in addition to the direct effects)?
 - online firms' incentive to locate in low-tax, small population states disappears
 - online firms' incentives to minimize the number of states with nexus disappears
 - to the extent that home state bias is important, large states will gain businesses
 - to the extent that shipping time is important, businesses will expand warehouses and distribution networks
- is the tax-advantaged status likely to disappear?
 - just speculation, initial changes suggest large retailers (not small ones) will be targeted

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