

Warehouse Clubs, Bulk Buying, and Inequality

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Updates

- Advice on using Nielsen (cleaning tips)
- Get unit cost differences between rich and poor households quickly
- Tips on estimating store distances

Unit Costs (Toilet Paper)

Table 1:

	Log Unit Cost			
	(1)	(2)	(3)	(4)
>100k	0.147*** (0.009)	0.123*** (0.008)	0.003 (0.004)	0.013*** (0.004)
college	0.023*** (0.006)	0.020*** (0.006)	-0.003 (0.003)	0.001 (0.003)
Brand FE	N	N	Y	Y
Store FE	N	Y	N	Y
Observations	983,926	983,926	983,926	983,926
Adjusted R ²	0.065	0.145	0.674	0.706

- Unit cost regression could be that rich households' price sensitivity outweighs quantity discounts
- 2 separate questions to pursue:
 - Given the substantial changes in local stores (more supercenters and dollar stores), what characteristics drove failing stores out and what are new stores selling? Product selection? Prices?
 - Use differences in trip frequency and sizes to estimate household's cost of time. Can use to estimate welfare implications of online shopping

- Verify existence of bulk discount (given unit cost regression)
- Focus on costs related to product size
 - Develop simple model where product size matters
- Relate question to consumption inequality
- Since Nielsen is becoming more well used, consider incorporate timespan for more mileage

Table 2:

	Log Unit Costs			
	(1)	(2)	(3)	(4)
Log(units)	−0.198*** (0.006)	−0.183*** (0.003)	−0.261*** (0.007)	−0.182*** (0.004)
Brand FE	N	Y	N	Y
Store FE	N	N	Y	Y
Observations	983,926	983,926	983,926	983,926
Adjusted R ²	0.144	0.748	0.259	0.764

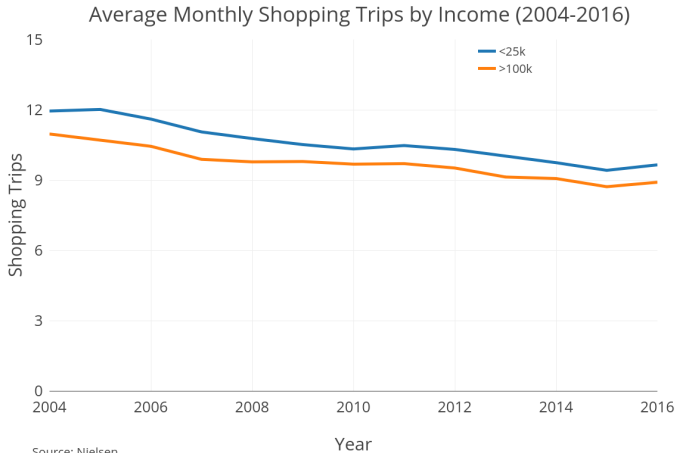
Note: *p<0.1; **p<0.05; ***p<0.01

- Explore what other research has done
- Check descriptives against theirs, if none, then document
- Focus on that poor households do not take advantage of quantity discounts
- Decompose into transportation costs, liquidity constraints, and time/travel costs
 - Link these costs to policy prescriptions to run counterfactuals
 - Welfare benefit disbursement (liquidity)
 - Costco membership fees (liquidity)
 - Car ownership (transportation costs)
 - Online shopping (time/travel costs)

Descriptives

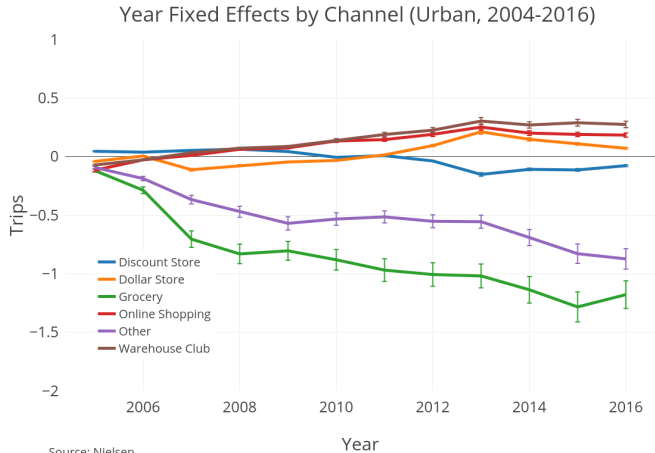
Motivation

- Households are shopping less

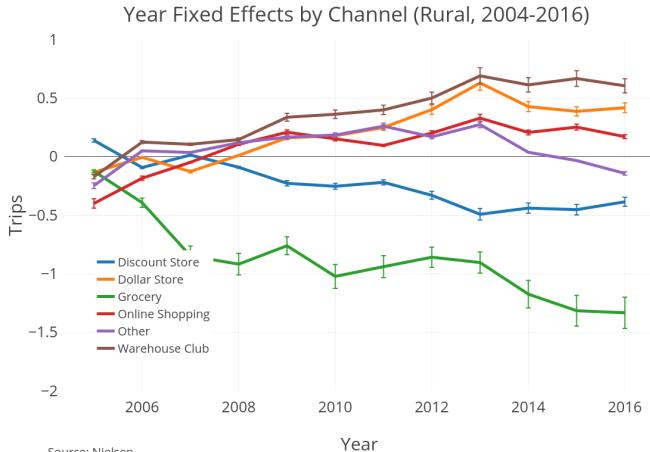


- There have been secular shifts in shopping behavior
- There are persistent differences between rich and poor households

Secular Trends In Stores



Secular Trends In Stores



Next Steps

- Explore current literature on consumption inequality
- Compare descriptive statistics to previous estimates