

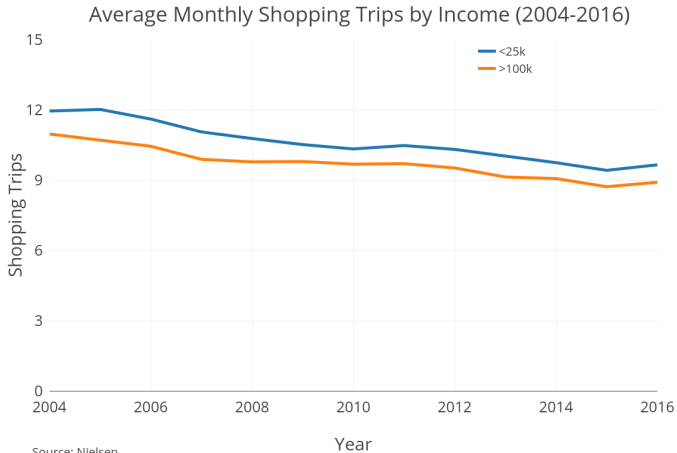
Warehouse Clubs, Bulk Buying, and Inequality

Mallick Hossain

- Smooth consumption does not imply smooth expenditures

Motivation

- Households are shopping less



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

Descriptives

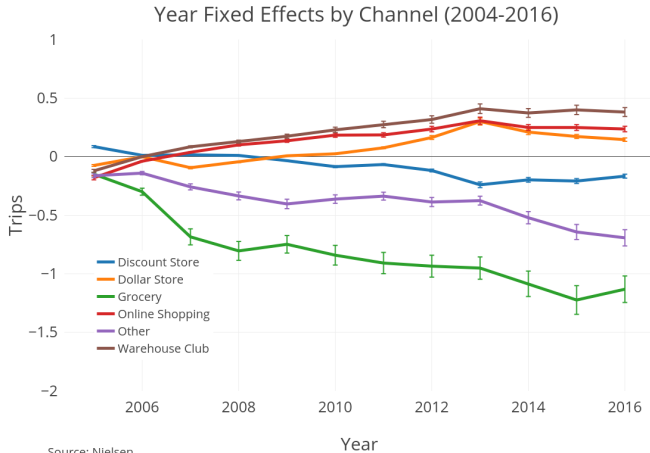


Table 1:

	<i>Dependent variable:</i>		
	Log(Trips) (1)	Log(Trip Spending) (2)	Log(CV + 1) (3)
25-50k	-0.059*** (0.005)	0.059*** (0.005)	0.002 (0.001)
50-100k	-0.142*** (0.005)	0.142*** (0.005)	0.005*** (0.001)
>100k	-0.204*** (0.007)	0.204*** (0.007)	0.012*** (0.002)
Log(MonthTotal)	0.559*** (0.003)	0.441*** (0.003)	
Demographics	Y	Y	Y
Year FE	Y	Y	Y
MSA FE	Y	Y	Y
Observations	8,233,144	8,233,144	704,248
Adjusted R ²	0.434	0.403	0.061

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

Example: Toilet Paper

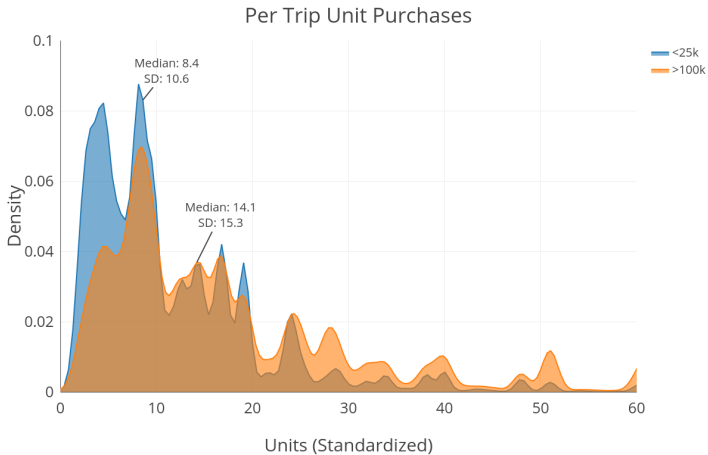


Table 2:

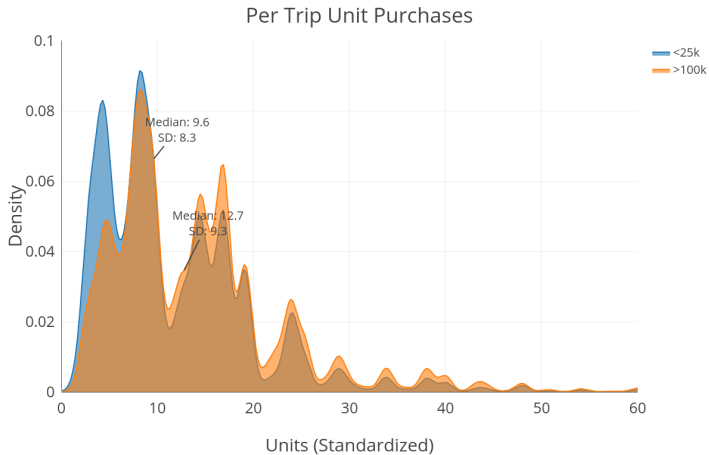
	Log Unit Costs			
	(1)	(2)	(3)	(4)
Log(units)	−0.198*** (0.006)	−0.183*** (0.003)	−0.261*** (0.007)	−0.182*** (0.004)
Brand FE	N	Y	N	Y
Store FE	N	N	Y	Y
Observations	983,926	983,926	983,926	983,926
Adjusted R ²	0.144	0.748	0.259	0.764

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

Possible Factors

- Access?
- Travel/Time Costs?
- Liquidity Constraints?
- Transportation Costs?

Large Discount Store



Where are the Savings?

Table 3:

	Log Unit Cost			
	(1)	(2)	(3)	(4)
25-50k	0.049*** (0.005)	0.036*** (0.004)	0.006*** (0.002)	0.009*** (0.002)
50-100k	0.117*** (0.006)	0.092*** (0.005)	0.012*** (0.003)	0.015*** (0.003)
>100k	0.147*** (0.008)	0.121*** (0.007)	0.002 (0.003)	0.013*** (0.003)
college	0.018*** (0.004)	0.015*** (0.004)	-0.004** (0.002)	0.0001 (0.002)
Brand FE	N	N	Y	Y
Store FE	N	Y	N	Y
Observations	3,617,787	3,617,787	3,617,787	3,617,787
Adjusted R ²	0.054	0.132	0.678	0.707

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

- Growing interest in income volatility, especially at a sub-annual level
- Could volatile income or volatile expenses generate this shopping behavior?
- How costly is this spending pattern over the course of a year?
- Should we refine welfare benefits as a result?

Model Overview

- Each period, households purchase a “necessity” good and an outside good
- Utility is increasing in the outside good, conditional on consuming a minimum amount of the “necessity” good
- “Necessity” good is storable and can be purchased in different sizes
- Per-period income is fixed, but expenses are volatile
- **Question:** Would this model generate these different spending patterns? Under what conditions?