Comments on: "How People Pay: Evidence from Grocery Store Data" by Elizabeth Klee

Joanna Stavins

- Little data on how consumers pay, only surveys
- Surveys have advantages (can ask about attitudes and preferences), but responses may not be true (SCF respondents underreport debt, Ausubel on credit card borrowing)
- Scanner data show how people really pay

Motivation:

• Scanner data is a great way to show when a consumer uses cash, check, credit or debit, but the paper does not really give convincing motivation why we should care.

Demographics:

- No information about individuals' characteristics, use census-tract level averages for the location of the retail outlet.
- Despite the lack of precise demographic data, strong effects of demographics.
- Are groups homogeneous? Variances within census tracts might be interesting: e.g., urban areas may be more heterogeneous than rural ones, or higher-income places more than lower-income ones.
- Did you try using zip codes? Zip codes are typically broader than census tracts and may work better. For example, in my town there are 3 Shaw's supermarkets (major chain) and 10 zip codes, so even zip codes may be too narrow.
- Based on surveys, age highly correlated with payment method. Use day of the week: retired individuals are more likely to shop during the week. May also be true for students. Also, among working adults probably a big difference between 25-year olds and 50-year olds.

PIN vs. signature debit:

• The data do not differentiate between signature debit and credit card, so only PIN debit is counted as debit. Signature debit lumped with credit cards? Similar from the retailer's perspective, but different from the consumer's perspective. That could bias the credit card results.

• Grocery store may not be representative—payment behavior varies by venue

Fraction of consumers using each payment method by venue (%)

Venue	Cash	Check	Credit	Sig. Debit	Pin Debit	SVC	
Grocery	26.6	16.3	17.5	9.8	29.1	0.6	
Gas Station	30.7	3.1	34.4	10.6	19.9	1.3	
Dept. Store	17.5	11.8	41.5	12.1	16.8	0.3	
Disc. Store	26.0	15.7	25.8	9.2	23.0	0.2	
Drug Store	33.8	13.4	20.8	10.7	21.0	0.2	
Fast Food	79.6	1.3	6.8	5.5	6.7	0.2	
Transit	82.5	1.2	7.2	3.0	4.6	1.5	
Movie	75.4	0.7	9.6	6.8	6.5	1.0	
Overall	38.3	7.1	22.3	10.4	21.8	0.1	

Dove/ABA - Consumer Payment Preference Survey (based on 2005 survey of 3000 consumers) • For example, here check used for largest value transactions—not found in the survey of FRS employees:

Fraction of consumers using each payment method by amount (%)

Amount	Cash	Check	Credit	Debit	SVC
< \$20	50.8	5.9	14.4	28.8	0.1
\$20 - \$50	8.9	14.3	30.4	46.1	0.2
> \$50	2.2	14.3	48.3	34.9	0.3

Federal Reserve System Survey (based on 2004 survey of 4,600 FRS employees; grocery, pharmacy or another retail store)

• People may use debit cards for low-value transactions at a grocery store to get cash back, but they would not use debit cards anywhere else for low values. The finding that there is a larger concentration of debit card transactions at lower values of sale and number of items bought is consistent with that.

Econometric model:

• The specification has square terms for # items and value to capture nonlinear effects. Could try other specifications (e.g., logs).

Follow-up:

- This is an important contribution to the payments literature. It is a great way to find out how people really pay.
- Other venues, hopefully with demographics.
- Need to understand why: Is the choice of payment method influenced by demographic effects? by wanting to get cash back? liking to get cancelled checks back? liking float? caring about the speed of transaction?
- We can ask people directly, or—better—observe their behavior, as Beth has done in her paper.