

Comments on

Simon, Smith and West: Price Incentives and Consumer Payment Patterns

by
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Motivation

- Important reform of Australian regulation of interchange fees
 - Interchange fee (recommended?) caps
 - Merchant surcharging allowed
- Subsequently, rapid growth of credit-card payments slowed down; growth of debit-card payments picked up

Main findings

- Consumers appear to respond to pricing incentives:
 - “Revolvers” less likely to use credit cards, more likely to use debit cards
 - Loyalty programs attached to credit cards increase card use, reduce cash use

Method

- Diaries of 662 individuals' all purchases and withdrawals during 2 weeks
- 17 000 payments, 1800 cash withdrawals
- Probit estimates of probability that credit card/debit card/cash is used for a payment, given purchaser characteristics, merchant characteristics, value, loyalty program, revolver status

Comparison of cash use in Au and Swe (Bergman, Guiborg, Segendorff, 2007)



Transaction size	Share cash payment	
	Australia	Sweden
A\$ 0-10	95 %	83
A\$ 11-25	74 %	56 %
A\$ 201-500	31 %	18 %

Oslo, Nov 13, 2008

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5

Card adoption/use increases with:

Simon, Smith & West

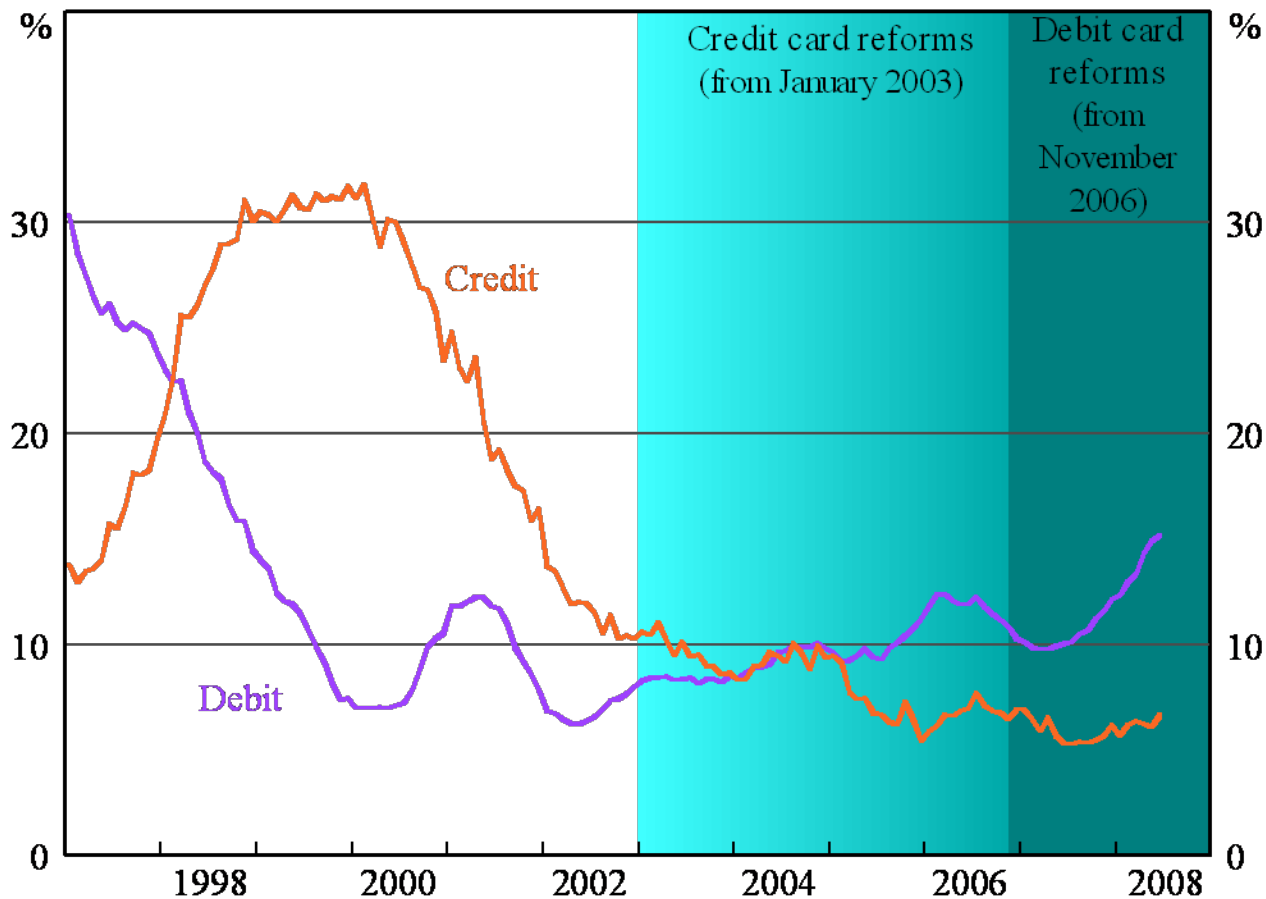
- Income
- Education
- Urban residence
- Size of purchase
- Male sex
- Loyalty program (LP)
- No-revolver status
- Some merchant categories
- Inverse age

Bergman, Guibourg & Segendorf

- Income
- Education
- n/a
- Size of purchase
- (no effect)
- n/a
- n/a
- n/a
- Inverse age

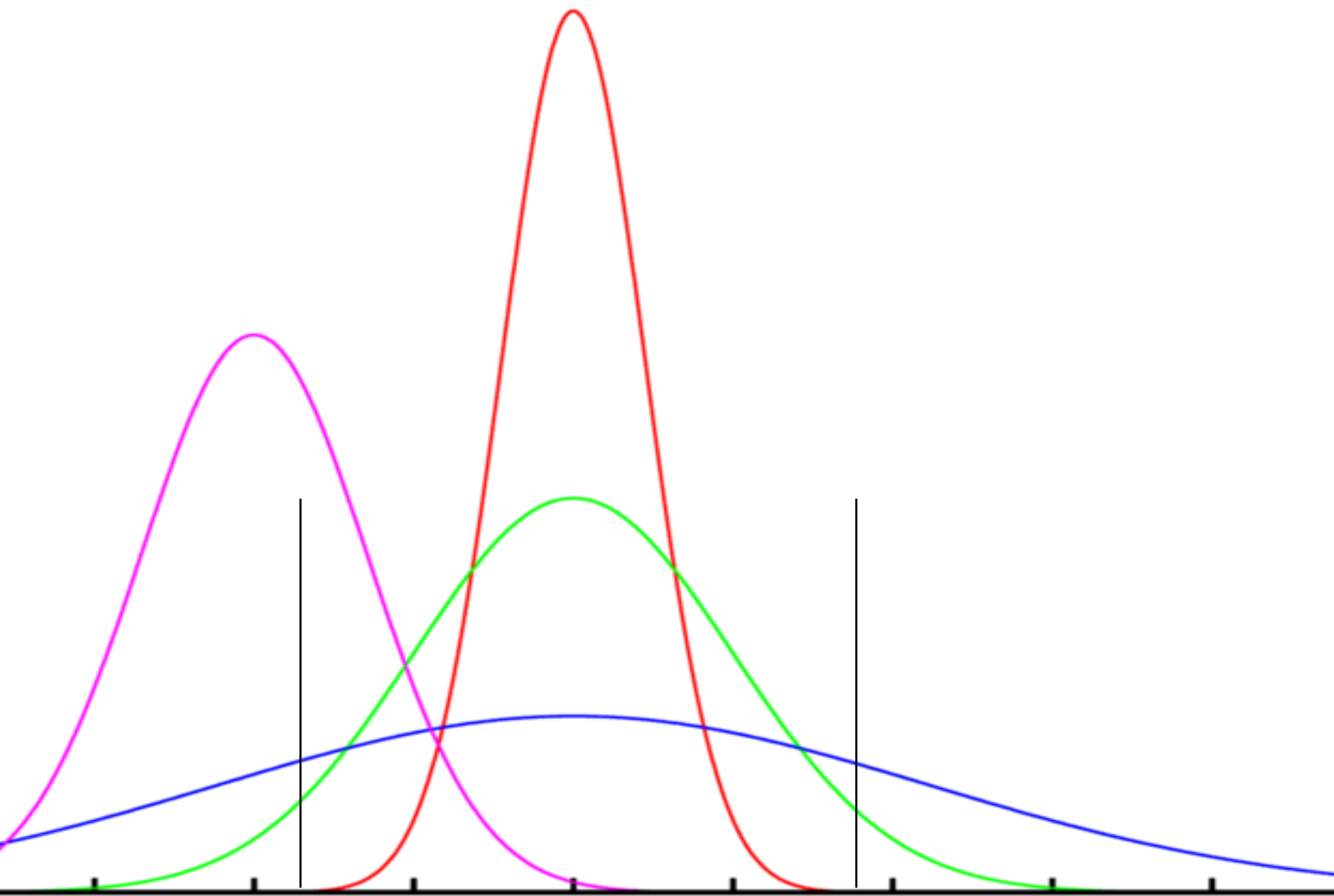
Figure 4: Number of Card Payments

Year-on-year growth



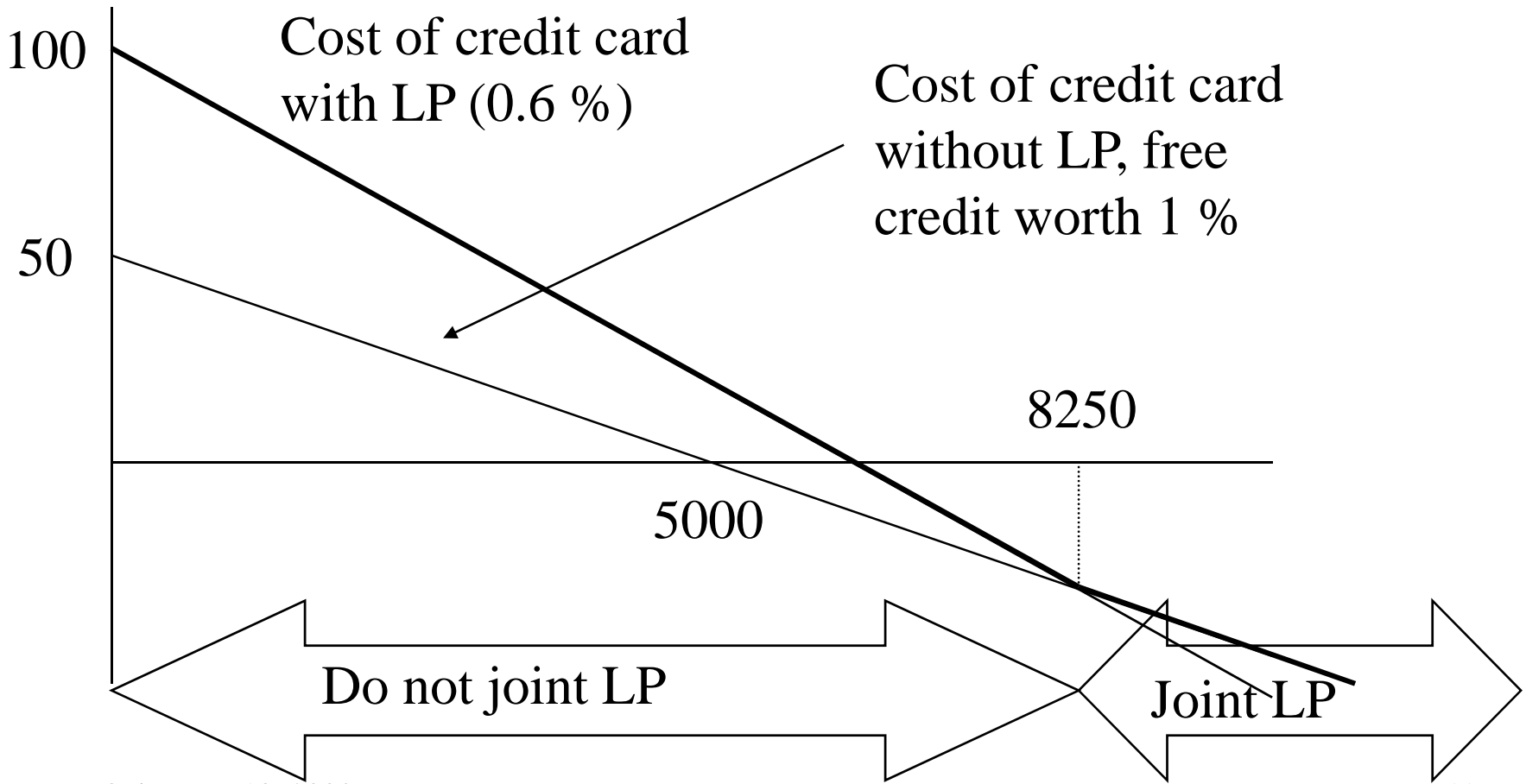
Endogeneity between weekly spending and card holding

- Proposed channels (p 19):
 - Having a c card *increases* spending, by easing budget constraint
 - Having a c card *reduced* spending, since higher interest payments on c card debts uses part of budget
- Average (long-run) weekly spending likely to be virtually independent of card-holding status
- Alternative explanation: having a credit card increases *variation* in weekly spending



- High transaction value (frequency) likely to drive card holding, rather than the inverse
- Having a card may increase *variation* in weekly purchase amounts, however
- Hence, some consumers will be observed as high-purchase consumers *because* they own a card
- On the other hand, some consumers will be observed as low-purchase consumers because they own a card
- Not obvious that this will be an important problem in practice

Annual fee



Endogeneity II

- A main hypothesis tested in paper: Does presence of LP raise probability of credit-card use?
- LP makes credit-card payments attractive (cheaper)
- People who often use credit cards will find it in their interest to join an LP
 - People who purchases a lot
 - People who like paying with credit cards
- Not controlling for purchase value likely to exaggerate effect of LP

Other questions

- Why different explanatory variables in Tables 4, 5? Sex, retirement status and state, education, respectively is missing.
- Why is there more variation in Figure 6 than in Figure 8?
 - Indicate confidence intervals?
 - Use wider purchase brackets?

Figure 6: Predicted Probability of Credit Card Use

For the base case consumer, by transaction amount

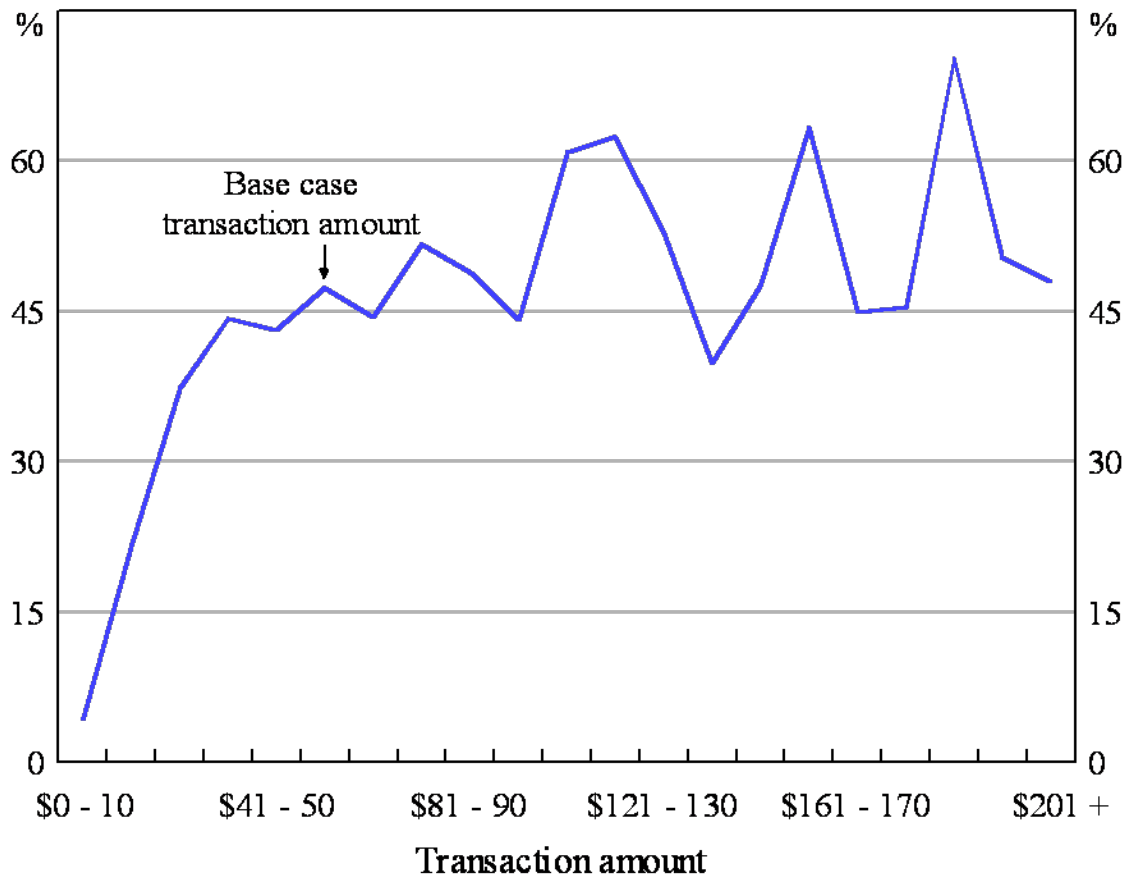
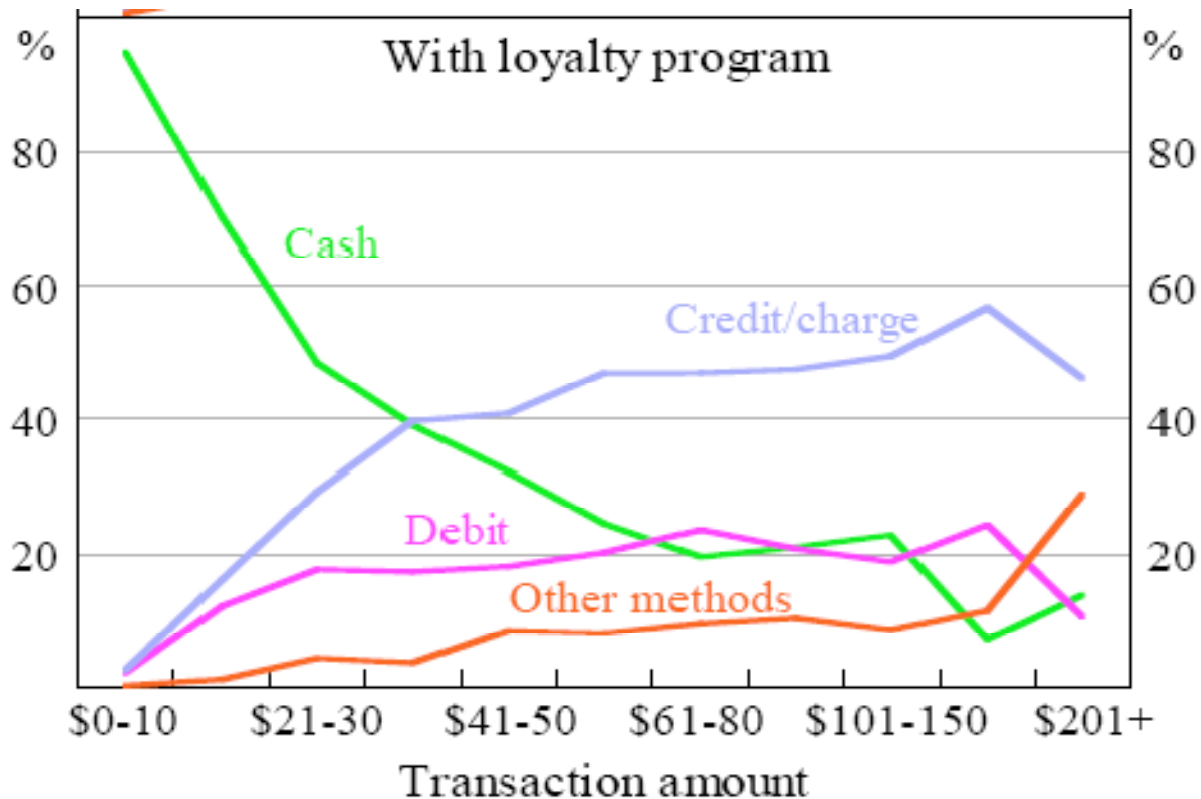


Figure 8: Share of Payments (Number) Credit/charge card holders



Other issues

- Hypothesis/result: credit cards and debit cards good substitutes for high-value transactions; credit cards and cash good substitutes for low-value transactions
- Surprising result: LP appears most effective for low-value transactions
 - Interact transaction's purchase value with LP
 - Influence of merchant? Different merchant types have different margins and hence different incentives to influence consumers' choice. Use margin in regression?

- “LP may have raised growth rate of credit card use by 5 percentage points” (p 37)
- But LP likely to cause a *shift* in credit card use, rather than to accelerate growth? Shift effect assumed to be smoothed over a couple of years?