

Discussion of  
Carbó Valverde, Chakravorti, and  
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and

Rochet and Wright

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## My Theme

Two papers (one empirical, one theoretical) which take seriously the distinction between credit cards and debit cards when investigating interchange fees

Both can (and should) go further in exploiting this distinction



# The Basic Message of Two-Sided Markets

- Since recruiting customers on each side of the market encourages customers on the other side, allocating costs to the two sides requires careful balancing of externalities



## Common Characteristics

- Convenience relative to cash:
  - Some protection from loss or theft
  - Less subject to stock-out
- Inconvenience relative to cash:
  - Limited acceptability
  - Less ability to limit losses



## Important Differences

- Credit cards give credit (emphasized by RW)
- Debit cards are used at ATM (emphasized by CCR)



## CCR

- Use Spanish data to investigate importance of regulated changes to interchange fees on credit card and debit card penetration and usage
- Conclusion: reducing interchange fees reduces merchant charges, increasing merchant acceptance of cards. Merchant acceptance increases cardholder adoption





## Ideas

- In accordance with two-sided markets: individual behavior should be influenced by individual bank on your side of market, but by market behavior on other sided of market
- Merchant behavior responds immediately to pricing; consumer behavior responds with lag to merchant behavior
- Distinction between models of “extensive” and “intensive” margins less convincing



## Distinctions in CCR

- Suggest market for debit cards already saturated because of high penetration of ATMs. (3.5% annual increase in debit cards held, vs. 11.9% for credit cards)
- If so, increasing merchant acceptance provides less important externality – barely developed





## Distinctions in CCR

- Crime: Hint of difference in importance for credit and debit cards
- Rival ATM density: check that it is *not* important for credit cards.
  - Alternate explanations
  - Right measure?



## Macroeconomic Issues

- Would it make sense to add macroeconomic variables?
- Do the regulatory period dummies mask macroeconomic fluctuations?



## CCR Conclusion

- Successful at sorting out the effects on the two sides of the market, and tracing effect from regulator to bank to merchant to customer
- Makes a convincing case for regulation in some cases
- Should press further with difference between credit and debit cards in the data



## RW: the framework

- Credit and ordinary (convenience) purchases.
- Cash, credit cards, and store credit.
- Cash costs least for convenience purchases.
- Cash can't be used for credit purchases;  
individuals vary in their personal cost from use of  
store credit
- Margin chosen by fee or subsidy to credit card  
purchase.



## RW: the idea

- Credit card companies set interchange fees to maximize card usage ( $\approx$  bank profits)
- This is accomplished by pushing fees up:
  - As fees increase, charges to merchants increase, and charges to customers fall (two-sided market)
  - Customer usage rises continuously as a result
  - Merchant acceptance is “bang-bang”: raise merchant charges until they threaten to drop acceptance





## RW: the idea

Lower card usage would *increase* welfare to users  
(consumers + retailers)

For some purchases, retailers could provide credit  
more cheaply than credit cards could

- Come back to this

For all non-credit purchases, cash is socially  
cheaper than credit cards

- Thus locally, always better to move from  
small reward for credit card use to small  
charge



## Standard Question #72

Why don't retailers adjust prices based on mode of transaction?

- Unsatisfactory Standard Answer #73:

They just don't bother

- Better Standard Answer #74:

Credit card companies forbid this.

- Standard Counter #75:

Convenience fees becoming more common for card usage

- Special counter for this model (#75a):

Concessionary terms for store credit give retailers further leeway



## Where are debit cards?

- The same model handles them as intermediate case
- Debit cards more expensive but useful when the customer unexpectedly stocks out of cash.
- Three levels of expenditure: cash for small purchases, debit card for intermediate purchases, credit card for large purchases



## What are Costs?

### Credit costs

As first approximation same for credit card and store credit

### Identity verification costs

Same for credit and debit cards; verifying not exceeding credit limit same as verifying not exceeding bank balance

But identity verification cost at a store will vary by customer

Puts debit cards in dual role: retailers could have better information on identity; but no way to tap bank account directly.



## Simplifications

- In this model pricing of goods or payments arrangements have no effect on total transactions
- No ex ante heterogeneity, so no room for variation in provision of payment services by retailers.





## RW Conclusion

- Store credit is an important margin
- The differences in cost between credit and convenience purchases are crucial for understanding the social benefits of credit cards
- Now that the distinctive aspects of credit cards have been analyzed, recommend including explicitly debit cards in the analysis.



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