Comments on

“The choice at the checkout: quantifying demand across payment instruments”

David Bounie
Télécom Paris

Federal Reserve Bank of New York
March 30, 2006
Objectives

► Estimate consumer preferences over payment choices at point of sale.

► Predict the outcomes of three counterfactual experiments:
  - removing options from the consumer choice set.
  - adding a hypothetical option to the choice set.
  - aging the consumer population.
Method

- Use a new nationally representative survey (1,500 households).

- Transform the responses to the open-ended questions into ranked outcome variables.

- Use the rankings in a ranked-order multinomial logit.

- Use the estimates to predict the outcomes of the counterfactual experiments.
Main result

► Debit card serves primarily as a substitute for cash and checks.

► This finding shed light on the relatively slower adoption of debit card in the US compared to many other developed countries.
Contribution

► Provide an estimation of the substitution between alternative payment instruments.

► Little empirical investigations in literature (Bolt et al. 2005).

► Users do not generally pay any fee per transaction and so the marginal cost of a further transaction is zero.
Consumer substitution: comments

- Debit is a substitute for alternative payment options *once and for all*.

- People will necessarily *prefer* debit card to alternative payment options.

- We can’t deduce a complete and definitive substitution from respondent’s answers.

- Examples.
Consumer preferences: comments

► “Frequent debit users” and “Infrequent debit users”: where does the classification come from?

► Why should debit be ranked first?

► Example.

► Need further data on respondent payment patterns.

► What does the « unmentioned » category really mean?

► How can I build an ordered set of choices between debit, “others” and “unmentioned”?
Consumer preferences: comments

► Checking account holders *without* a debit card *choose* not to use debit.

► The principal behavioral postulate is that a decision maker chooses its most preferred alternative from those available to it.

► Debit is not an available alternative. So people can’t choose (if they could they would probably act differently?).
Implicit assumptions

- Three implicit and important assumptions are made.
  - First, retailers are assumed identical (supermarket).
    - People use different payment instruments according to the type of commerce (Boeschoten, 1998).
  - Second, all four payment options are available at point of sale.
    - Supply-side constraints.
  - Third, the transaction size has no impact.
    - People use different payment options with transaction size (Hayashi and Klee, 2003).
A further implicit assumption

- For all respondents, the payment choice for which they report their “preferences” was necessarily at the checkout (supermarket).

- People can refer to payments on the Internet, by post, on vending machines, etc.

- You don’t control for these types of payments.

- So, choices are not necessarily at the checkout!