Comment on “How Well Do Consumers Forecast their Future Borrowing”
By Agarwal, Chomsisengphet, Liu, and Souleles

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September 30, 2005
Main Comment

- Fascinating paper, but…
- Agenda gets slightly ahead of the analysis.
- Authors want to emphasize the errors that people make.
- Establish mainly that predictions of the standard neoclassical model pretty good.
Unique Experiment:

- Credit card holders given choice of two contracts.
  - Low annual fee and high interest rate
  - High annual fee and a low interest rate
- Must make initial choice but can switch at any time.
Consumer’s problem

- Minimize cost of borrowing
- \( \min \{ R^p_{t-1} E_{t-1} B_t - F_{t-1}, R^{np}_{t-1} E_{t-1} B_t \} \)
  - \( F \) is the fee
  - \( R^p \) and \( R^{np} \) represent the interest costs when paying the fee (p) and not paying the fee (np)
  - \( B \) is the amount of borrowing
  - The contract decision is made at date t-1 before borrowing is known
Consumer’s problem

- Minimize cost of borrowing
  \[ \min \{ R_{t-1} E_{t-1} B_t - F_{t-1}, R_{t-1}^{np} E_{t-1} B_t \} \]

- Treating borrowing as exogenous simplifies the problem greatly.
  - Otherwise cannot express problem in terms of minimizing payments to the bank.
  - Understates mistakes since can always do better if adjust borrowing.
Consumer’s problem

- Minimize cost of borrowing
- \( \min \{ R_{t-1}^p E_{t-1} B_t - F_{t-1}, R_{t-1}^{np} E_{t-1} B_t \} \)
- Panel data on realizations of \( B_t \) and contract choice.
Findings Consistent with Rational Model

- Those with higher average debt tend to pay the fee or switch to the fee.
- Those with more frequent debt tend to pay the fee.
- And visa versa.
Authors then Focus on Errors

- Find almost 40% of agents choose contract that is suboptimal ex post.
### Ex post errors

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<th>Payer</th>
<th>Non-Payer</th>
<th>Total</th>
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<td>35.5</td>
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<td>Should be Payer</td>
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<td>Total</td>
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## Ex post errors among wealthy

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<td>80</td>
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<td>Should be payer</td>
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Focusing on errors is a dangerous business

- The error is a measure of our ignorance
- Tough to distinguish between true errors and bad or incomplete models.
- Much better to test a theory directly.
How might one theorize about errors?

- Unavoidable errors.
- Question: Are these mistakes surprising?
  - What type of process for debt do we need to rationalize the observed contract choices?
  - Suppose that we fit a Markov chain to the debt data, would the mistakes look very different?
  - Authors discount rational mistake story
    - Say even wealthy (who should not have to borrow) borrow.
    - Yet wealthy do borrow. Why?
Theories of errors

- Sins of omission
  - carelessness, inattention
- Are these errors a big deal?
  - 5% make errors that cost more than $25 per year
  - 1% make errors that cost more than $100 per year
  - .01% make errors that cost more than $300 per year.
Theories of errors

- Sins of omission
  - carelessness, inattention
- Did they know or remember that they could switch?
  - This is especially applicable those who paid the fee, since there is no reason to switch until the year is up.
Theories of errors

- Sins of commission
  - unjustified belief that will not accumulate debt.
  - self-control

- A story:
  - A person knows that at some future point in time they may be tempted to consume to much.
  - They know that this means that they may be borrowing on their credit card.
  - But they do not want to encourage this sort of behavior so they choose the card with the high interest rate and low annual fee.
Concluding comments

- Very interesting data.
- Neoclassical model does well.
- Next steps should be to take some explicit model of the types of errors that people make and to see how it improves our understanding of the data.