

**Discussion of “Determinants of Borrowing Limits
on Credit Cards”**

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Basic idea

- “Loan”
 - borrow a fixed amount
- “Line of credit”
 - an option to borrow up to a fixed amount

- Authors argue that there is an information asymmetry with lines of credit.
 - borrower has private information about how much he or she will borrow
- Make the sensible claim that the more information lenders have, the less inefficiency we will observe.
- Argue that lenders should look at wealth data, in addition to the usual information in a credit report, which only includes borrowings.

- I found the paper quite difficult to follow.
- Two main comments on the paper
 1. Not sure where it fits into contract theory.
 2. Why don't banks get more information?

1. Relation to contract theory

- Fundamentally, we have an information problem here.

Observed by bank	Not observed by bank
Age	preferences
Sex	Wealth
Credit score	Current income
Other credit lines	Future income shocks?

- Is this an adverse selection problem or a moral hazard problem or both?
 - Adverse selection:
 - * Borrower has private information prior to contracting .
 - * Borrower knows his own preferences, wealth, etc. how much he will repay but lender doesn't.
 - * Problem: lender can't distinguish good and bad credit risks.
 - Moral hazard:
 - * Borrower receives private information after contracting.
 - * After getting line of credit, borrower receives an income shock, which lender can't observe.
 - * Problem: lender can't insure borrower against bad shocks because it can't observe them.

- Not clearly spelled out in the paper:
 - “The only uncertainty banks have about borrowers’ repayment probabilities arises from their inability to know the actual borrowings to be undertaken on the lines they extend.” (p. 7)
- Where’s the information asymmetry?

- Moral hazard problem?
 - Does borrower receive information (income shock) unobservable to lender?
 - No. Because authors seem to think that information is available in SCF that allows better forecast of borrowing.
- Adverse selection problem?
 - Does borrower have information at time of contracting unobservable to the lender?
 - Yes. Apparently wealth and current income (unknown to the lender) forecast borrowing.

- Adverse selection problem means signalling.
 - High repayment types will take costly action to reveal their type.
 - In the model, amount borrowed is sufficient statistic for repayment probability.
 - So high types might seek out low credit limits to show that they don't plan to borrow much.

- Key point about adverse selection models:
 - Inefficiency comes because good types borrow less than they would like to.
 - Not because they are shut out of the market.
 - Unobservably bad types do fine.
 - Remember Gresham's law is not “Good money drives out bad”
 - * But “Bad money drives out good.”

- Here:

“Individuals who are rationed out of the credit card market could very well turn out to have ex post higher repayment probabilities than some credit card holders who borrow large fractions of their credit limits.” (p. 8)

- It's not clear from the paper why one type i would be more profitable than another.
- People shut out of credit markets would be high wealth people of type i .

- Signalling says that good borrowers will seek out low credit limits.
- Bad types will also get those loans, but will have to get additional lines of credit – revealing their types.
- Superficially consistent with the data.
 - High borrowers don't borrow a lot on one credit line.
 - They get many credit lines.
- So by getting a small number of cards, you signal that you don't intend to borrow much.

Table 1: Number of Credit Cards as a Function of Debt, conditional on having some debt. 2004 SCF

Credit Card Debt Octiles	Average # of Cards	Median # of Cards
1	3.12	2
2	3.62	3
3	3.97	3
4	4.11	3
5	5.06	4
6	5.42	4
7	5.96	5
8	7.98	7

Table 2: Credit Card Debt as a Function of the Number of Credit Cards Held, 2004 SCF

Number of Credit Cards	Average Credit Card Debt (\$)	Median Credit Card Debt (\$)
1	1,875	670
2	2,386	1,100
3	4,271	2,100
4	5,360	3,100
5	6,115	3,100
6 - 10	7,585	4,000
11 - 15	11,631	5,210
16 +	15,625	15,000

2. Why don't lenders get more information?

- Banks have an incentive to establish likelihood of repayment.
- Authors argue that there is information out there that would allow banks to better assess repayment probability.
- Why don't banks get more information?
- The truth is out there!
 - Wealth information is relatively easy to get – no more difficult to get my positive balance at Fidelity than my negative balance at MBNA.
 - Mortgage lenders get wealth and income information.
- Oddly, in mortgage markets, some evidence that lenders move in the *opposite* direction.
 - Increased use of reduced documentation loans
 - Essentially, apply credit card rules to home mortgages

- Lenders now offer a whole menu of disclosure levels
- The more information you provide a mortgage lender, the lower your rate.

Disclosure level

Full		
SIVA	(Stated income, verified assets)	More disclosure
NIVA	(No income, verified assets)	↕
SISA	(Stated income, stated assets)	Less disclosure
NINA	(No income, no assets)	

- Why don't credit card companies offer a similar menu?
 - Credit reports could include income and asset information
 - Privacy concerns?
 - Borrowers could voluntarily provide information

Conclusions

- Interesting topic
 - Authors should try to link paper more closely with literature on asymmetric information.
 - Future question: If more information would improve efficiency, why don't lenders solicit it.