Payday Borrowers: Transaction Habits, Credit Score Changes, and Pecuniary Mistakes

Susan Payne Carter
Vanderbilt University

Paige Marta Skiba
Vanderbilt University

Jeremy Tobacman
University of Pennsylvania

Three Questions

1. How do households choose between financial products?
2. How costly is high-cost credit?
3. What can payday loans teach us about financial security?

Saving, Borrowing, and Financial Sophistication

- Figuring out how to save and how much to save for retirement is a challenge (Lusardi and Mitchell 2006, 2007, 2009)
- Not infrequently, households save and borrow simultaneously (Gross and Souleles 2002, Zinman 2007, Bertaut and Haliassos 2008, Agarwal, Skiba, and Tobacman 2009)
- People with lower levels of “debt literacy” are more likely to use costly financing, such as payday loans (Lusardi and Tufano 2009)

Payday Loans

- Small amounts: typically $300
- Short durations: typically two weeks
- High interest rates: here,
  - 15% on first $500 + 10% on additional amounts
    - Example: Loan = $600; Interest = $85
  - APR = 390% (for loans <=$500)
  - Annualized cost: (1.15)^26 -1= 3686%

- Used by 10 million US households each year

Credit Unions (CU's)

- Not-for-profit financial institutions governed by their members
  - 1935 membership: 1% of US population
  - 2008:
    - 7806 state and federal CU's
    - 88.5 million members
    - $811 billion in assets
- Surprisingly sparse economic research

Data

- Two groups of CU members:
  - 3,845 members who had an electronic debit to a payday lender between January 1, 2006 and June 12, 2006
  - (12,467 other members who had an account open on January 1, 2006)

- Transactions into and out of:
  - Savings
  - Line of credit (LOC)
  - Checking
    - With flags for electronic debits for pdl repayments
- FICO and internal CU credit scores

Summary Statistics

Mean Total Payday Loan Interest: **$175**

Mean Number of Payday Loans: **3.3**

Mean Size of Each Payday Loan Repayment (Principal + Interest): **$450**

Pecuniary Mistakes?

Two Measurement Methods for Interest Losses

Method 1: Calculate the minimum liquidity available from LOC, checking, and savings between payday loan repayment dates

Method 2: Calculate the liquidity available from LOC checking, and savings balances **14 days** before payday loan repayment dates

Interest Loss Calculations

If LOC liquidity available with a 16.9% APR

Take out a $450 PDL:

Interest on PDL: $450* 15% = $67.50

Interest on LOC: $\$450*(1.169^{14/365}-1)=\$2.70$

Loss = $67.50-$2.70 = $64.80

If have liquidity in checking or savings:

Loss = $67.50

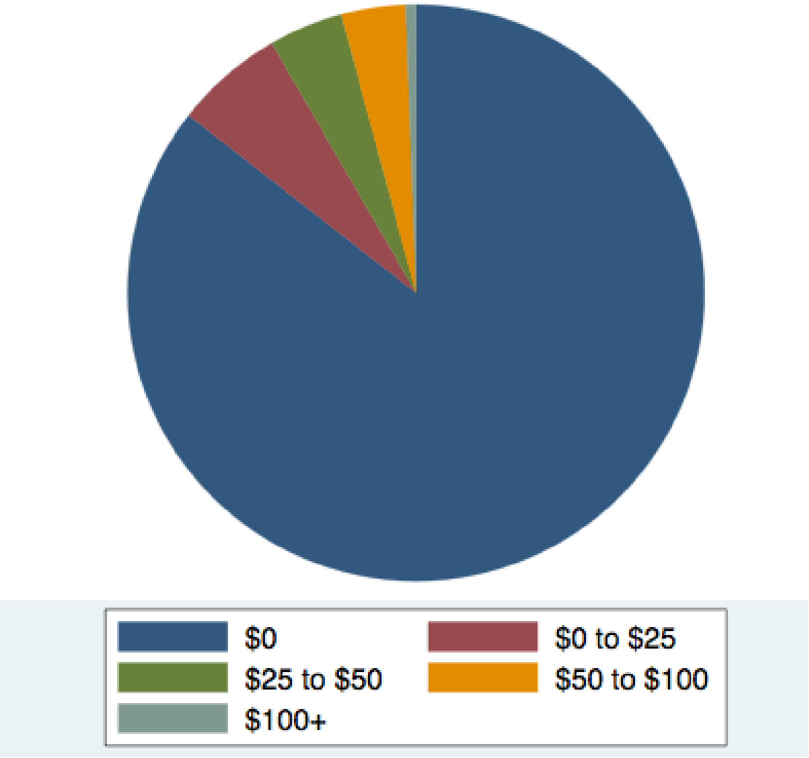
Interest Loss Frequencies

Method 1: Minimum Liquidity		Method 2: 14 Days Before Repayment
	LOC *	
13%		**17%**
	LOC + Checking + Savings	
31%		**60%**

* From subsample that had a positive LOC limit

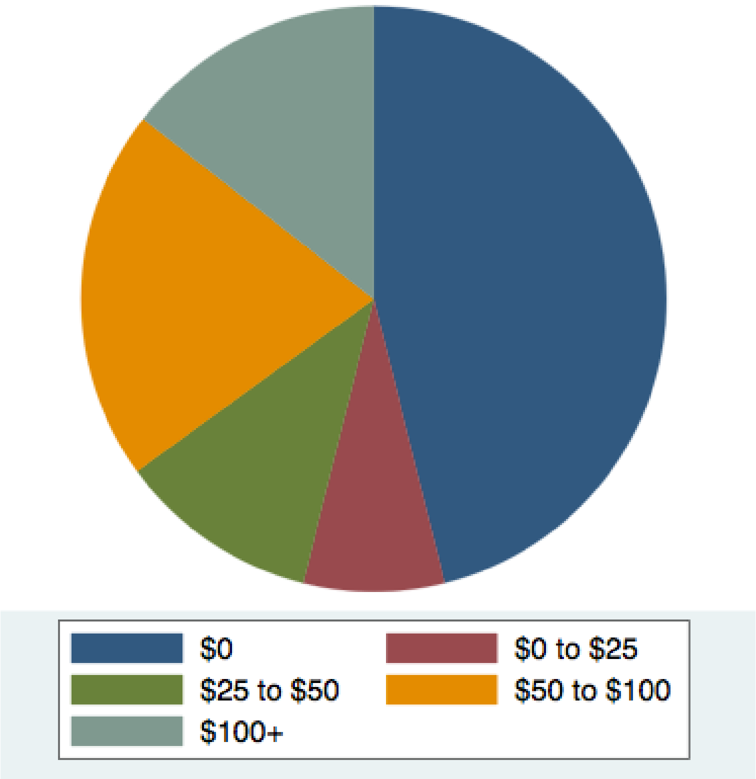
Interest Loss Magnitudes

LOC *



Mean = $5.50

Checking Account



Mean = $49

* From Subsample that had a positive LOC limit

What Predicts (Interest Losses > 0)?

- Higher FICO scores
- Higher initial checking account balances
- Higher (inferred) income
- Small payday loan amounts

- No effect of:
  - Change (January 11 – March 26) in FICO scores
  - Number of transactions

Conclusion

- Pecuniary mistakes?
  - Half of payday borrowers could have used liquidity in checking, savings, or LOC instead
  - Interest losses averaged $49 for the 6 month time period
    - Consistent with previous results on payday borrowing
    - Larger than most results on other kinds of borrowing
- Lifelong financial security benefits from careful analysis of alternatives and responsive decision-making