Do Student Loan Borrowers Opportunistically Default? 
Evidence from Bankruptcy Reform

Rajeev Darolia, University of Missouri
Dubravka Ritter, Federal Reserve Bank of Philadelphia

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Overview

- Student loan borrowers cannot discharge debt in bankruptcy
  - Laws a response to perceived bankruptcy system abuse by “opportunists”
  - Can harm non-opportunistic debtors - Bills to roll back these laws
- We ask: Do student loan borrowers opportunistically default?
- Identification strategy: 2005 policy change
- Data: Random sample of anonymized credit records (N ≈ 2.6M, ~1.3M student loan borrower records)
- Primary findings
  - Do not find evidence of opportunistic default pre-policy
  - Policy change appears to have predictably increased credit supply
- Student loan: lender provides current funds targeted toward educational expenses in return for a future stream of repayments.
  - >$110 billion disbursed annually
- Student loan market can encourage college attendance
  - Shifts costs to future when higher ability to repay
  - Credit constraints for thin file applicants with no collateral
- Repayment is a key issue
  - >$1 trillion in outstanding loan obligations
    - Private lenders (~15% of outstanding debt)
  - Student loan delinquency rates have nearly doubled during the past decade nationally.
  - Default rates on federally supported loan programs recently reached their highest level in more than 15 years.
Personal Bankruptcy

- Allows debtors to make a economic “fresh start”
  - “gives to the honest but unfortunate debtor...a new opportunity in life and a clear field for future effort, unhampered by the pressure and discouragement of preexisting debt.” (1934 Supreme Court)
  - Encourages economic activity → consumption insurance
- Chapter 7 (liquidation)
  - Surrender non-exempt assets to pay debts
    - Exemption maximums vary by state
  - Unsecured debts (e.g., credit card debt) discharged
  - ~70% of personal bankruptcy filings are Chapter 7
- Chapter 13 (reorganization)
  - Retain assets, pledge future income to pay debts
  - May repay some amount of unsecured debt
Student loan borrowers cannot discharge student loan debt in bankruptcy
- Federal SL debt starting in 1976; Private SL debt since 2005

Critiques
- Unfairly damages debtors’ economic health
- Unnecessarily burdensome to struggling students
- Comparable to “medieval indenture”
- Puts SL borrowers in a “special circle of bankruptcy hell reserved for dads who avoid child support and tax evaders”

Empirical evidence of widespread opportunistic behavior not used to motivate bill, provision “slipped in?”

Example bill to roll back the law: S. 114 Fairness for Struggling Students Act of 2013 (Durbin, Warren, Whitehouse, Franken, Harkin, Reed)
Cost of Bankruptcy System Abuse

- Credit availability falls
- Responsible, paying debtors pay higher interest rates
- Creates incentive to work less (job loss or business failure is less costly)
- Rewards opportunists
  - Those with sufficient income to service debt, but who strategically declare bankruptcy
Benefit of filing bankruptcy
= \max[(U_S + U_O) - A_7 - I_{13} - C, 0]

Can choose either Ch. 7 or 13

\therefore \text{Benefit} > 0 \text{ when }

U_S + U_O > A_7 + C

i.e., incentive to strategically file bankruptcy when unsecured debts are large and few assets, regardless of income level

\text{Income}

\begin{align*}
U^* &= (U_S + U_O) - C \\
I^* &= \text{income level needed to service debt}
\end{align*}
Policy Change

- Bankruptcy Abuse Prevention and Consumer Protection Act (BAPCPA)
  - Made bankruptcy less attractive
    - E.g., higher filing fees, court determines future repayment
    - Lengthened time between filings

- In response to growing bankruptcy rates
  - 340k → 1.5M annually from 1985-2004
  - ~90% of Ch. 7 filings had “no” assets

- Rush to file, then filings declined substantially
  - Ch. 7: 23-55% of CY 2004 quarterly filings
  - Ch. 13: 45-77% of CY 2004 quarterly filings
Post-BAPCPA

- Courts can compel Ch. 13 if incomes are high (means test)

- **PSL debt no longer dischargeable**

\[ \therefore \text{Benefit} > 0 \text{ when} \]

\[ U_0 > A_7 + C \cap I < I^* \]

i.e., incentive to strategically file bankruptcy when unsecured (NON SL) debts are large and few assets AND low income

- Other incentives created (transfer wealth to exempt forms, manipulate means test)

\[ U^* = (U_S + U_O) - C \]
\[ U^{**} = U_O - C \]
\[ I^* = \text{income level needed to service debt} \]
Empirical Approach

- PSL nondischargeability laws were motivated by perceived opportunistic behavior by PSL borrowers
- BAPCPA reduced the incentive to default
- Therefore, we observe post-policy bankruptcy filings and default
  - If no change $\Rightarrow$ suggests lack of opportunistic behavior
  - If declines $\Rightarrow$ suggests opportunistic behavior pre-policy

- BAPCPA made Ch. 7 filing less attractive to everyone
  - Therefore, compare policy responses of PSL borrowers to control group whose incentives were not directly affected
Estimate of the effect of the bankruptcy reform on outcomes of PSL borrowers, while accounting for trends of GSL-only borrowers

\[ \delta = [E(Y|P,A) - E(Y|P,B)] - [E(Y|G,A) - E(Y|G,B)] \]

\[ Y_{it} = \alpha + \beta_1 P_i + \beta_2 A_t + \delta (P_i \times A_t) + d_{it} + \eta X_{it} + e_{it} \]

- \( P = \) PSL indicator
- \( A = \) post-policy indicator
- \( d\)-vector includes state of residence, quarter-year, and SL cohort
- \( X\)-vector includes borrower age; lagged components of the credit profile; census tract characteristics, indicators for having a mortgage, auto loan, or other securitized loan, and county unemployment rates.
- SE’s clustered by state
Estimate of the effect of the bankruptcy reform on outcomes of PSL borrowers, while accounting for trends of GSL-only borrowers and non-SL borrowers

\[ \gamma_1 = [E(Y|P,A) - E(Y|P,B)] - [E(Y|G,A) - E(Y|G,B)] - [E(Y|N,A) - E(Y|N,B)] \]

\[ Y_{it} = \alpha + \beta_1 P_i + \beta_2 G_i + \beta_3 A_t + \gamma_1 (P_i \times A_t) + \gamma_2 (G_i \times A_t) + d_{it} + \eta X_{it} + e_{it} \]

The difference between treatment effect estimates from the DD, \( \delta \) and DDD, \( \gamma_1 \) approaches is the pre- and postpolicy trends of non–student loan borrowers:

\[ \delta - \gamma_1 = [E(Y|N,A) - E(Y|N,B)] \]
Data

- FRBNY Equifax Consumer Credit Panel
- 5% random sample of US households with a credit record
  - 5% random sample of SL borrowers
  - 0.5% of non-SL borrowers
- Quarterly credit profile, Q42003 – Q42007
- Detailed information on debt and accounts
- Limited personal background (age, state, zip code)
- Up to 20 SL tradelines per consumer per quarter
- 2.6M total person-quarter observations
- 1.3M SL holder person-quarter observations
  - ~200K PSL, ~1.1M GSL-only
# PSL Borrowers Pre- & Post-Policy

<table>
<thead>
<tr>
<th></th>
<th>Prepolicy</th>
<th>Postpolicy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 7 Filing Rate (%)</td>
<td>0.24</td>
<td>0.10</td>
</tr>
<tr>
<td>Chapter 13 Filings Rate (%)</td>
<td>0.06</td>
<td>0.03</td>
</tr>
<tr>
<td>Student Loan Delinquency Rate (%)</td>
<td>0.74</td>
<td>0.82</td>
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## Chapter 7 Bankruptcy

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<tr>
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<td>PSL</td>
<td>-0.0594***</td>
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<td>(0.0772)</td>
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<td>Post-policy</td>
<td>-0.1793***</td>
<td>-0.0617***</td>
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<td>(0.0252)</td>
<td>(0.0152)</td>
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<td>PSL X Post-policy</td>
<td>0.0923***</td>
<td>-0.0442**</td>
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<tr>
<td></td>
<td>(0.0206)</td>
<td>(0.0203)</td>
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<tr>
<td>GSL</td>
<td>-0.0434</td>
<td></td>
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<tr>
<td></td>
<td>(0.0799)</td>
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<tr>
<td>GSL X Post-policy</td>
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<td>Mean Dependent Variable</td>
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<td>0.1566</td>
</tr>
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<td>Observations</td>
<td>1,302,957</td>
<td>2,612,615</td>
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<tr>
<td>PSL</td>
<td>0.0053</td>
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<tr>
<td></td>
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<tr>
<td>Post-policy</td>
<td>-0.0133</td>
<td>-0.0139**</td>
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<td>(0.0135)</td>
<td>(0.0054)</td>
</tr>
<tr>
<td>PSL X Post-policy</td>
<td>-0.0172</td>
<td>-0.0195*</td>
</tr>
<tr>
<td></td>
<td>(0.0097)</td>
<td>(0.0118)</td>
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<tr>
<td>GSL</td>
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<tr>
<td>Mean Dependent Variable</td>
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<td>0.0477</td>
</tr>
<tr>
<td>Observations</td>
<td>1,302,957</td>
<td>2,612,615</td>
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</tbody>
</table>
## New Student Loans Pre- & Post-Policy

<table>
<thead>
<tr>
<th></th>
<th>Pre-policy</th>
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<tbody>
<tr>
<td>Average Risk Score</td>
<td>650</td>
<td>646</td>
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<tr>
<td>25th Percentile Risk</td>
<td>599</td>
<td>588</td>
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<tr>
<td>10th Percentile Risk</td>
<td>534</td>
<td>514</td>
</tr>
<tr>
<td>Average Initial Balance</td>
<td>$9,990</td>
<td>$12,723</td>
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## Credit Supply – At Origination

<table>
<thead>
<tr>
<th></th>
<th>Risk Score</th>
<th>Student Loan Balance</th>
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<tbody>
<tr>
<td>PSL</td>
<td>6.57***</td>
<td>-240</td>
</tr>
<tr>
<td></td>
<td>(2.42)</td>
<td>(432)</td>
</tr>
<tr>
<td>Post-policy</td>
<td>-8.34***</td>
<td>-770**</td>
</tr>
<tr>
<td></td>
<td>(2.17)</td>
<td>(350)</td>
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<tr>
<td>PSL X Post-policy</td>
<td>-1.25</td>
<td>2,773***</td>
</tr>
<tr>
<td></td>
<td>(3.02)</td>
<td>(505)</td>
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<tr>
<td>Mean Dependent Variable</td>
<td>635</td>
<td>9,532</td>
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<tr>
<td>Observations</td>
<td>72,565</td>
<td>72,565</td>
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</tbody>
</table>
Loan Size by Credit Score Decile

PSL

GSL Only
Other Estimates

- Robust to
  - Pre-2004 Loan Borrowers
    - Attempt to disentangle credit supply changes
  - Alternative time periods
    - Q42004-Q42006
    - Excluding Q42005
Discussion

- 2005 bankruptcy reform reduced filing rates overall
- Policy affected PSL borrowers uniquely, but we do not find evidence behavior changed differentially
- Our interpretation - lack of evidence that the moral hazard associated with PSL dischargeability pre-BAPCPA appreciably affected the behavior of student loan borrowers
  - Consistent with White’s (2007) prediction that BAPCPA would primarily harm non-opportunists
- Credit supply increased
  - Riskier borrowers have access
- Overall welfare?
Rajeev Darolia
University of Missouri
573-884-5247
DaroliaR@missouri.edu
APPENDIX
“If [the need for different bankruptcy treatment of various types of loans] were so compelling and spot on, if these were really different kinds of loans and needed to be treated differently there might have been all of at least 5 minutes of testimony on the bankruptcy reform bill about this. No. This was slipped in. This was not even discussed. And no one knows how did this get in there? How did we say that private loans are not dischargeable in bankruptcy?”

- Senator Richard Durbin (2012)

“A basic principle of our country is a fresh start for those who get in over their heads with debt, if they’re willing to face the rigors of bankruptcy. Even this is denied for those drowning in private student loans, as the result of a provision snuck into the 2005 bankruptcy reform legislation in the dead of night. This bill gives us the chance to right that wrong.”

- Senator Sheldon Whitehouse (2013)
Example Legislative Response

- S. 114 Fairness for Struggling Students Act of 2013 (Durbin, Warren, Whitehouse, Franken, Harkin, Reed)

“In 2005, the law was unjustifiably changed to give private student loans the same privileged bankruptcy treatment as government loans, even though private student loans have vastly different terms and fewer consumer protections. Today’s bill would restore the bankruptcy law, as it pertains to private student loans, to the language that was in place before 2005 so that privately issued student loans will once again be dischargeable in bankruptcy like nearly all other forms of private debt.”
“the easy availability of discharge from educational loans threatens the survival of existing educational loan programs. … the occurrence of a few instances of credit splurges on the eve of bankruptcy by individuals who promptly obtain discharges of the debts tends to bring discredit on the operation of the bankruptcy laws.”

- Report of the Commission on Bankruptcy Laws (1973)
“It is dangerous to enact a law that is almost specifically designed to encourage fraud…If student A elects to repay the loan, honoring the legal and moral obligation that was incurred, he begins his career with a substantial debt and the accompanying financial pressure. Meanwhile, Student B (who chooses to declare bankruptcy) can begin with a clean slate and is free to spend his initial earnings on other items…Student B is rewarded for refusing to honor a legal obligation. The lesson that Students A and B have learned is that it ‘does not pay’ to honor one’s debts or other legal obligations.”

- U.S. Representative Allen Ertel (1977)
More Detail on Covariates

- **Credit profile components**
  - Equifax Risk Score (a type of credit score)
  - inquiries in the prior three months
  - age of newest account
  - age of newest student loan
  - student loan balance
  - total tradelines balance
  - number of tradelines
  - number of tradelines 120 or more days past due

- **2000 Decennial Census (tract level)**
  - median income
  - percentage with a college education
  - percentage that is a minority race or ethnicity
  - percentage that own their homes
## Summary Statistics

<table>
<thead>
<tr>
<th></th>
<th>PSL</th>
<th>GSL-Only</th>
<th>No SL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chapter 7 Filing (%)</strong></td>
<td>0.17</td>
<td>0.22</td>
<td>0.11</td>
</tr>
<tr>
<td></td>
<td>(4.07)</td>
<td>(4.63)</td>
<td>(3.25)</td>
</tr>
<tr>
<td><strong>Chapter 13 Filing (%)</strong></td>
<td>0.04</td>
<td>0.06</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>(2.11)</td>
<td>(2.48)</td>
<td>(1.90)</td>
</tr>
<tr>
<td><strong>120+ Days Delinquent on a Student Loan (%)</strong></td>
<td>0.78</td>
<td>1.16</td>
<td>na</td>
</tr>
<tr>
<td></td>
<td>(8.81)</td>
<td>(10.70)</td>
<td>na</td>
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<tr>
<td><strong>Risk Score</strong></td>
<td>653</td>
<td>637</td>
<td>703</td>
</tr>
<tr>
<td></td>
<td>(99)</td>
<td>(105)</td>
<td>(103)</td>
</tr>
<tr>
<td><strong>Total Tradeline Balance ($)</strong></td>
<td>40,496</td>
<td>33,086</td>
<td>16,113</td>
</tr>
<tr>
<td></td>
<td>(42,791)</td>
<td>(39,673)</td>
<td>(39,200)</td>
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<tr>
<td><strong>Total Student Loan Balance ($)</strong></td>
<td>26,809</td>
<td>19,363</td>
<td>na</td>
</tr>
<tr>
<td></td>
<td>(36,474)</td>
<td>(27,620)</td>
<td>na</td>
</tr>
<tr>
<td><strong>Individual's Age (years)</strong></td>
<td>33.38</td>
<td>34.46</td>
<td>51.02</td>
</tr>
<tr>
<td></td>
<td>(12.16)</td>
<td>(11.97)</td>
<td>(17.09)</td>
</tr>
<tr>
<td><strong>Tract College Educated (%)</strong></td>
<td>35.82</td>
<td>33.84</td>
<td>31.80</td>
</tr>
<tr>
<td></td>
<td>(17.60)</td>
<td>(17.32)</td>
<td>(17.41)</td>
</tr>
<tr>
<td><strong>Tract Median Income ($)</strong></td>
<td>48,022</td>
<td>47,656</td>
<td>48,270</td>
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<td></td>
<td>(19,003)</td>
<td>(19,470)</td>
<td>(20,891)</td>
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<tr>
<td><strong>Tract Homeowner (%)</strong></td>
<td>66.68</td>
<td>65.78</td>
<td>69.60</td>
</tr>
<tr>
<td></td>
<td>(22.74)</td>
<td>(23.06)</td>
<td>(20.91)</td>
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<tr>
<td><strong>County Unemployment Rate (%)</strong></td>
<td>4.87</td>
<td>4.85</td>
<td>5.00</td>
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<tr>
<td></td>
<td>(1.36)</td>
<td>(1.42)</td>
<td>(1.52)</td>
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<td><strong>Observations (person-quarters)</strong></td>
<td>195,623</td>
<td>1,107,334</td>
<td>1,309,658</td>
</tr>
</tbody>
</table>