College on Credit: a multi-level analysis of student loan default

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Overview

• Brief summary of loan trends and “state of affairs” of student loan default research
• Conceptualization of repayment “success”
• Data and analytical strategies
• Key findings relative to theory/policy
• Discussion
Research questions

• *To what extent are:*
  – *students’ socioeconomic, academic, or demographic characteristics associated with defaulting on student loans?*
  – *institutional characteristics related to default rates?*
Some qualifications...

• What this study does
  – Examines borrowers’ odds of defaulting relative to repaying on time
  – Partitions the variance between student and institution levels
  – Utilizes recent national survey data (BPS:09)

• What this study doesn’t do
  – Estimate a causal relationship between these factors
  – Compare other repayment options (i.e. deferment, forbearance, etc.)
  – Examine private loan repayment
How much indebtedness occurs?

- $25,250 (1)
- 66% (2)
- 8.7 million (3)

- Average debt of bachelors degree recipient:
  - $950 < debt > $55k
- Percent of undergraduate bachelors grads who borrow
- Number of borrowers (fed sub+unsub undergrads)
Share of undergraduates* borrowing federal loans
*full-time, full-year only (1)

<table>
<thead>
<tr>
<th>Institution Type</th>
<th>1992-93</th>
<th>2007-08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary two-year and above</td>
<td>63.0%</td>
<td>92.8%</td>
</tr>
<tr>
<td>Private four-year (doctoral)</td>
<td>38.5%</td>
<td>57.1%</td>
</tr>
<tr>
<td>All institutions</td>
<td>31.3%</td>
<td>44.3%</td>
</tr>
<tr>
<td>Public four-year (doctoral)</td>
<td>30.4%</td>
<td>48.6%</td>
</tr>
<tr>
<td>Public two-year</td>
<td>11.7%</td>
<td>21.5%</td>
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</tbody>
</table>
Share of outstanding debt by source
(NY Federal Reserve data)
Mortgage, $8.83
HE Revolving, $0.70
Auto Loan, $0.70
Credit Card, $0.76
Student Loan, $0.76
Other, $0.36

2010

Overview | Trends | Conceptual framework | Data and analysis | Findings | Implications
2011

- Mortgage, $8.54
- Student Loan, $0.84
- Credit Card, $0.70
- Auto Loan, $0.71
- HE Revolving, $0.64
- Other, $0.33
Context on student loan default

• Policy
  – HEA
    • Title IV eligibility
    • Gainful employment

• Research
  – Do institutions matter?
  – Or is default a “pre-existing” condition? (Monteverde, 2000)

• Practice
  – Consequences of defaulting:
    • Borrower: aid eligibility, wage garnishment, credit score, bankruptcy
    • Institution: CDR, default management, 3-year window (30% CDR)
Trends in loan default
(2-year CDR)

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Conceptual framework

Student-level (level 1)

Demographics:
- Age
- Gender
- Race/ethnicity

Socio-economic status:
- First-generation student
- Family income level
- Has dependents

Academic experience:
- Major choice
- College GPA
- Received Pell Grant
- Cumulative federal loan
- Took out private loans
- Transfer
- Degree completion

Post-collegiate employment:
- Employment status

Institution-level (level 2)

Control:
- Public
- Private
- Proprietary

Level:
- Two-year
- Four-year

Primary loan repayment outcomes of interest:
- In repayment
- In default

Alternative loan repayment outcomes:
- Repaid loans
- Emergency protection
- Not yet in repayment
Data and analysis

• Data:
  – Nationally-representative sample
    • In repayment vs. In default (n=5,959)
    • Panel weights

• Analytical technique:
  – Multi-level model (ICC = .32)
  – Binary outcome (1 = default, 0 = in repayment)
Key finding #1: 

*Cumulative debt burden is not a strong predictor of default*

<table>
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<tr>
<th>Status</th>
<th>Amount</th>
<th>Odds ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative federal loans</td>
<td>0.919***</td>
<td></td>
</tr>
<tr>
<td>Cumulative federal loans (sq)</td>
<td>1.001**</td>
<td></td>
</tr>
</tbody>
</table>
Key finding #2: Degree completion and employment are strong predictors of default

<table>
<thead>
<tr>
<th>Share of borrowers in default by degree attainment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree recipient</td>
</tr>
<tr>
<td>27%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Odds ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>No degree, not enrolled</td>
</tr>
<tr>
<td>Unemployed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Share of borrowers in default by employment status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed</td>
</tr>
<tr>
<td>13%</td>
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</tbody>
</table>

Overview | Trends | Conceptual framework | Data and analysis | Findings | Implications
Key finding #3: Student socio-economic characteristics are moderate predictors of default
Key finding #4: 
Net of student characteristics, institutional sector strongly predicts default

Share of defaults, by sector
- Public four-year, 11%
- Public two-year, 19%
- Private four-year, 8%
- Private two-year, 9%
- For-profit four-year, 9%
- For-profit two-year, 52%

Odds ratio of default, by sector
Comparison group = public four-year sector
- Private four-year: 110%
- Public two-year: 132%
- For-profit four-year: 214%
- Private two-year: 259%
- For-profit two-year: 316%
Summary & Implications

• Not all default risk can be attributed to “pre-existing conditions”
  – In fact, it may be a “preventable illness”
    • Recall the grad rate and unemployment variables

• Federal policy implications
  – Student-level
    • Improve information regarding repayment options
    • Consider alternative sanctions for defaulted loans
  – Institution-level
    • Program integrity: strengthen career college sanctions/access to Title IV aid
    • Cohort Default Rate threshold could even lower for many for-profits (i.e. are we “ok” when 30% of borrowers default?)
Thank you!

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