



The Effect of Undergraduate Student Loan Debt on Postbaccalaureate Decision-Making

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Outline

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 - Conceptual Framework
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Motivation

“The college degree is becoming the new high school diploma: the new minimum requirement, albeit an expensive one, for getting even the lowest-level job”

Rampell, 2013



Motivation

“The college degree is becoming the new high school diploma: the new minimum requirement, albeit an expensive one, for getting even the lowest-level job”

Rampell, 2013

On the teaching force being 80% white...

“[minority college graduates] may carry significant debt and have high expectations for future salaries”

Rich, 2015



Motivation

- Reliance on debt to finance higher education is on the rise
 - Over the past decade, total amount of federal loans has risen by 52%
 - 60% of students who earned a college degree in 2013 held some type of debt
 - Students of color and from low-income backgrounds disproportionately rely on loans
- Borrowing is generally healthy behavior but there are consequences to not meeting repayment requirements
 - Half of all borrowers are either delinquent, in default or in a repayment plan that makes their balances rise instead of fall
- Becomes a national concern if aversion to the consequences of debt deters students from individually or socially optimal postbaccalaureate decisions



Purpose

To expand our general understanding of how undergraduate loans influence and whether they potentially constrain the postbaccalaureate decision-making for students.

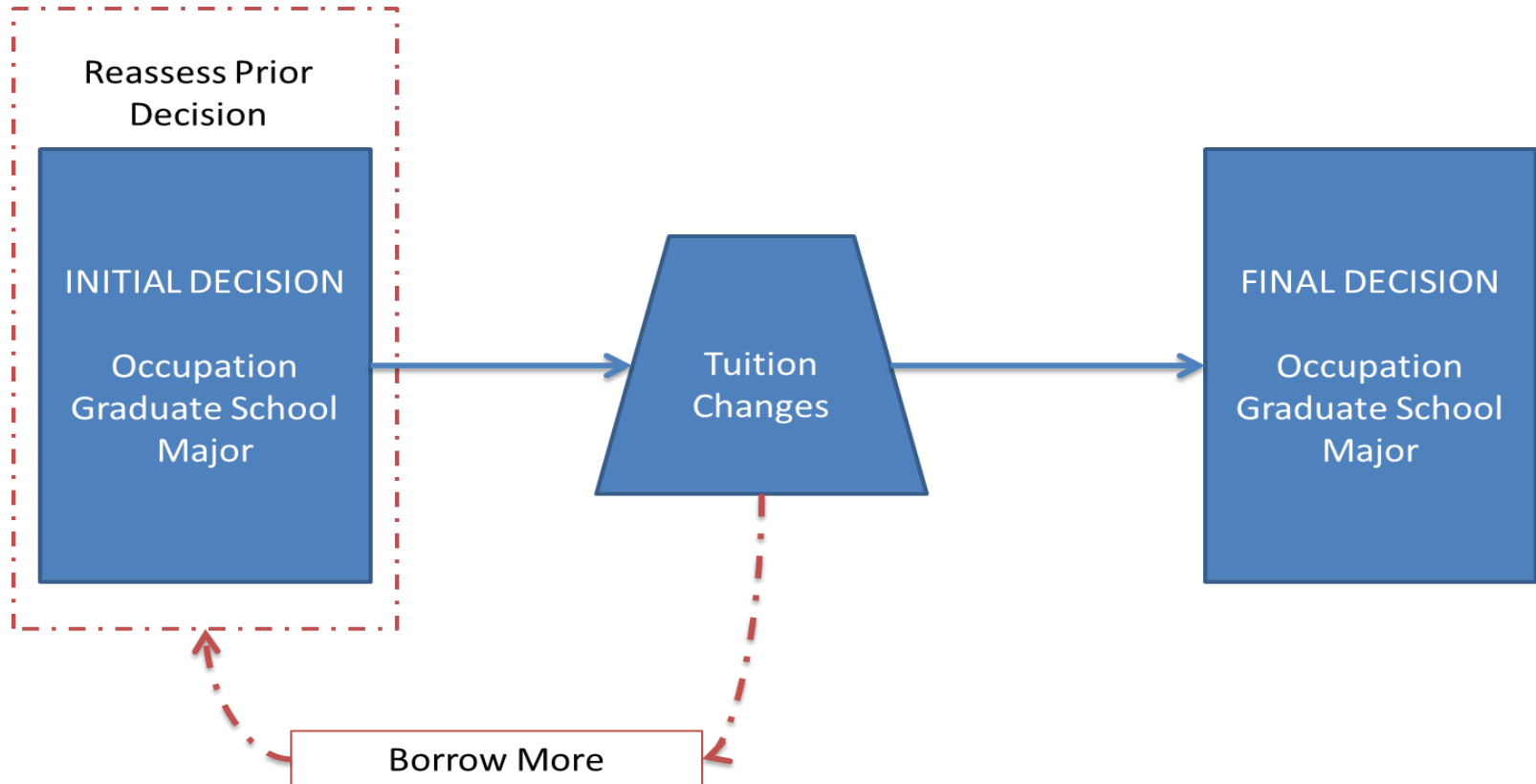


Literature Review

- Body of research on the relationship between debt levels and postbaccalaureate decision-making finds mixed results
- Causal studies:
 - Rothstein and Rouse (2011): negative effect on low-salary occupation choice
 - Malcom and Dowd (2012): negative effect on enrolling in graduate school for STEM degree holders
 - Zhang (2013): negative effect on enrolling in graduate school for students attending public institutions
- Previous research on debt's relationship with postbaccalaureate decision-making generally uses older, institution-specific, or field-specific data that may not be as relevant to the current economic context in which policy stakeholders are making decisions



Conceptual Framework





Research Questions

- To what extent does undergraduate student loan debt affect postbaccalaureate educational aspirations, educational enrollment, and early-career occupational choice?
- How do underrepresented students conceptualize undergraduate debt and their repayment options? How does this change closer to time of repayment?



Quantitative: Research Question

To what extent does undergraduate student loan debt affect postbaccalaureate educational aspirations, educational enrollment, and early-career occupational choice?



Quantitative: Data

Beginning Postsecondary Students (BPS: 04/09)

- Nationally representative, longitudinal cohort study of students enrolling in postsecondary education for the first time in 2003-2004.

Baccalaureate and Beyond (B&B: 08/12)

- Nationally representative, longitudinal cohort study of baccalaureate degree earners in academic year 2007-2008.

Current study: U.S. citizens and resident aliens attending not-for-profit institutions for which IPEDS codes could be located.



Quantitative: Research Design

First stage

$$debt_{it} = \gamma_0 + Z\gamma_i + X_i\alpha + \varepsilon_i$$

Second stage

$$outcome_{it} = \beta_0 + \beta_1 \widehat{debt}_{it} + X_i\delta + u_i$$



Quantitative: Research Design

First stage

$$debt_{it} = \gamma_0 + \mathbf{Z}\boldsymbol{\gamma}_i + \mathbf{X}_i\boldsymbol{\alpha} + \varepsilon_i$$

Second stage

$$outcome_{it} = \beta_0 + \beta_1 \widehat{debt}_{it} + \mathbf{X}_i\boldsymbol{\delta} + u_i$$

$debt_{it}$: total cumulative undergraduate loans or total federal undergraduate loans (both log)

$outcome_{it}$: binary for graduate school aspirations, enrollment, or continuous measure of annual salary (log)

\mathbf{Z} : change in average tuition & fees (log), parent's education, interaction between the two

\mathbf{X} : gender, race/ethnicity, prior income (quadratic), college entrance exam, institutional selectivity, institutional control, institutional level, entrance cost of attendance, college GPA, marriage status, children



Quantitative: Results

- Lack of evidence found for debt inducing changes in graduate school aspirations
- Credible causal estimates produced for two outcomes: graduate school enrollment and early-career occupation salary



Quantitative: Results

- A \$10,000 increase in *total* loans:
 - Decreases likelihood of students enrolling by 3-4%
 - Increases average salary by \$1,550 (2009) and \$3,410 (2012)
- A \$10,000 increase in *federal* loans:
 - Decreases likelihood of students enrolling by 5%
 - Increases average salary by \$2,100 (2009) and \$4,620 (2012)



Qualitative: Research Question

How do underrepresented students conceptualize undergraduate debt and their repayment options?
How does this change closer to time of repayment?



Qualitative: Research Methods

Participants

- 6 African American, female, recent graduates of a Southern University who borrowed federal undergraduate loans

Data Sources

- Document/artifact analysis
- 30-45 minute semi-structure interviews
 - Phase one: interview during June 2015 close to graduation
 - Phase two: interview October/November 2015 close to when students make repayment decisions



Qualitative: Results

Timing and structure of information

Family as a source of knowledge

Comfort with the amount borrowed

Realities of post-baccalaureate decision-making



This work...

- Supports that debt inhibits graduate school enrollment for students who respond to changes in tuition and fees
- Supports that debt increases the early-career occupation salary of the same students
- Suggests interviewing students past graduation is key as reported confidence in repayment and postbaccalaureate decisions appear to change as repayment draws closer



Contributions

- Research
 - New way to identify causal estimates of undergraduate debt
 - Mixed methods analytical approach provides more holistic results
- Policy and Practice
 - State tuition policies
 - Federal, state, and institutional aid disbursement policies
 - Financial counseling specifically focused on educational debt



Question Time!