

Where Do For-Profit Students Go When Colleges Lose Federal Aid?

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- Rise of the for-profit sector
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 - Average tuition \$14k/year (NCES 2013)
 - 93% of students receive fed aid (NCES 2013)
- Growing evidence of less-than-desirable student outcomes, allegations of fraud and abuse (U.S. GAO 2010, Senate HELP Committee 2012)

Motivation

- Proposed Gainful Employment regulations
 - Apply to all FP and some community college programs
 - Links access to federal student aid programs to students' post-college earnings and loan repayment
- ED estimates (2014 Federal Register):
 - ~1400 programs (99% in FPs) would not pass GE requirements
 - 840k students would lose federal student aid
- Hundreds of institutions would potentially close (Guryan and Thompson 2010)

Research Questions

- Will increased regulation reduce access?
 - Where will for-profit students go when their colleges lose access to federal aid?
 - Stay in open colleges and face higher prices?
 - Enroll elsewhere?
 - Exit higher education all together?
 - Ultimately depends on the extent to which FPs compete with other sectors (and possibly other FPs too)

Setting

- We look back to the last major regulatory action affecting federal student aid eligibility in the early 1990s
- We estimate the impact of federal aid sanctions (loss or threatened loss) on enrollment in:
 - Sanctioned schools
 - Local competitors
- Focus on Pell Grant recipients
 - Most vulnerable to federal student aid loss
- Admin and survey data
 - Pell Grant recipients, sanctions, loan default rates, closures
 - IPEDS enrollments, completions, school characteristics

Empirical Approach

- Generalized DD identification strategy
 - Variation across local higher education markets over time in federal sanctions
- Compare enrollments in counties and years where institutions were sanctioned, to those where there were no sanctions.
 - Assumes spillovers are limited to local higher education market (proxy for with county)
 - Limited to 2-year sector

Related Literature

- Student outcomes at FPs:
 - Earnings gains from attendance at FPs similar or lower than public sector (Cellini & Chaudhary 2014, Lang & Weinstein 2013)
 - Resume audit studies find FP graduates do no better on employer callbacks (Deming et al. 2014, Darolia et al. 2014)
- Effect of federal student aid on FP sector:
 - Tuition 80% higher for programs receiving federal aid vs. programs that do not (Cellini & Goldin, 2013)
 - When institutions lose federal student aid eligibility, enrollments decline 12-16% in sanctioned schools (Darolia 2013)
- Evidence that FPs and CCs compete for students:
 - Positive funding shocks to CA community colleges => FP exit (Cellini 2009)

Background: Federal Student Aid

- Title IV: Grants (e.g., Pell), loans (e.g., Stafford), and campus-based aid (e.g., work-study)
 - FPs receive about 25-30% of Pell Grant disbursements, but enroll only 11% of students (Baum & Peayea 2013).
 - 81% of FP students take out federal student loans vs. 11% in CC.
 - Of students who borrow, FP students average \$8,500 in loans vs. \$4,400 for CC student borrowers (Cellini & Darolia 2014).

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 - Of students who borrow, FP students average \$8,500 in loans vs. \$4,400 for CC student borrowers (Cellini & Darolia 2014).
- Huge growth in FP education in late 1980s raised similar concerns about fraud, abuse, and students' ability to repay loans.
 - In 1989, about 3,000 FP institutions getting T4 aid (more than today!)
 - ~10% of students, 25% of fed aid
 - GAO reports, congressional hearings
 - Result: new regulations for T4 eligibility

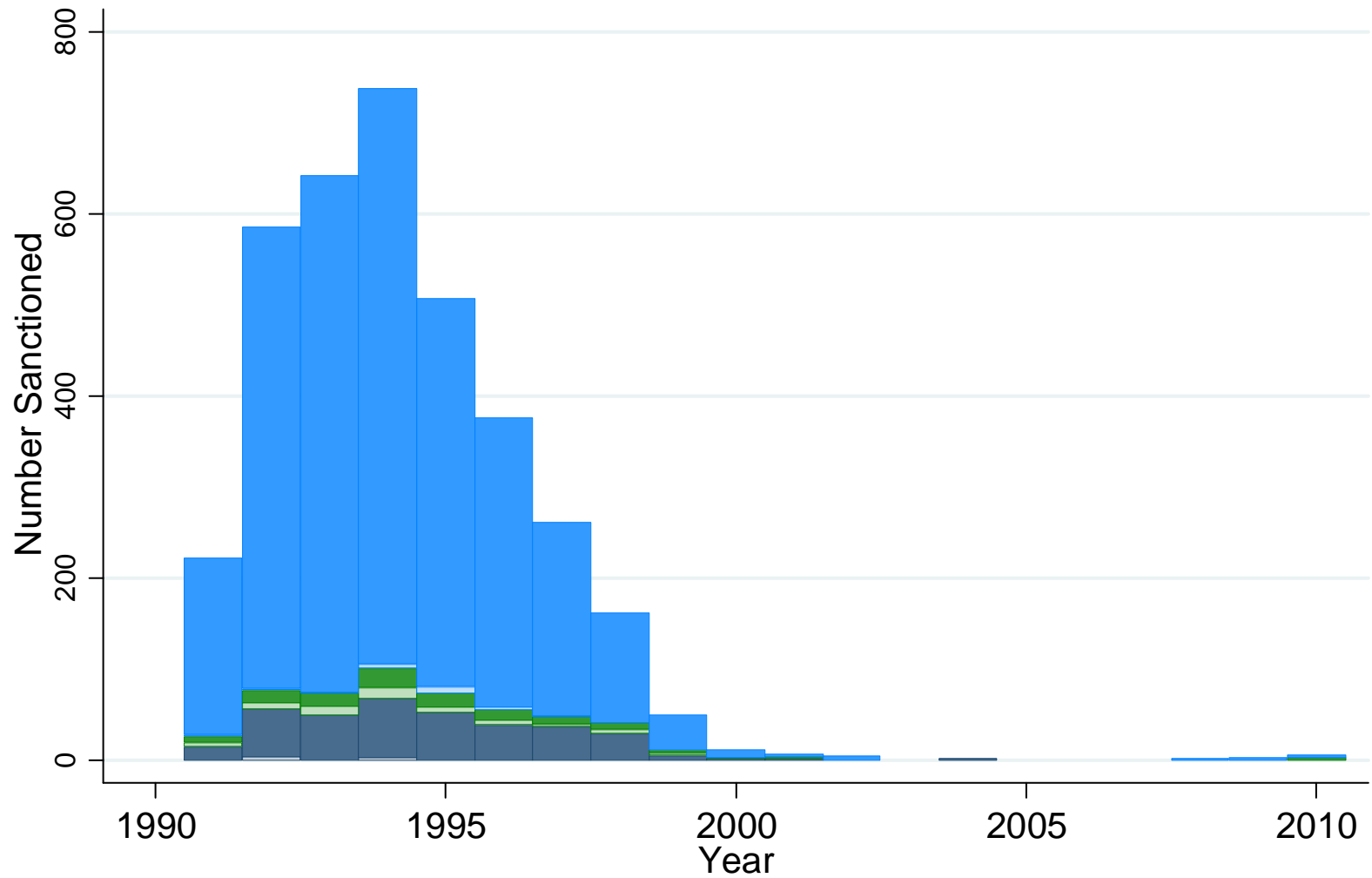
Background: Federal Student Aid

- Cohort Default Rate (CDR) Regulations

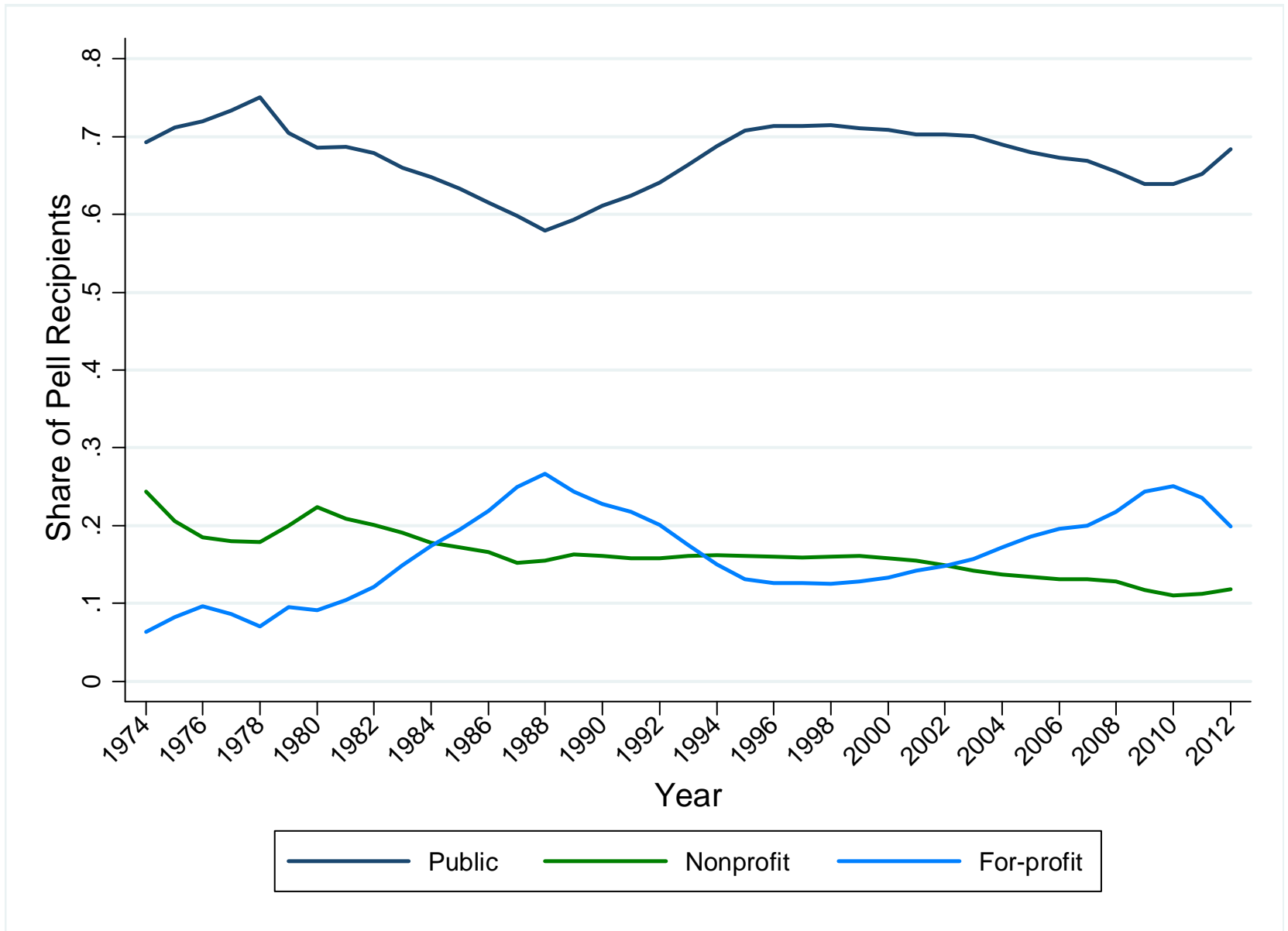
CDR = % students who default on loans within 2 years of entering repayment

- Implemented in 1989 => 1st round of sanctions in 1991
 - Schools with CDR > 40% in one year lose all Title IV eligibility.
 - Schools with CDR > 25% in each of 3 consecutive yrs lose loan eligibility only (retain Pell eligibility).
- We observe threatened sanctions and appealed sanctions that were upheld
 - Cannot distinguish between successful appeals and no appeals (FOIA request did not help!)

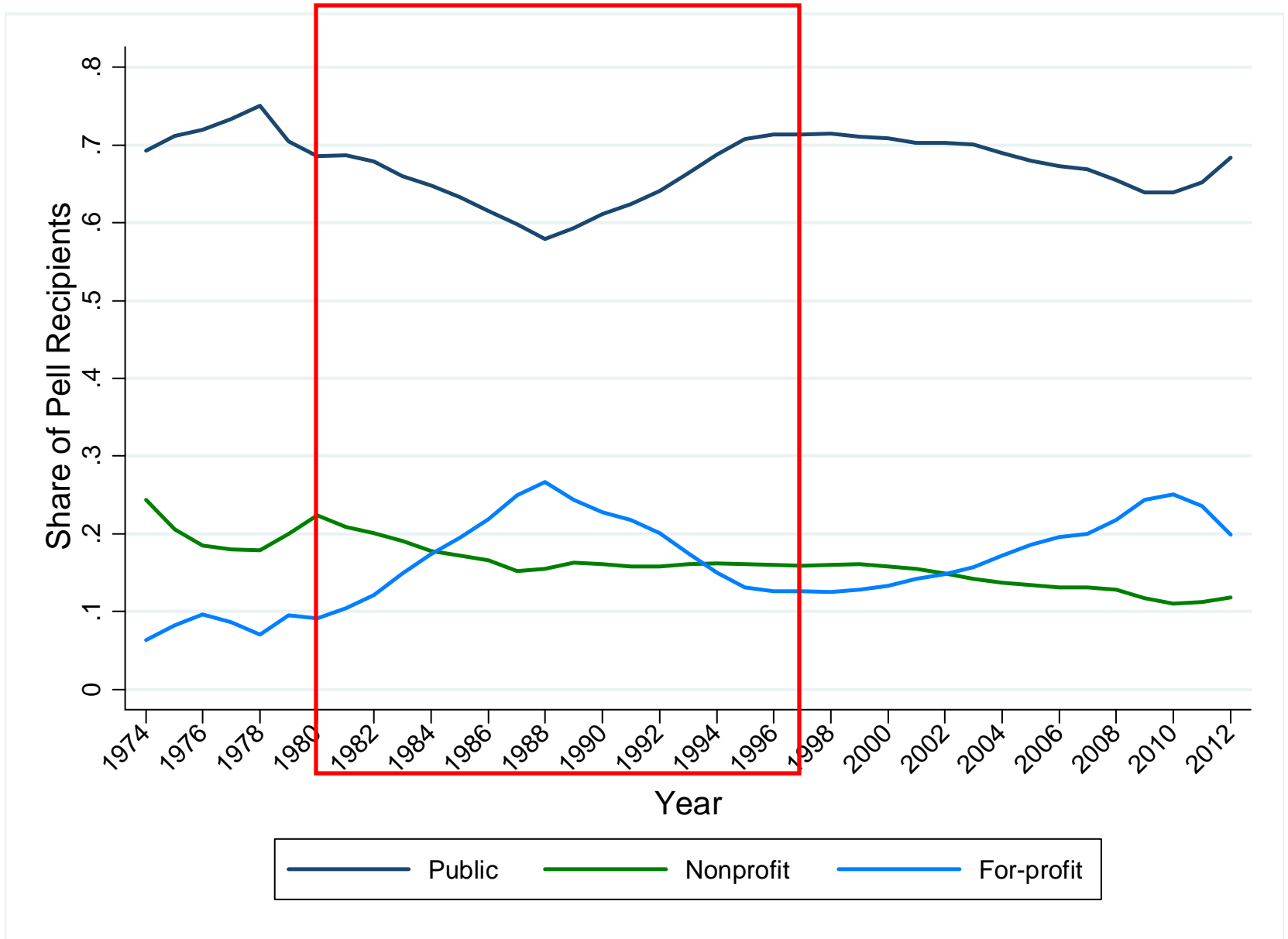
Sanctions by Sector and Year



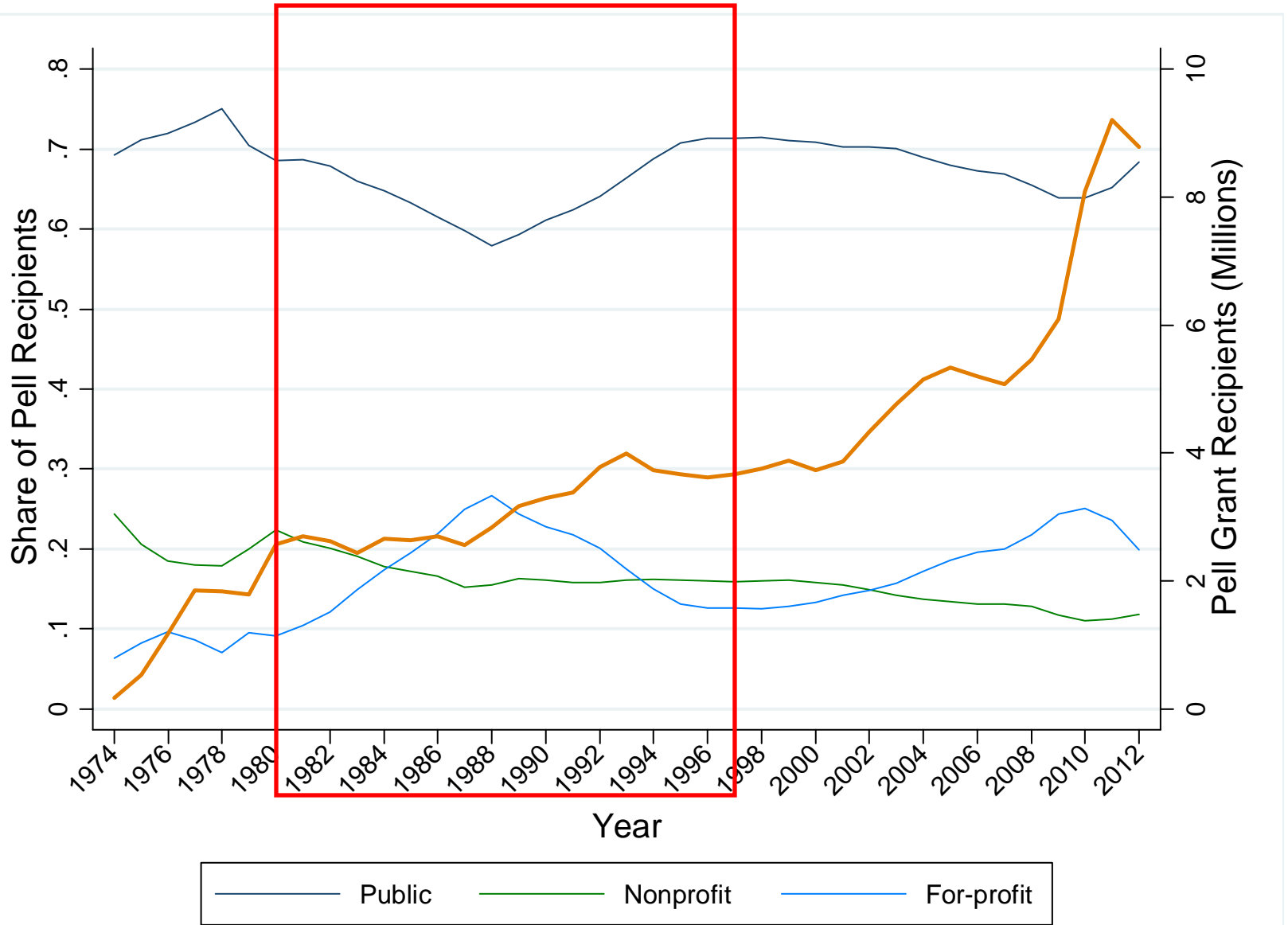
The Distribution of Pell Grant Recipients Across Sectors



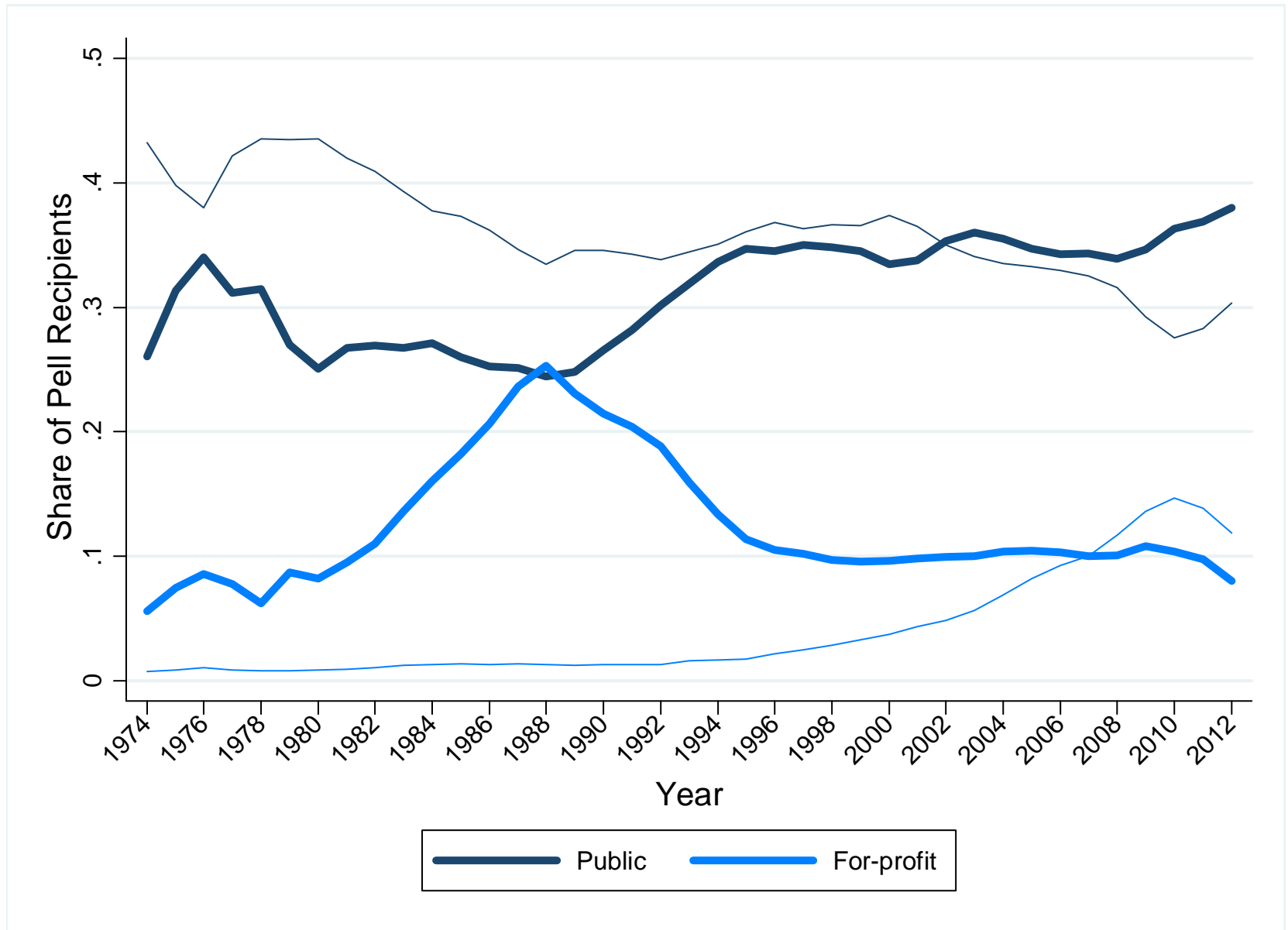
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Total Pell Grant Recipients



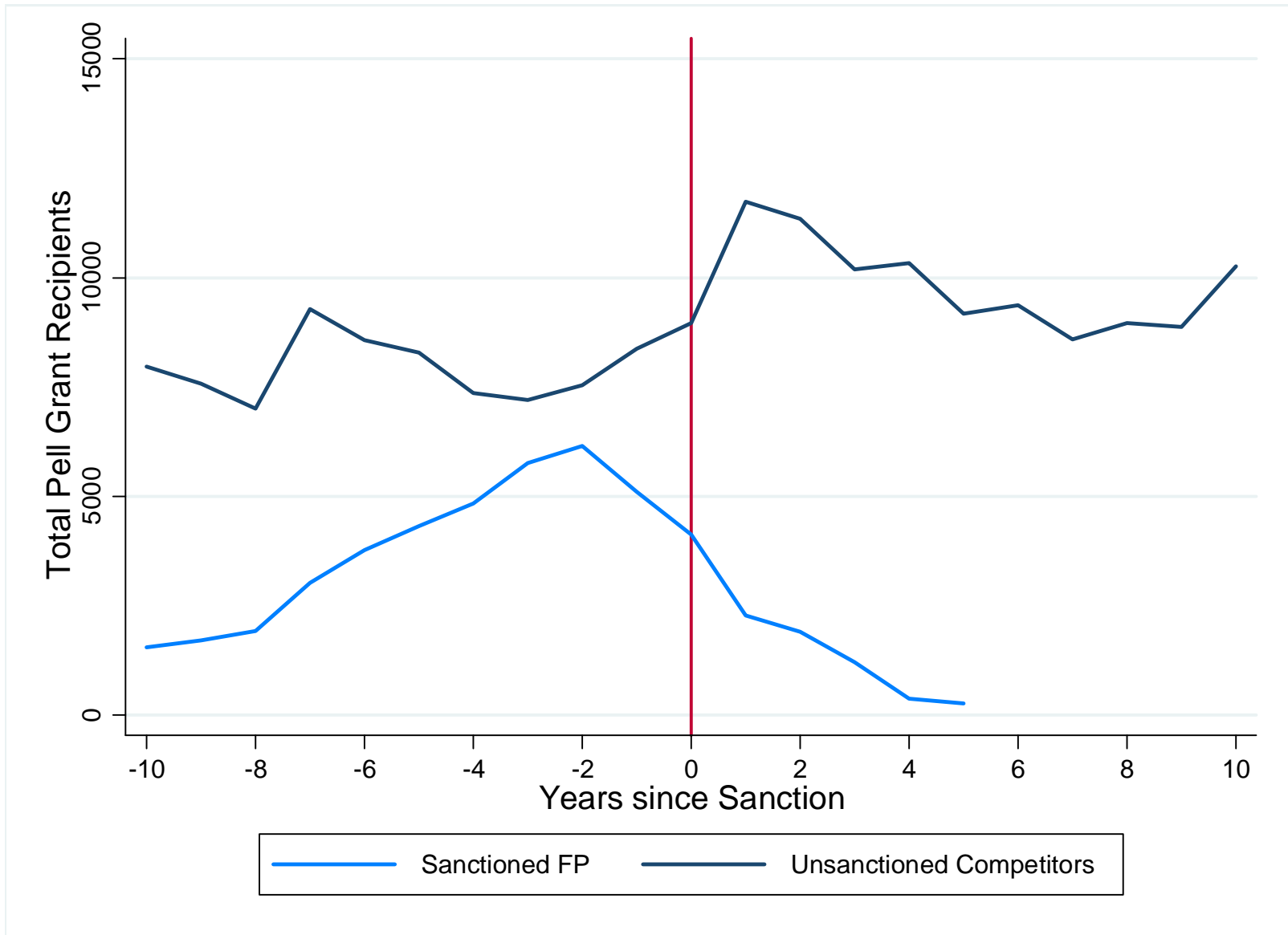
The Distribution of Pell Grant Recipients: 2-Year Schools

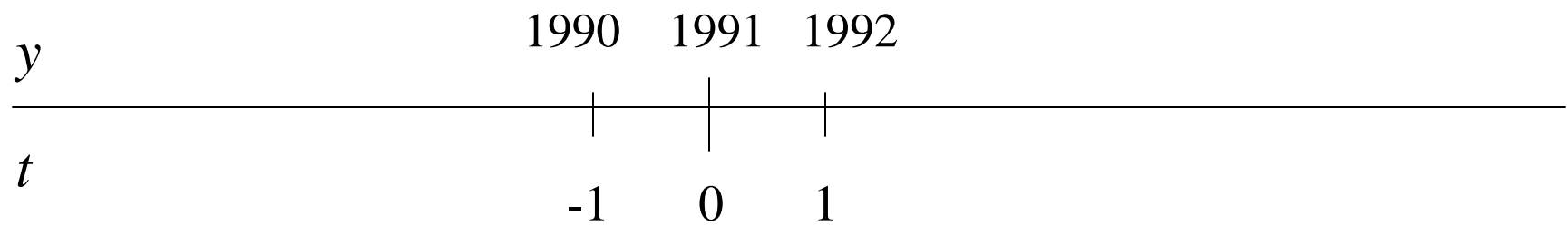
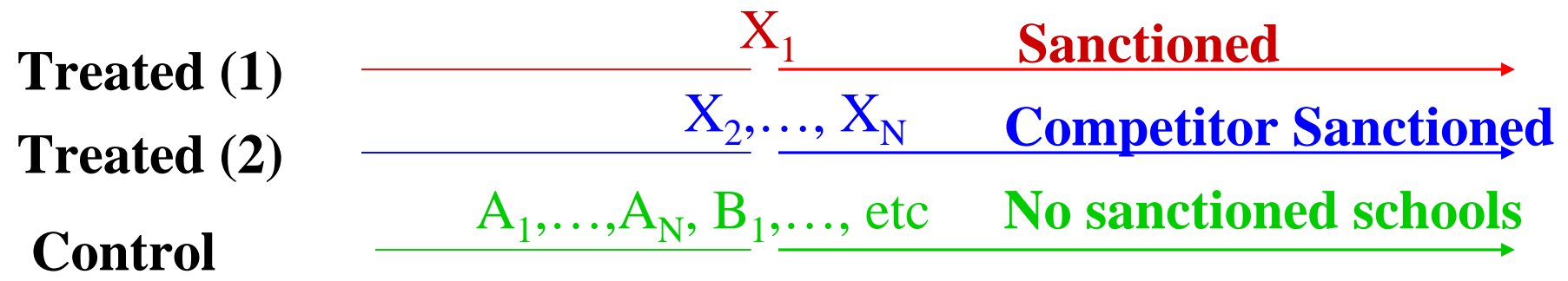


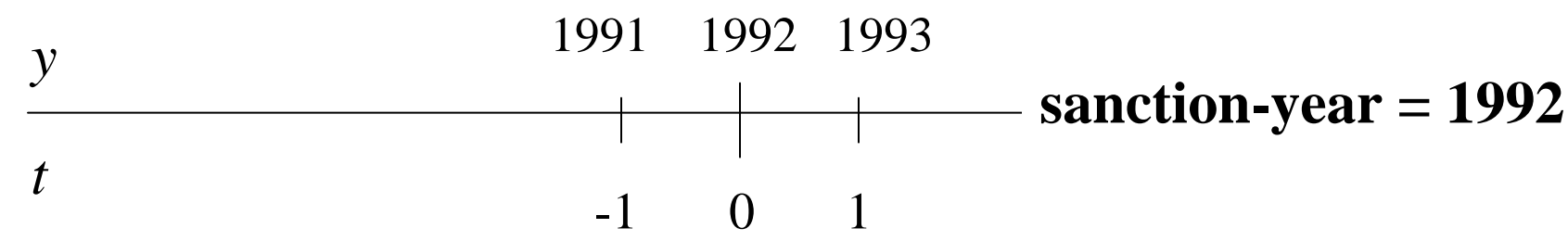
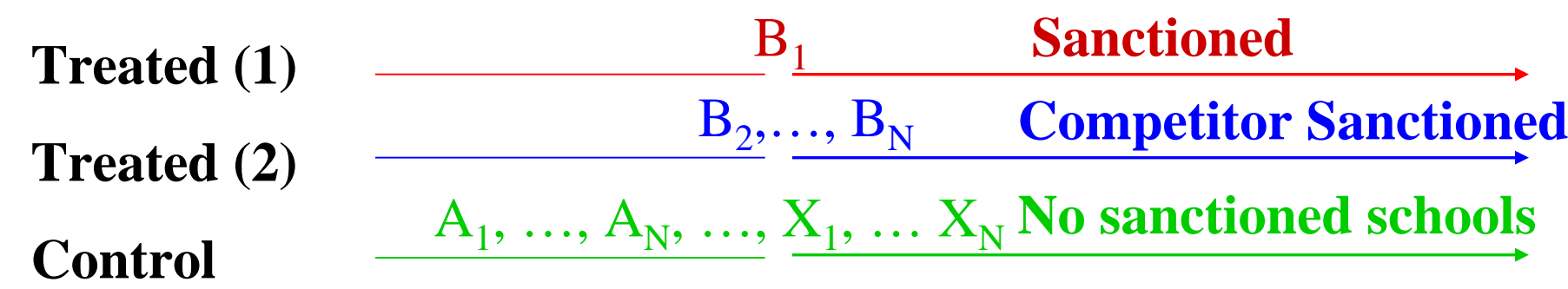
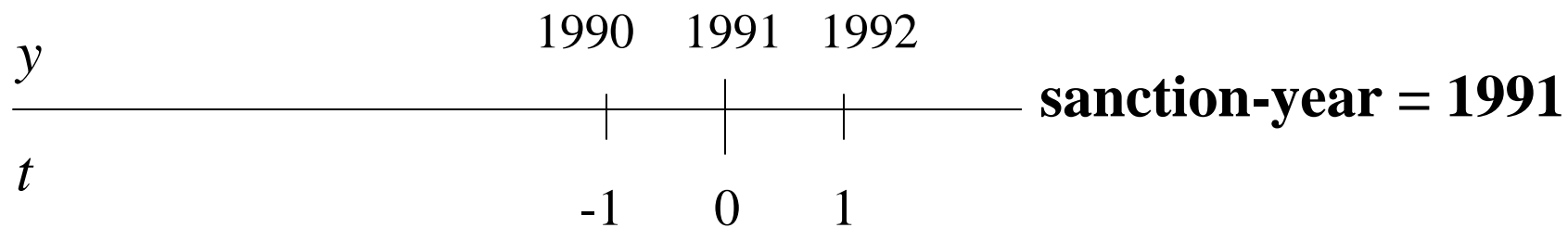
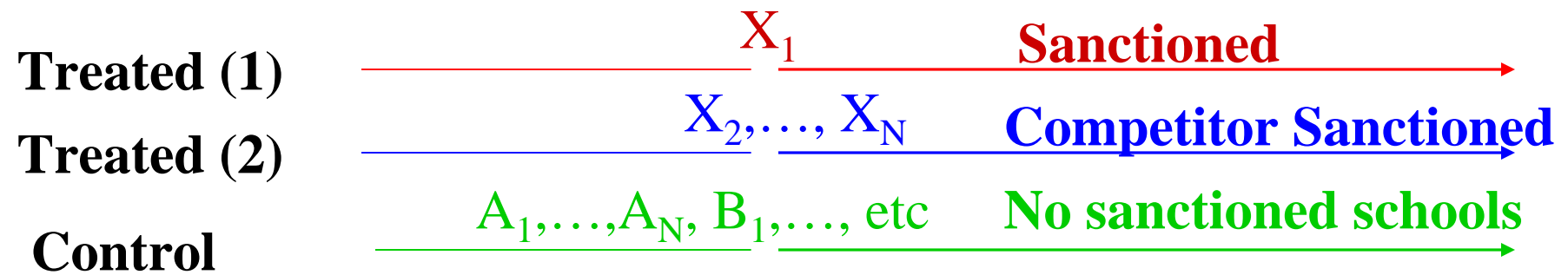
Methodology Details

- Diff-in-Diff approach:
 - Compare enrollments in counties and years where institutions were sanctioned, to those where there were no sanctions.
 - Assume spillovers are limited to local higher education market (proxy for with county)
 - Limit to 2-year and less-than-2-yr sector (assumes 2- and 4-year schools do not compete for students)
 - Limit to counties with <50 schools (drop 14 counties)
 - Consider 5 years before and after each sanction.
 - Sanction defined broadly (threatened, loss of loans, loss of T4)
 - Identifying assumption: No other factors affecting enrollment in either the sanctioned or competitor schools were contemporaneous with the timing of the sanction.

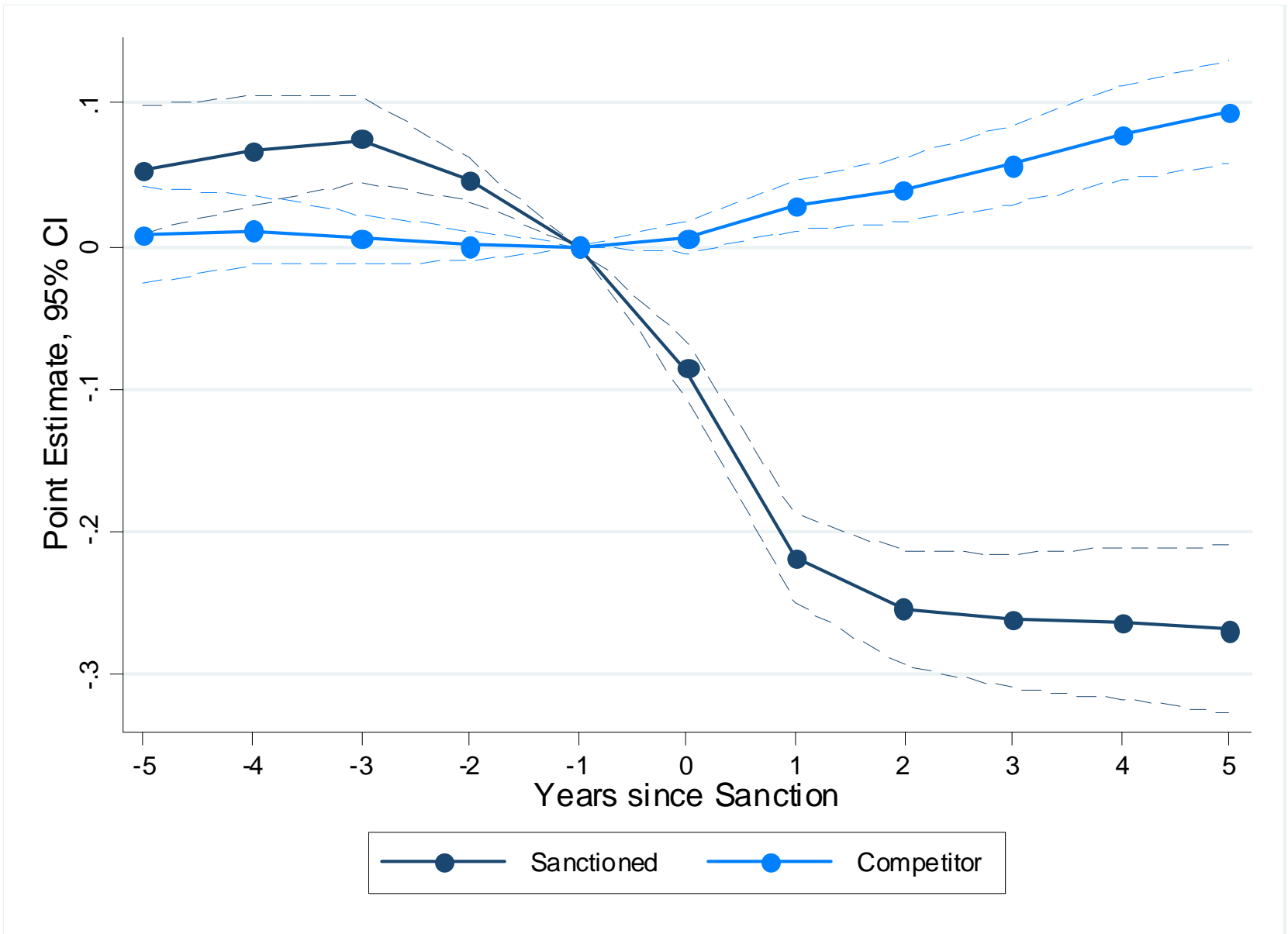
ID Variation Example: Memphis TN, 1991



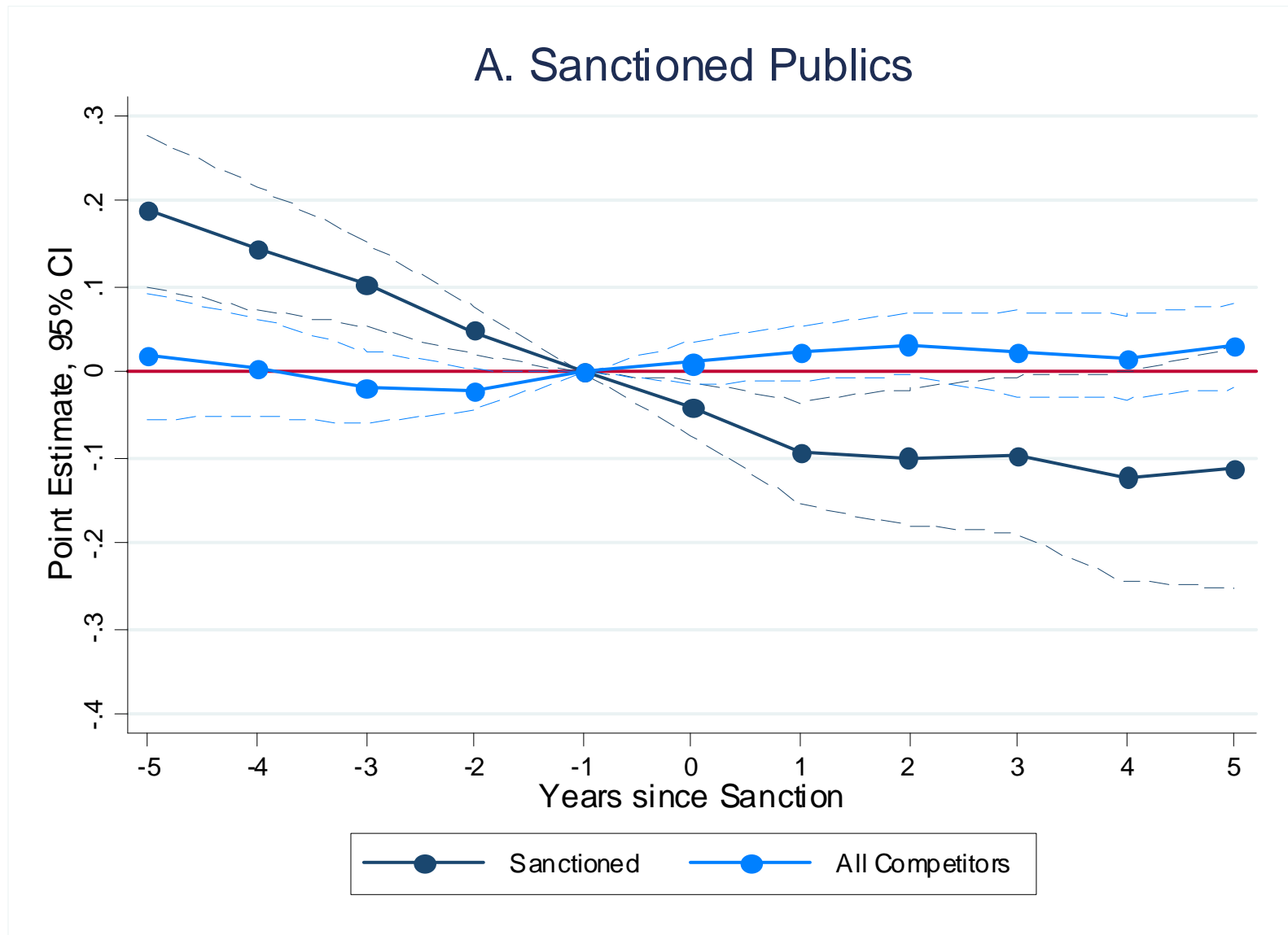




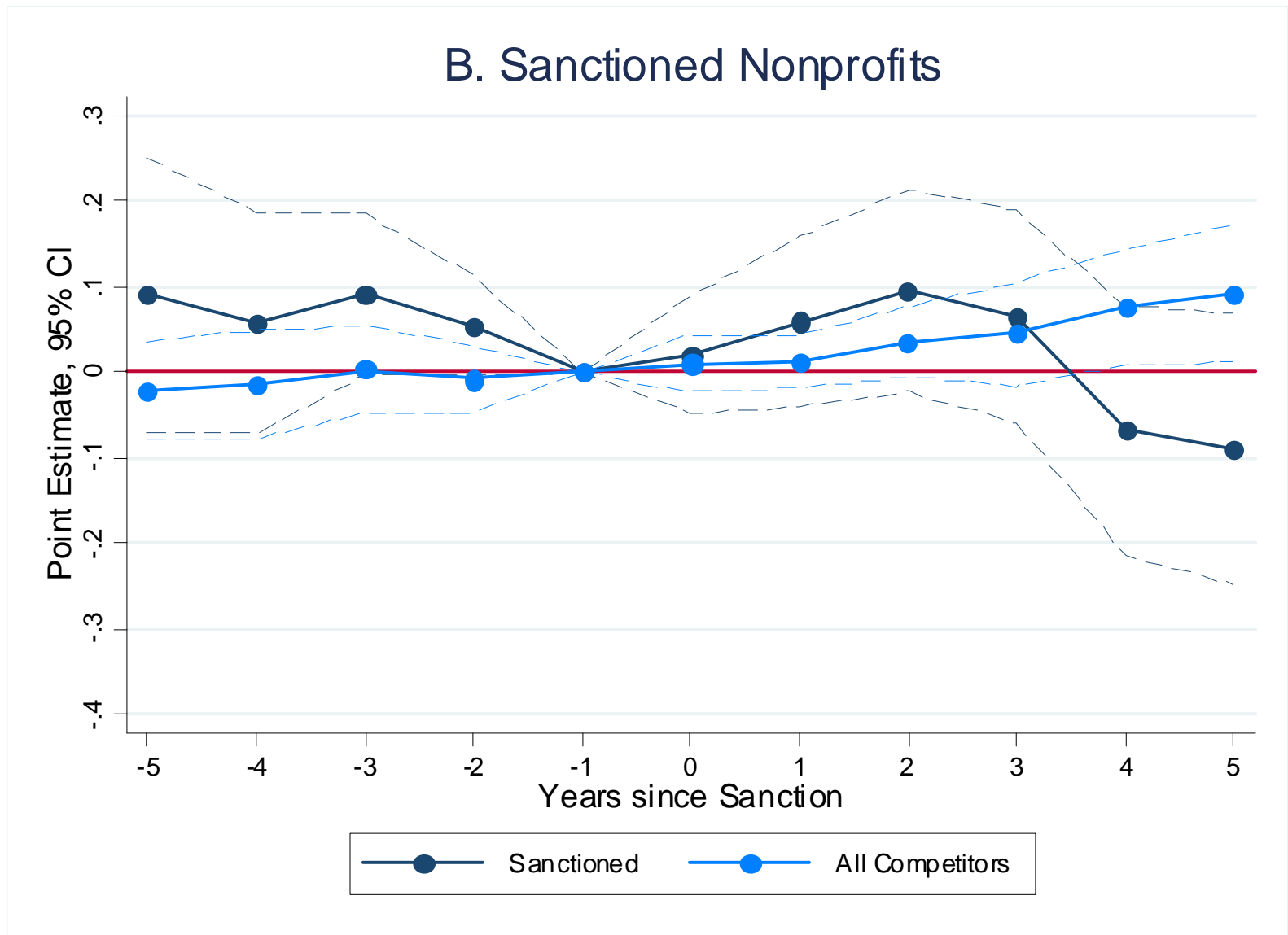
The Impact of Sanctions on Ln(Pell Enrollment)



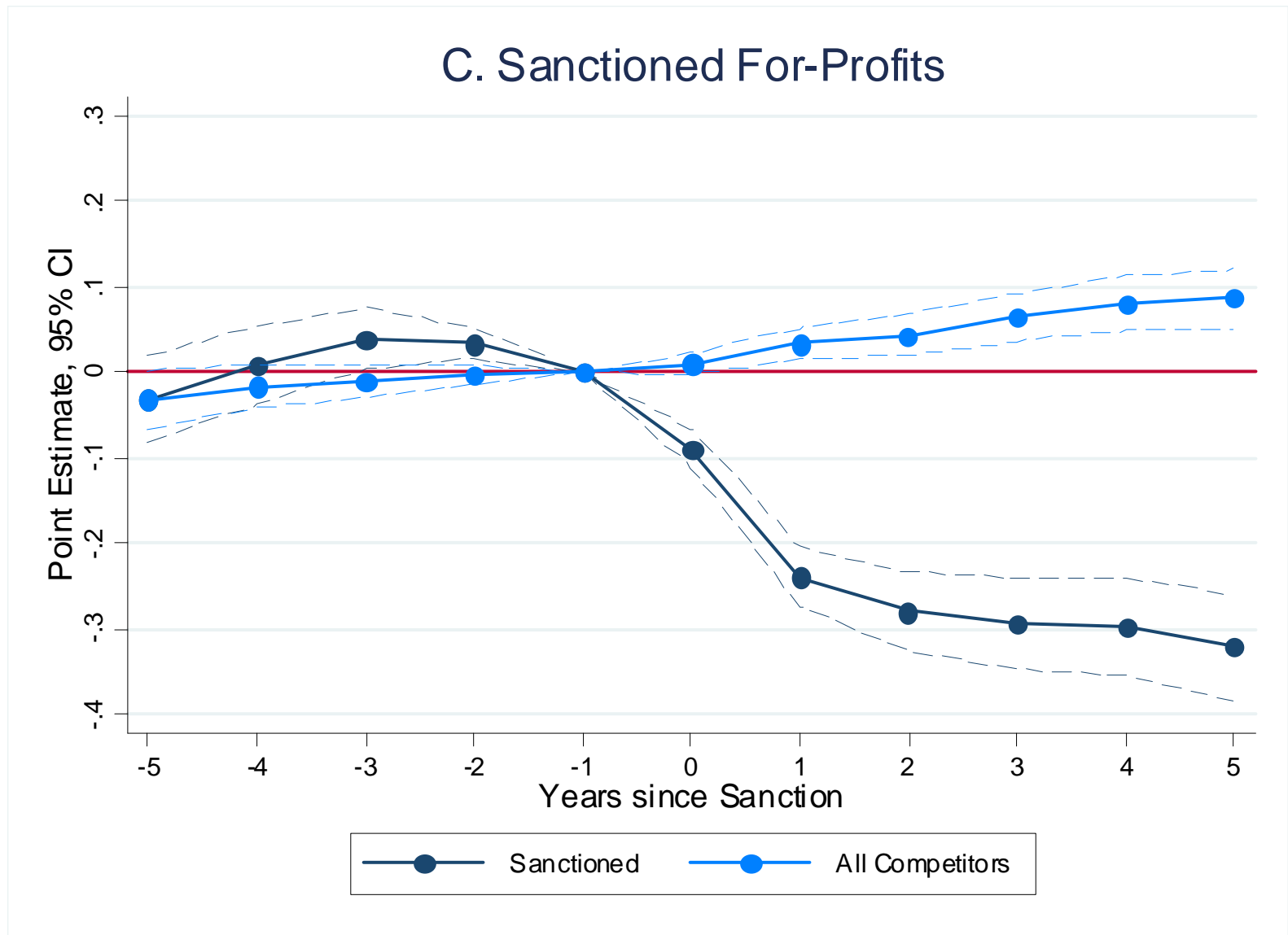
The Impact of Sanctions on Ln(Pell Enrollment): Heterogeneity by Sector



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Impact on Pell Grant Enrollment, with Closed Schools

Sanctioned sector: 3. For-profit

Sanctioned x Post	-0.721 (0.063)**
Competitor x Post	
x Public	0.100 (0.048)*
x Nonprofit	0.031 (0.041)
x For-profit	-0.160 (0.037)**
Test of equality (<i>p</i> - val)	<0.001

Observations

Total pre-sanction enrollment in market	
Sanctioned	382
Public competitor	1,755
NP competitor	176
FP competitor	1,076

Predicted change in market enrollment:	
Sanctioned	-275
Public competitor	176
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60% of enrollment decrease in sanctioned for-profits absorbed by community colleges

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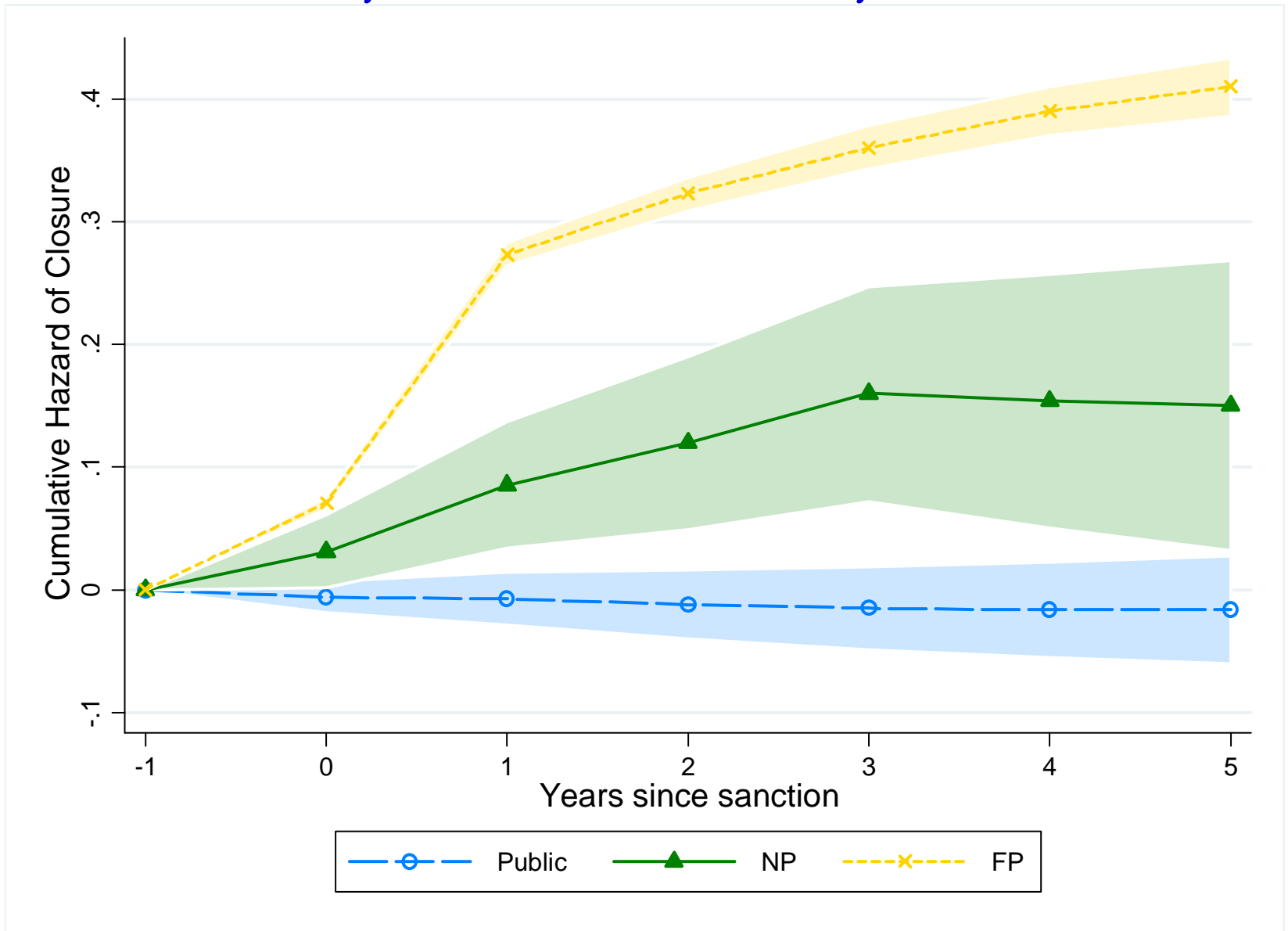
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But, after accounting for negative enrollment spillovers on other for-profits, only 40% absorbed

Majority of Reduction in Sanctioned FP Enrollment Driven by Increased Probability of Closure



Preliminary Results

- Probability of closure increases by 40% in the 5 years after a threatened sanction among for-profits
- Sanctioned for-profits that remain open experience a 24% decrease in enrollment of Pell Grant recipients.
- After accounting for increased probability of closure, enrollment declines = 51%

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- Sanctioned for-profits that remain open experience a 24% decrease in enrollment of Pell Grant recipients.
- After accounting for increased probability of closure, enrollment declines = 51%
- Where did these students go?
 - Public competitors of sanctioned for-profits see a 10% increase in enrollment in both cases (including closed or not).
 - FP competitors see a 15% *decline* in enrollment, after accounting for school closures
 - Depending on how you count these competitor FP declines, this means 40-64% of affected for-profit students reenroll in a community college

Remaining Questions

- What accounts for the decline in FP competitor enrollment?
 - Students learning that FPs have a risk of sanction (or are low quality)?
 - Institutions preemptively closing (or not enrolling Pell-eligible students) to avoid sanction?
- Is the switch to the public sector welfare-enhancing?
 - Depends on cost and quality, for both students and taxpayers.
- How similar is the institutional environment today?
 - Back then...
 - No online colleges and many fewer chains, but small number of large correspondence schools
 - Possibly stronger community college systems
 - Potentially less reliance of FPs on federal student aid

Thank You!