

FINANCIAL AID: WHAT DO WE KNOW AND HOW DO WE KNOW IT?

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Why should aid matter?

- By most accounts, financial benefits outweigh costs
- Short-term \$\$\$ constraints → worse societal outcomes
 - Creation of federal loan programs



Why should aid matter?

- “Overcorrect” for misperceptions
 - Reduce stress and defrays unobserved “costs”
 - “Option” value lets them try it out
 - Impact type of institution attended
-
- Problems: lack of information;
burdensome forms;
awards not transparent



Methods of evaluating aid

Regressions / Matching

- Adjust for background characteristics
- Cannot control for everything (e.g., motivation)

Difference-in-difference (DD)

- Examine changes in “treatment” group after introduction of a policy change

Regression Discontinuity (RD)

- Examine outcomes for students who just met criteria for program eligibility

Randomized control trials (RCT)

- The title says it all – randomly assigning eligibility eliminates all (or most) potential bias

Evaluating aid – who is the comparison group?

- Comparing Pell Grant recipients to those with no aid...
- “Naively” comparing low-income recipients to high-income non-recipients
- Adjusting for income → Comparing students with same income but only one “chose” to get the Pell Grant
 - Cannot say whether differences in outcomes are due to Pell Grant or characteristics that predict Pell Grant application
 - Motivation; stronger support network; college services

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Randomized Control Trial (RCT)

- Create pool of eligible students and randomize aid offers
 - Method does not require everyone to participate
- Least amount of bias and easiest to evaluate



U. of Michigan's HAIL Scholarship

- Low-income, high-achieving students typically “undermatch” by attending less selective institutions
- “High Achieving Involved Leader” scholarship
 - Personalized mailing
 - Promised four years of free tuition
- Identified through ACT/SAT scores
 - MI subsidizes for free in public schools



U. of Michigan's HAIL Scholarship

- Applications 26% → 67%
- Enrollment 13% → 28%
- What issues were solved?
 - Uncertainty about their suitability for an elite school
 - Students typically over-estimate the (net) cost of college
 - “Low cost” intervention as most would have received institutional aid
 - Procedural barriers (e.g., FAFSA forms)



Randomized Control Trial (RCT)

- Other examples: Buffett Scholarship in Nebraska, Wisconsin Scholars Grant
- Potential issues with RCTs:
 - Ethical concerns, but often limited resources allow for “rationing” and can ensure program stability
 - May be difficult to run in practice and/or legally infeasible
 - Outcomes not available for years

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Regression discontinuity (RD)

- Program eligibility determined by numeric threshold
- Can compare students on either side of threshold
 - Students with 5570 EFC and 5580 EFC should be similar on both observed and unobserved (e.g., motivation) characteristics

Expected Family Contribution (EFC)	Annual Pell Award Full Time 12+ Credits	Semester Award Full Time 12+ Credits
5401-5500	745	373
5501-5576	657	329
5577+	0	0



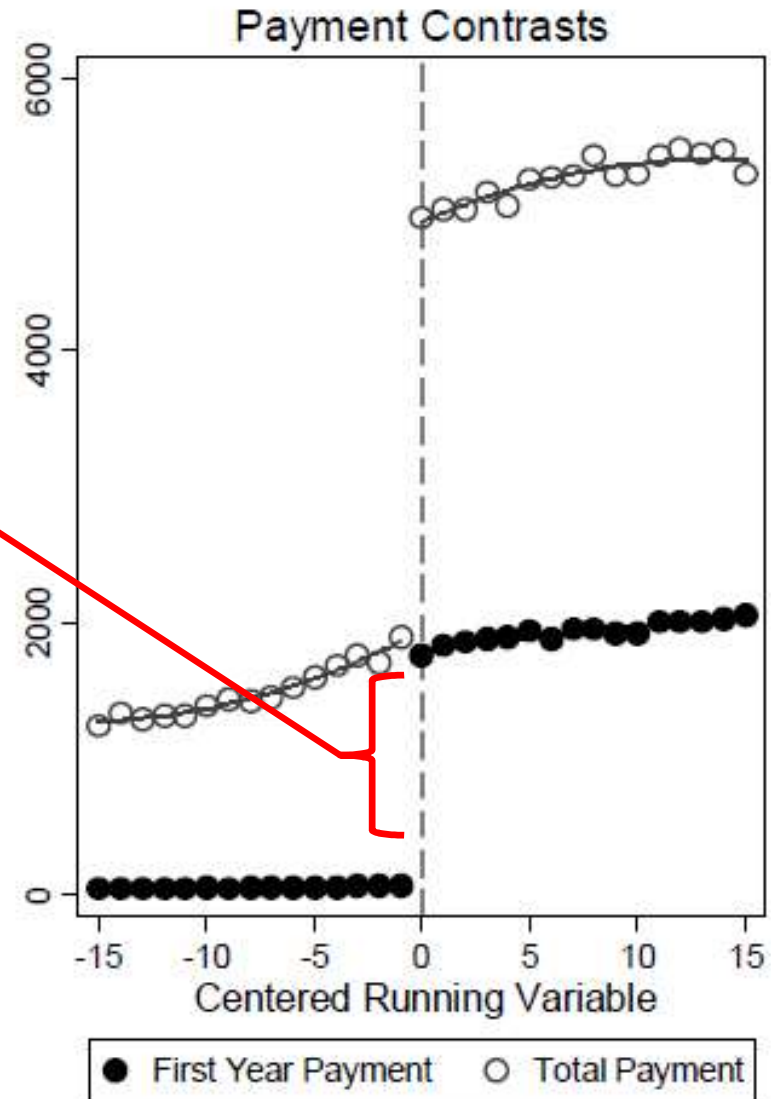
Regression discontinuity (RD)

- Program eligibility determined by numeric threshold
- Can compare students on either side of threshold
- Functionally equivalent to RCT but less statistical power and slightly more complicated evaluation procedures

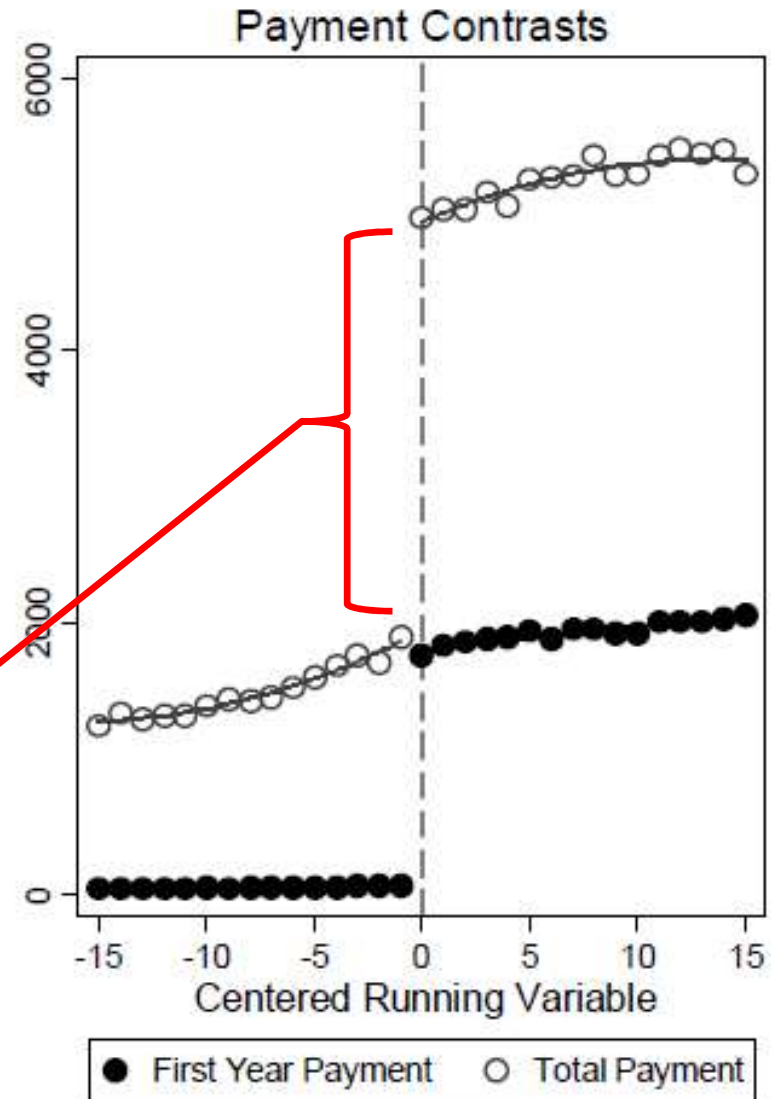
California's Competitive Award

- State aid for “non-traditional” students
- Students assigned 200 points based on GPA and “disadvantage” (income, education, age)
- State gives 12,500 awards, starting with 200 points and going down until awards are exhausted
 - Cutoff varies from year to year and is unknown to applicant

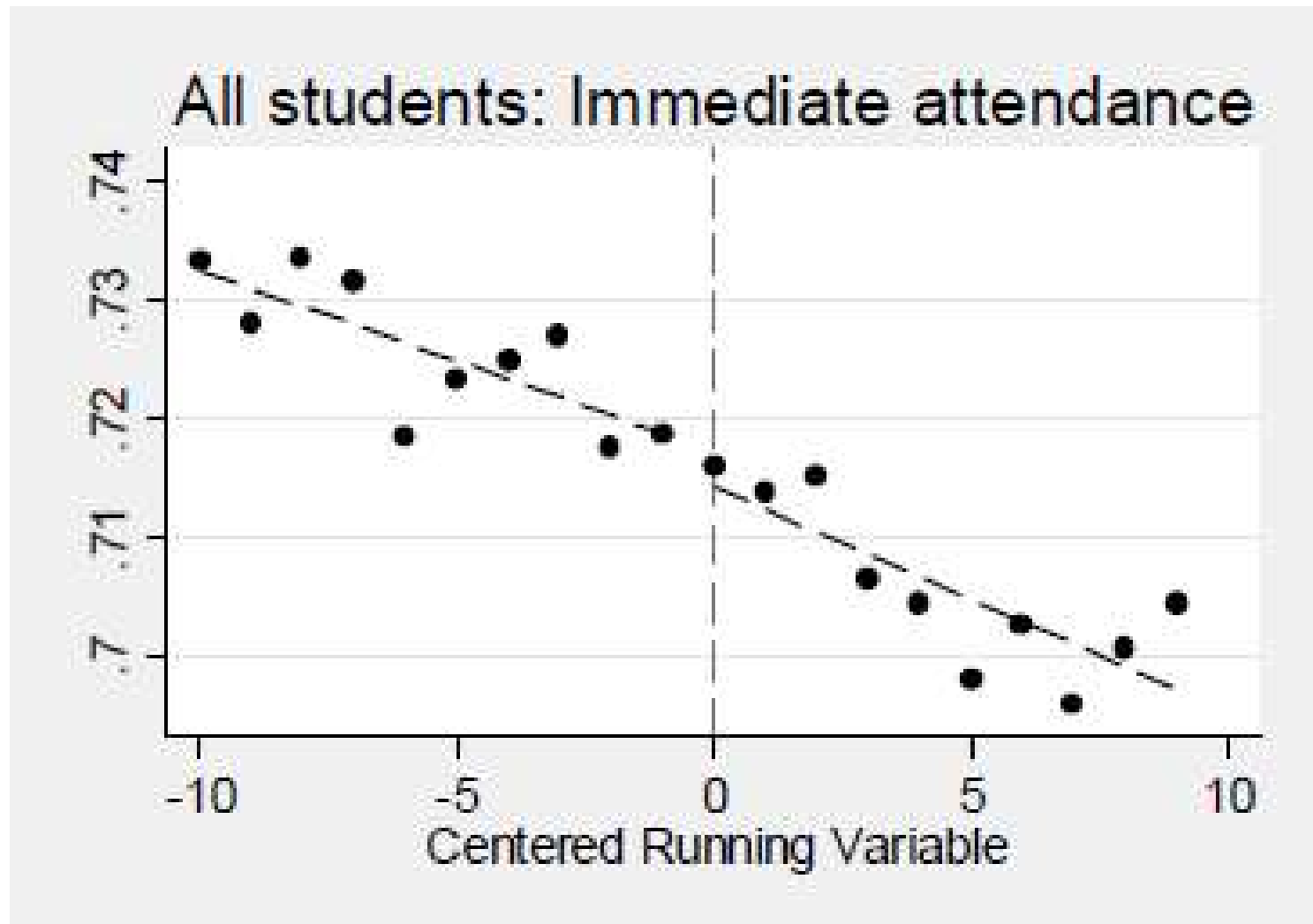
- In 1st application year, those below cutoff get no money and those above cutoff ~\$2000
- Some students will reapply in later years
 - Over time the difference between two groups is ~\$3,000



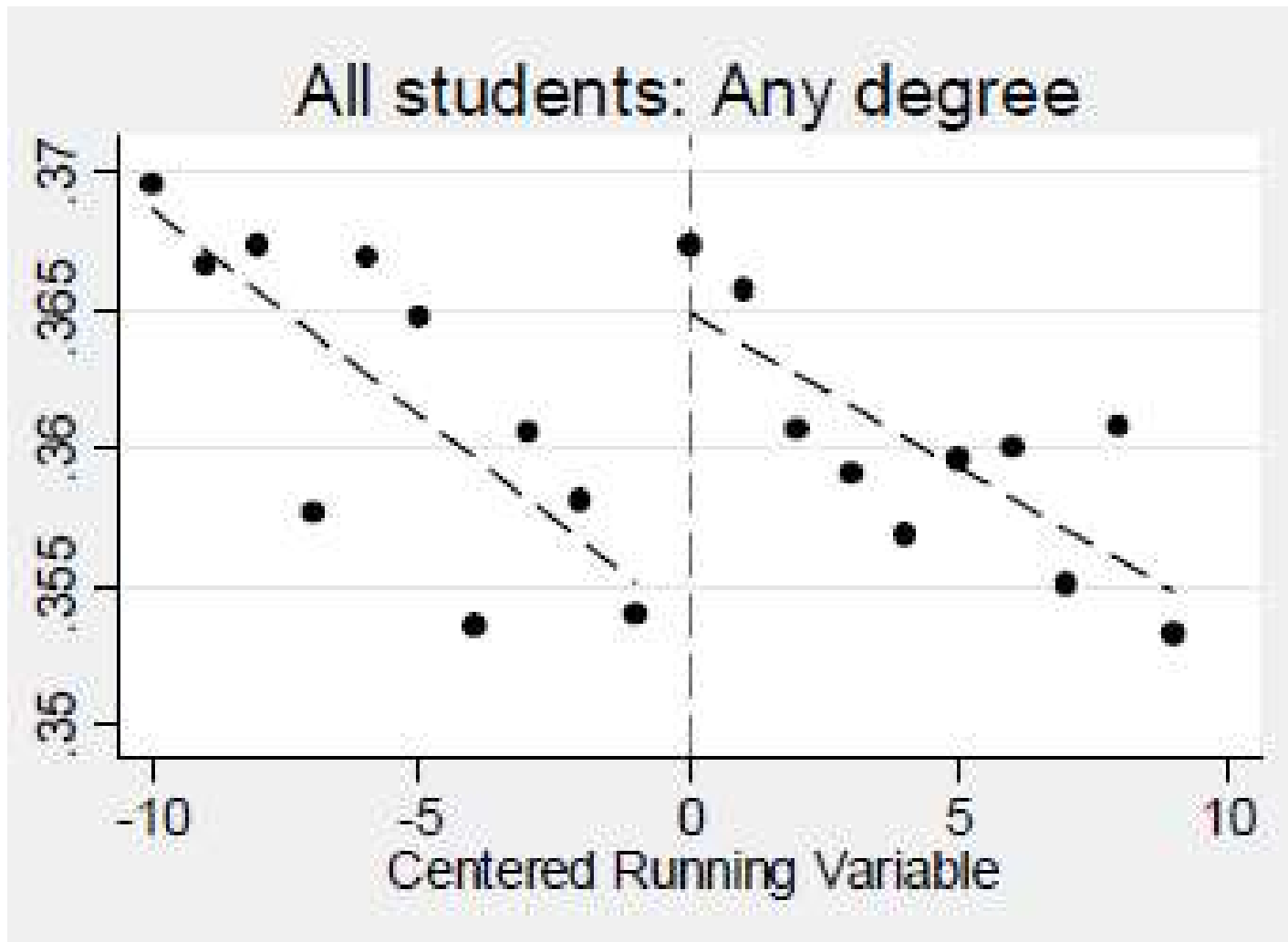
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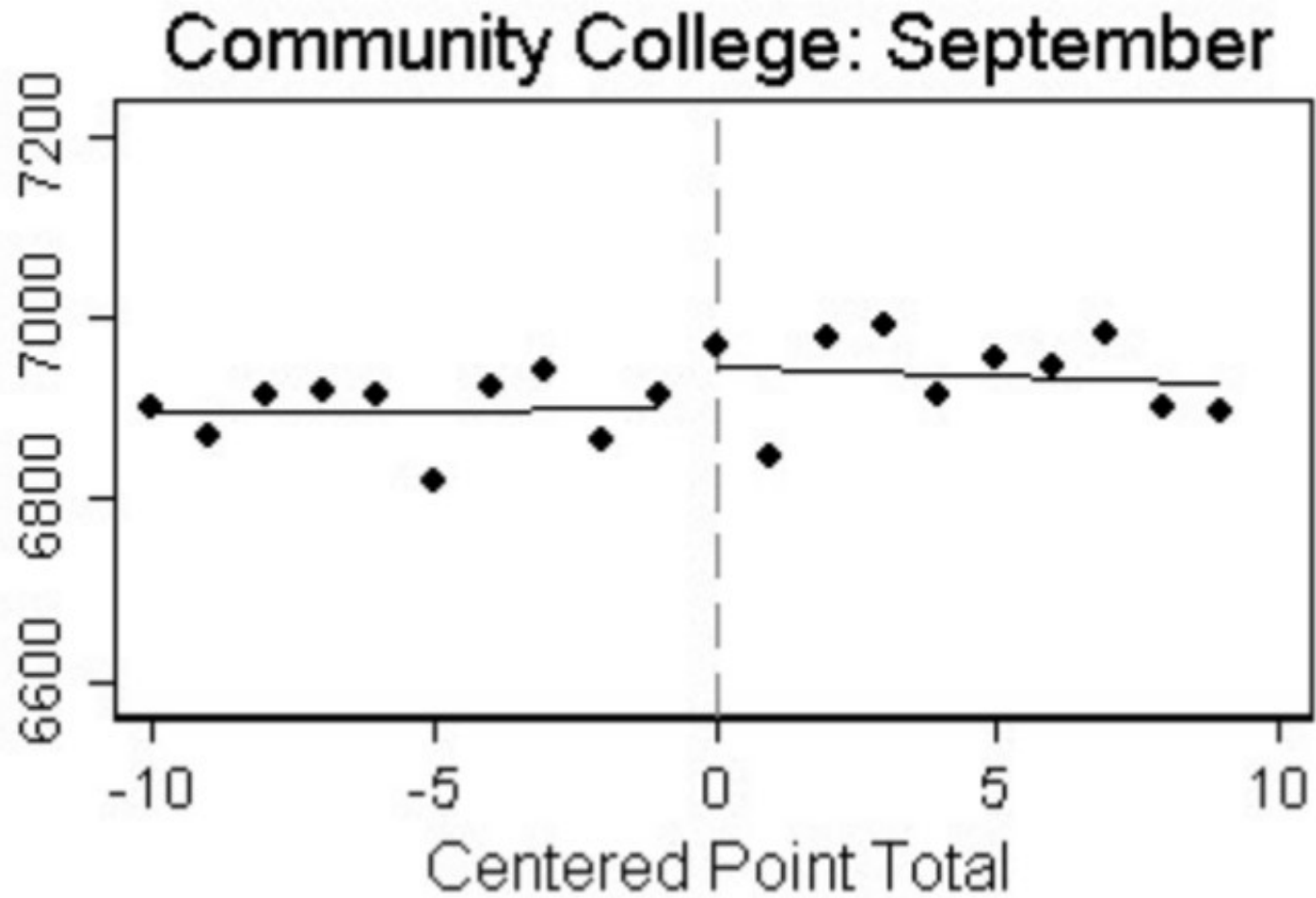
- Award had no impact on going to college



- Award increased degree completion increased...but only by 1 percentage point



- No impact on wages



California's Competitive Award

- What issues were solved? Not enough
 - \$1500 is ~1 month of min. wage work
 - Aid offer not particularly transparent
- Potential problems:
 - If people can manipulate their position potentially invalid
 - Threshold doesn't have "teeth" or coincides with other programs
 - Impact only pertains to those near threshold
 - In this case impacts unaffected by shifting location of threshold

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Difference-in-difference (DD)

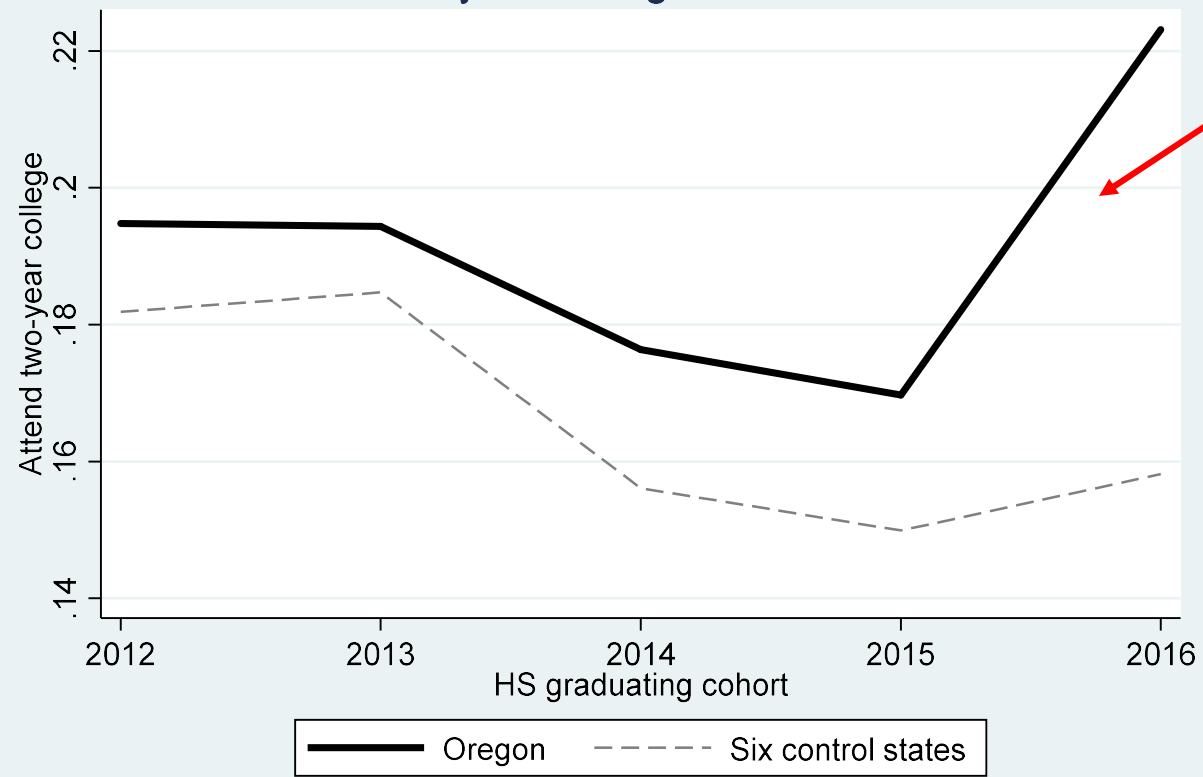
- “Treatment” affected by policy but “control” unaffected
- It’s ok if the two groups are different from each other
- Requires data before and policy change for both groups
 - Instead of overly simplistic regressions, the method “differences” out the “differences” between the two groups

Oregon Promise

- Oregon Promise is a state-level “free” community college tuition program begun in 2016
- Treatment = Oregon
- Control = a variety of states
 - Selected states that had universal 10th grade PSAT coverage



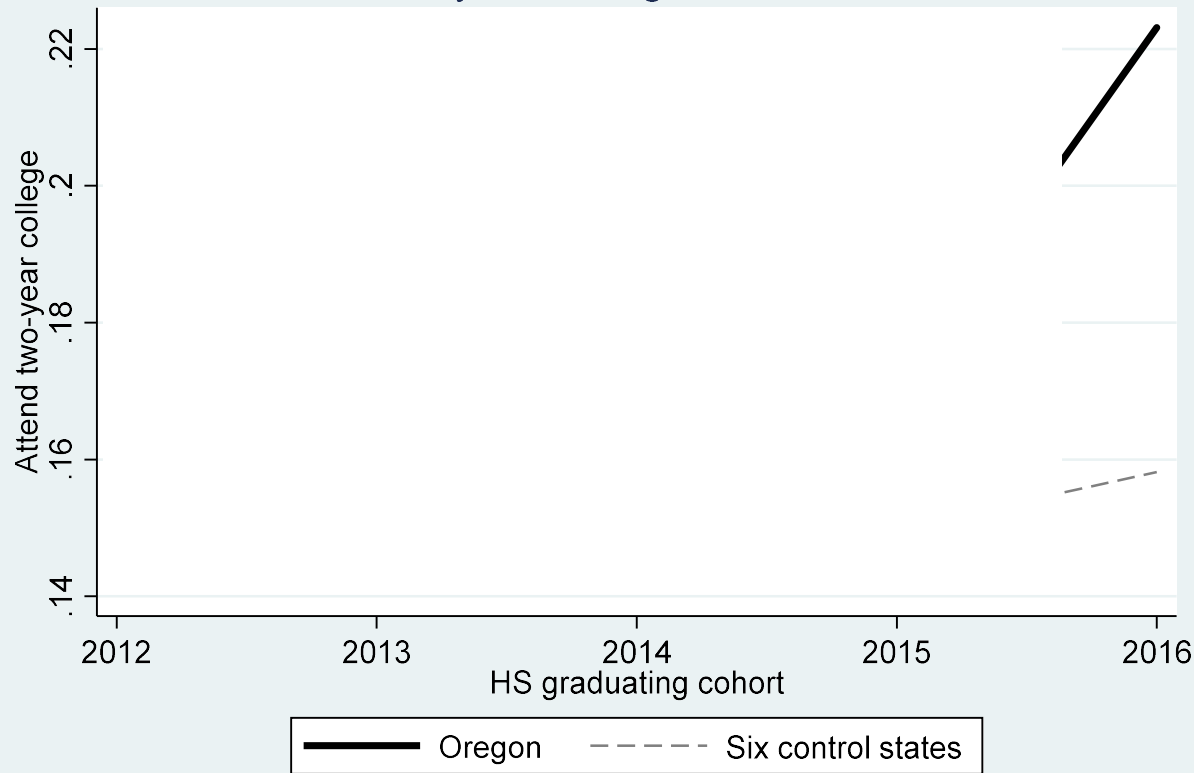
Two-year college attendance



Oregon Promise started in 2016



Two-year college attendance



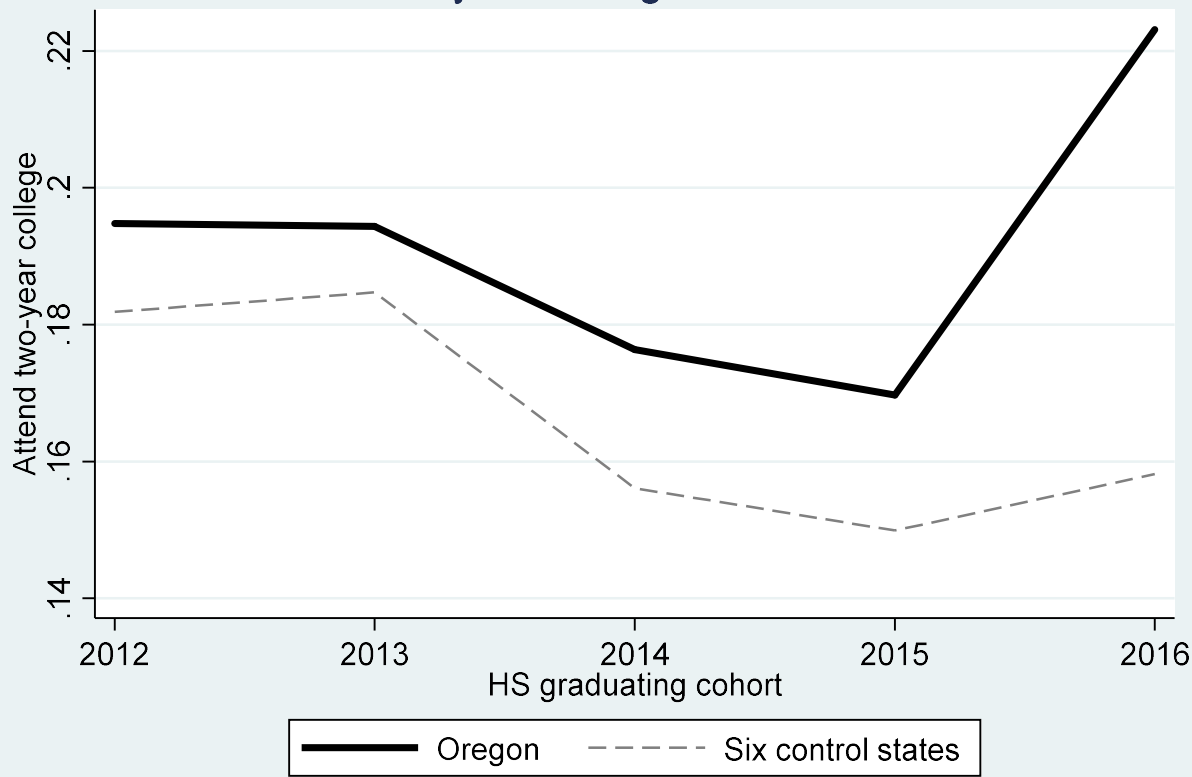
Compare OR to control states

(Bad) answer:
6pp more likely to attend CC

But OR students more likely to go to two-year college even before policy!



Two-year college attendance

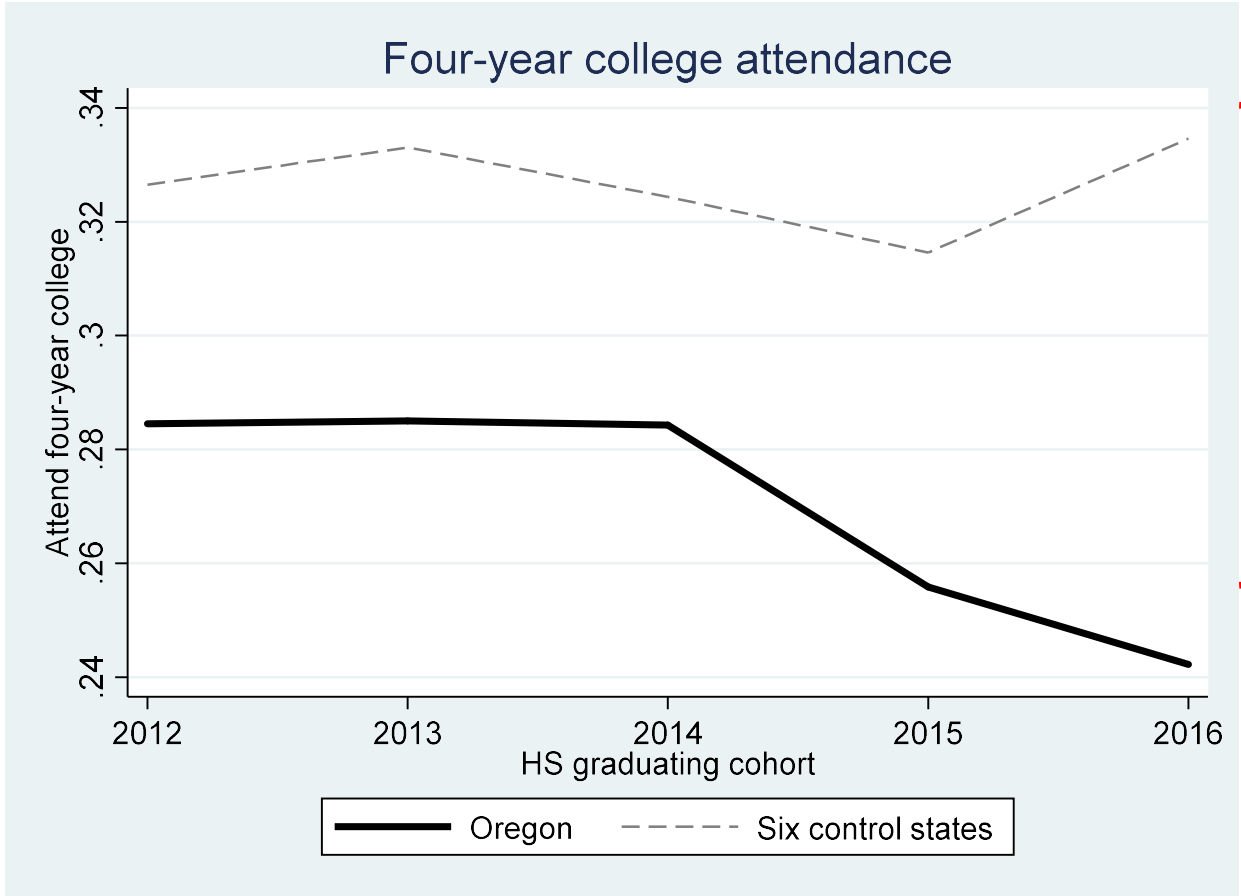


Difference before policy? ~2pp

Difference after policy? ~6pp

“Difference-in-difference” policy impact?

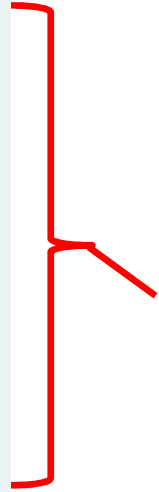
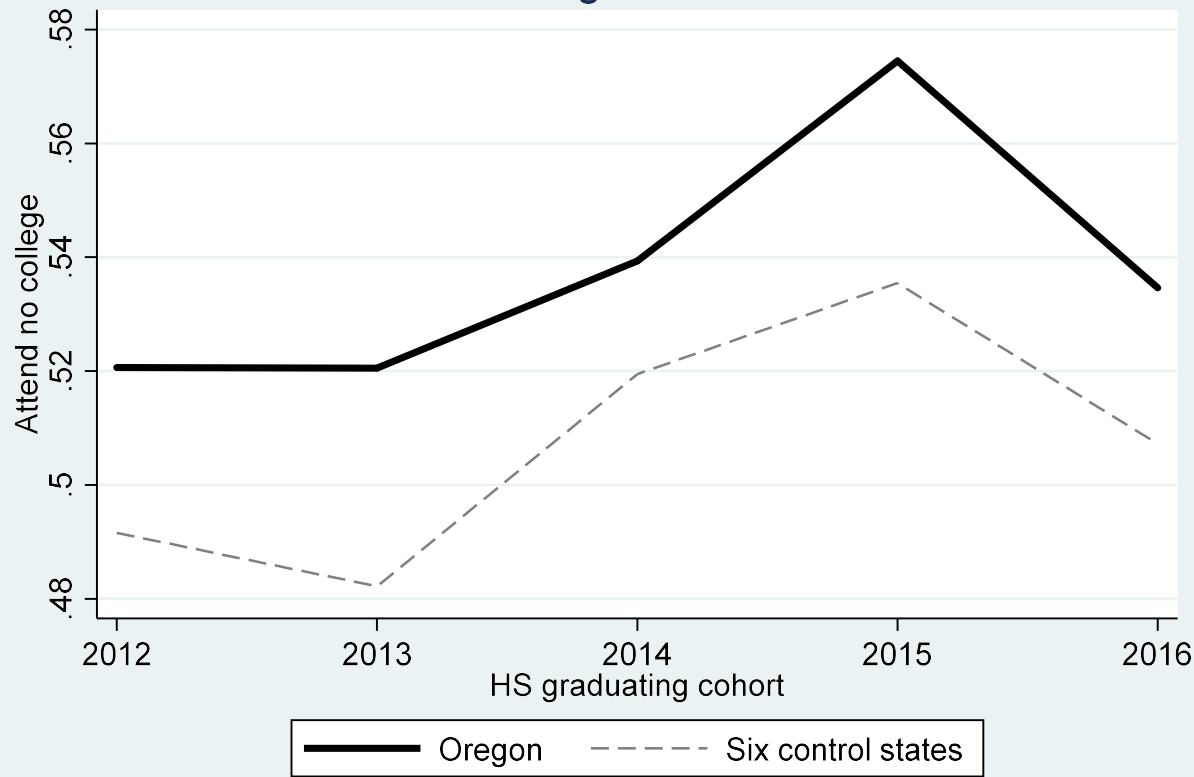
~4pp increase in CC enrollment



Students in 1st year mostly shifted out of four-year colleges



No college attendance



No increase in overall college enrollment

Oregon Promise

- Large increase in community college enrollment
- What issues were solved?
 - Clear signal of affordability
 - But, “last-dollar” scholarship gave fewest \$ to lowest income students, leading to initial shifting out of four-year colleges
- In second year Oregon (1) imposed EFC cutoff and (2) program was better known, leading to increase in overall enrollment

Difference-in-difference (DD)

- “Treatment” affected by policy but “control” unaffected
 - Most common policy evaluation tool
- Requires data before and policy change for both groups
 - Instead of overly simplistic regressions, the method “differences” out the “differences” between the two groups
- Key assumptions (required but not “sufficient”):
 - Two groups have similar paths prior to policy
 - “Nothing else” happened when treatment was adopted



Overview

- Multiple methods to evaluate program effectiveness that improve upon typical regression methods
- Have led to a number of insights as to the effectiveness of financial aid in particular



What have we learned?

- Positive long-term impacts for HS students
 - CA, TX, WV all tracked students for many years after HS and found positive impacts on completion and employment



What have we learned?

- Positive long-term impacts for HS students
- Effectiveness relies on targeting the right students
 - No impacts for federal tax credits
 - Challenges for “non-traditional” students

What have we learned?

- Positive long-term impacts for HS students
- Effectiveness relies on targeting the right students
- Effectiveness relies on targeting the right colleges
 - MA: eligibility only for public four-year colleges likely decreased graduation rates
 - TN: promotion of only two-year colleges reduced bachelor's degrees



What have we learned?

- Positive long-term impacts for HS students
- Effectiveness relies on targeting the right students
- Effectiveness relies on targeting the right colleges
- Clear signal of affordability matters
 - Neediest students often do not obtain all the information they need
 - Promise programs typically show large effects

What have we learned?

- Positive long-term impacts for HS students
- Effectiveness relies on targeting the right students
- Effectiveness relies on targeting the right colleges
- Clear signal of affordability matters
- Information alone typically has little impact
 - Sending students information about program benefits
 - Updating information about college costs appears to have little effect, though potentially larger results for college benefits

What have we learned?

- Positive long-term impacts for HS students
- Effectiveness relies on targeting the right students
- Effectiveness relies on targeting the right colleges
- Clear signal of affordability matters
- Information alone typically has little impact
- Minimizing application barriers helps
 - Frequent support to complete application forms: text message “nudges”; human counselors; online AI
 - Changing “default” loan letters to push students into aid

Data Sources

- National Student Clearinghouse (NSC)
 - Student level data matching for entire country (except for-profit)
 - Cost is levied per student (though decreases for large samples)
- Unemployment Insurance (UI) data
 - Typically cannot track students out of state
- Credit Bureau data (e.g., Transunion)
 - Breadth of data: income estimator, state of residence, debt
 - High fixed cost, low variable cost



Questions?