

14.48, Economics of Education
Prof. Frank Levy
Lecture 25

Dynarski:

27% of people in their mid to late twenties have a BA

Arkansas:

Scholarship program was started in 1991 for those students who had not yet enrolled in college.

To qualify for the program a student must have a GPA greater than or equal to 2.5, a 19 or above on the ACT (19 is generally the 40th percentile), and a family income below \$35,000 in 1991.

In 1999, the income limit was \$75,000.

The median family income in Arkansas is approximately \$49,000.

Payments—

1991: \$1000

1994: \$1500

1997: \$2500

State college tuitions in Arkansas: \$1100-2200

Why did the state government increase the payment by so much in such a short time?

- 1) This program appeals to a lot of voters
- 2) State government scared that everyone who qualified for the program would take up the money and they wouldn't be able to fund it. Therefore, they started the scholarship out small and increased in once they gauged demand.

Georgia had the Hope Scholarship Program, which was similar to the program in Arkansas.

Treatment:

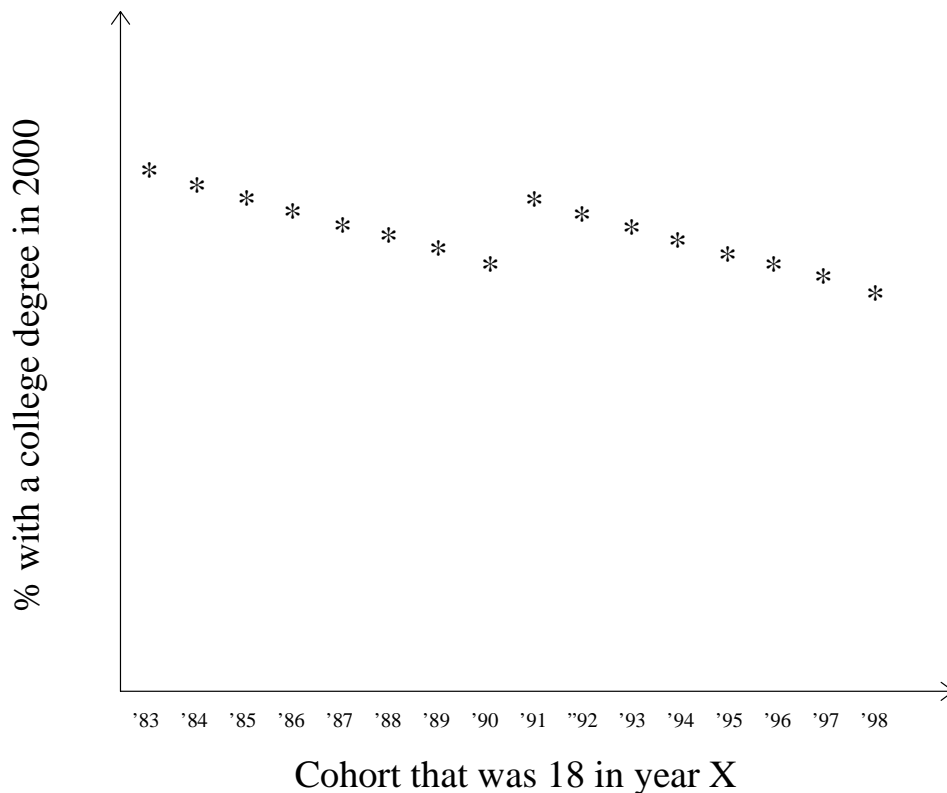
**Qualifying for the program NOT whether or not you take up the scholarship. The government can't control whether or not people use the scholarship, just whether or not they qualify.

The analysis on the Arkansas data is similar to the diff-in-diff analysis in Duflo's Indonesia paper.

Using the 2000 census, we look at people in Arkansas. For now, we're ignoring whether or not people move into and out of the state.

Overall, there is a modest decline from year to year since each older cohort has more time to complete college than the younger cohort.

If the scholarship program worked, then we should see a kink upwards around 1991 because the scholarship program helped to attract more students to college.



However, there may be other factors that might have caused people to go to college at higher rates starting in 1991. To control for this, we need to compare Arkansas to other states.

After controlling for other states, the upward effects were real. The Arkansas program increased college enrollment rates by +3% on average, more for black women.

A 3% increase on a 27% BA completion rate for the 22-29year old cohort is a real success. Comparatively, remedial college course programs increase college completion rates by 2-3%.

Issue:

Economics now emphasizes proving causality and exploring falsification tests.

Suppose a lot of people get BA's in Arkansas and then move out of the state. Then we're underestimating the effect of the scholarship program.

Alternatively, say Arkansas has a lot of people move into the state that already have BAs, then we'd be overestimating the effect of the scholarship program. How do we test for this?

- 1) We run our regression in 2000 on people born in Arkansas
- 2) We run it again in 2000 for people who live in Arkansas in 2000, regardless of
- 3) state of birth.

If the program really works, then only 1) will give you significant results.