



Consequences of Community College Tuition Reductions

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October 2017

What We Studied

This paper explores the effects of community college tuition reductions on student enrollment decisions and graduation probabilities. Students are found to be responsive to community college tuition, increasing enrollment in community college by 5.1 percentage points for a \$1,000 decrease in community college tuition. This increase in enrollment primarily comes from students enrolling in community colleges who would not have otherwise enrolled in college, rather than drawing students in from the four-year sector. Students induced to enroll in community college also eventually transfer to universities. Graduation rates for students induced to enroll in community college are similar to the average student at community colleges.

The study leverages changes in community college taxing districts in Texas. The paper examines five community colleges who annexed municipalities into their taxing districts from 1994 to 2012. The study uses a differences-in-differences framework to compare enrollment rates of recent high school graduates before and after the annexation relative to students already included in the taxing district. This framework isolates the effect of annexation and the resulting reduced community college tuition. The results are robust to a number of specifications and tests required for causal interpretation.

The majority of public higher education students in Texas are enrolled at two year institutions (hereafter community colleges). Community colleges provide a variety of post-secondary schooling options including certificates as well as associate degrees. Community colleges are open access and hence provide access to college for many students. Community colleges also have relatively low tuition providing a low-cost, public higher education option. When setting tuition, community colleges have to balance the need for revenue and access. Recently there has been additional policy attention on community college tuition as several states have implemented free community college tuition (Tennessee and Oregon).

Further, the Obama administration proposed free community college tuition nationally. A key policy question is how changing community college tuition affects enrollment decisions of students. Reducing community college tuition could increase or reduce educational attainment. If students are drawn from the four-year sector to community colleges, this could reduce overall education attainment. However, reducing community college tuition will also induce some students to enroll in college and thus increase educational attainment. These competing effects are articulated in Rouse (1995).

This research asks, “What happens when community college tuition is lowered?” Specifically, how does reduced community college tuition affect enrollment patterns and the educational attainment of students?

What We Discovered

Texas community colleges are partially supported using revenue from property taxes. Students living in areas that pay taxes to support a community college receive a tuition discount called “in-district tuition.” In-district tuition for the colleges studied is roughly one half of out-of-district tuition. The author identified 22 instances in which taxing districts were expanded by annexing a new area. In these areas, voters approved an increase in property taxes in exchange for a reduction in community college tuition. These changes are depicted below in Figure 1.

The paper compares the enrollment rates of recent high school graduates in areas that experience an annexation to students already included in the taxing district, before and after annexation occurs, in a differences-in-differences framework. This isolates the effect of reduced community college tuition while accounting for fixed characteristics of annexed municipalities and changes in enrollment patterns for a particular community college.

Figure 2 shows the difference in community college enrollment between annexed areas and areas already included in the taxing district by years since annexation. Before annexation, these two areas experience similar trends in enrollment. After annexation, the trends diverge showing that reducing community college tuition increases enrollment at community colleges.

To summarize the results:

- Reducing community college tuition by \$1,000 increased enrollment in community college by 5.1 percentage points, roughly a 20 percent increase
- Reducing community college tuition did not substantively affect enrollment at universities.
- Some students induced to enroll in community colleges transferred to universities.
- Students induced to enroll in community college experienced similar graduation rates to the average students in community college.

Figure 1

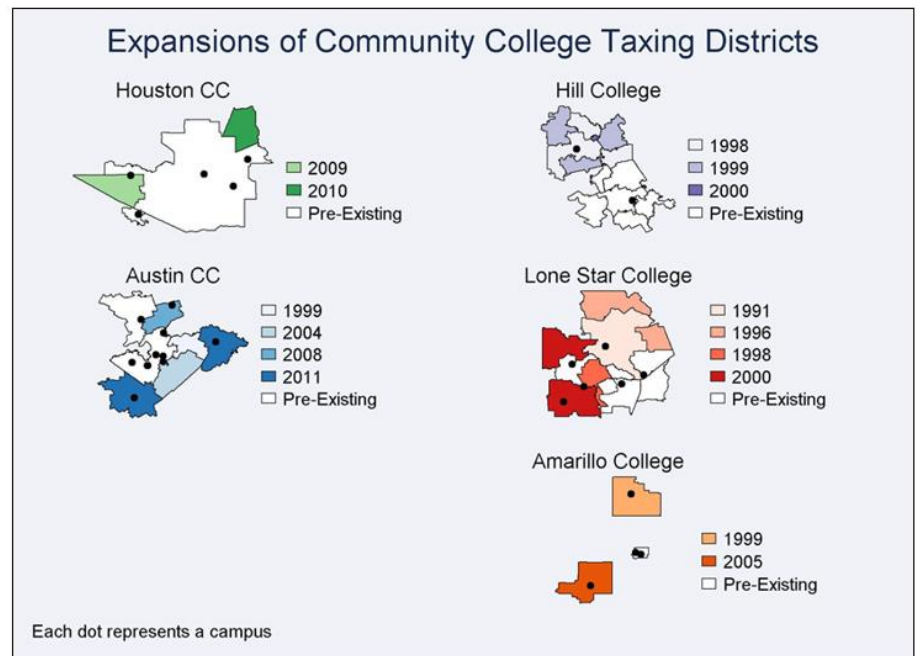
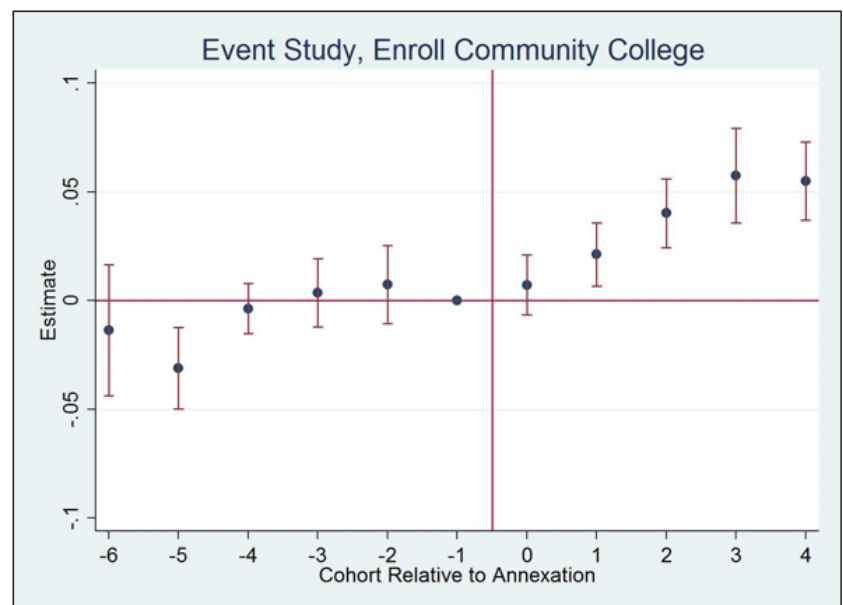


Figure 2



Policy Recommendations

This paper provides insight into what happens when community college tuition. While it does not offer specific policy recommendations, it does provide a picture of what policymakers might expect if tuition is reduced. Namely, reducing community college tuition would increase the number of students at community colleges with much smaller (and possibly no) impacts on four-year enrollment.

References

Rouse, Cecilia Elena. 1994. "What to do after high school: The two-year versus four-year college enrollment decision." *Choices and consequences: Contemporary policy issues in education*, 59–88.

Denning, Jeffrey T. 2017. "College on the Cheap: Consequences of Community College Tuition Reductions" May 2017, *American Economic Journal: Economic Policy*, Volume 9, Number 2, 155-188.

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