



## Winners and Losers? The Effect of Gaining and Losing Access to Selective Colleges on Education and Labor Market Outcomes

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### Executive Summary

This paper examines the effects of the Top Ten Percent policy, which guaranteed students in the top ten percent of their high school graduating class admission to Texas Public Universities. As a result of the policy, the composition of the student body changed, particularly at the University of Texas at Austin (UTA). This paper asks, what were the educational and labor market effects of this policy change for both the students who gained access (referred to as “Pulled In” students), and students who lost access to UTA (referred to as “Pushed Out” students).

Pulled In students were more likely to attend public universities in Texas and more likely to attend UTA. Pulled in students also were more likely to graduate with a bachelor's degree, and there is some evidence that they had higher earnings. Pushed out students were less likely to attend UTA but were no less likely to attend public colleges and universities in Texas; they also saw no declines in college graduation or earnings.

### What We Studied

#### **The Texas Top 10 Plan**

In May 1997, the Texas legislature passed HB 588, which created what has become known as the Top Ten Percent Policy that guaranteed admission to any public university for Texas public high school students in the top ten percent of their class. This policy was a response to an affirmative action ban in *Hopwood v. Texas* in an effort to maintain the racial and ethnic diversity of the campuses. These types of policies are now used in several other states.

This policy change presents an opportunity to study the effects of admission to a selective college (UTA). The effects of access to selective college are not obvious *ex ante*—students who gain access may benefit from more prepared peers, higher institutional spending, etc. or may be harmed if they are not prepared for the schooling environment (sometimes referred to as the mismatch hypothesis).

Prior research has often found positive effects of college selectivity on student outcomes (Bleemer 2021; Cohodes and Goodman 2014; Hoekstra 2009, Goodman Hurwitz, and Smith 2017) though this conclusion is not unanimous (Dale and Krueger 2002, 2014; Mountjoy and Hickman 2020).

## **How We Analyzed the Data**

This paper asks, what are the effects of gaining access to UTA via the Top Ten Percent policy on enrollment, graduation, major choice, and earnings. The authors apply a differences-in-differences strategy, comparing the two treated groups—those who are Pulled In and those who are Pushed Out—to a set of students who were unlikely to be affected. Conceptually, the Pulled In students are those who were in the top ten percent of their class at schools that did not send many students to UTA prior to the Top 10 Percent Policy; these students were more likely to attend UTA after the policy change. Pushed Out students are those who were just outside the top 10 percent of their class at schools that, prior to the policy, sent many students to UTA; these students were more likely to lose access to UTA after the policy change.

In order to construct these groups, one needs information on whether the student is in the top ten percent of their high school class, as well as the fraction of students that a school sent to UTA prior to the policy change. While the fraction of students from a high school is straightforward to determine from the ERC data, a key data limitation is that, prior to the policy being implemented, the ERC data does not contain information on class rank; this is only available for students who applied to a public university after the policy's implementation. To overcome this limitation, the authors use machine learning tools to predict the probability that a student is in the top ten percent of his class using information from class taking, test scores, and school characteristics. These predictions are then generated for everyone in the sample, including those who attended college prior to the policy change.

These predictions are then combined with information on how often a high school sent students to UTA prior to the policy change to classify students as Pulled In and Pushed Out. The comparison group includes students who were outside the top ten percent of their class at schools that sent a moderate number of students to UTA prior to the policy change.

To identify the effect of the policy, the authors use data from the high school graduating cohorts of 1996-2002 to compare the change in outcomes for those Pulled In (Pushed Out) by the policy to the change in outcomes for those students who are unlikely to be affected by the policy. The key assumption is that the comparison group represents what would have happened to the Pulled In (Pushed Out) groups absent the policy.

## **What We Discovered**

After the implementation of the policy, the Pulled In students were more likely to enroll in Texas public colleges and universities overall. This may arise from increased enrollment overall or shifting from out of state/private schools to public institutions in Texas. Pulled In students were more likely to graduate from UTA but also more likely to graduate with a BA degree from any public university in Texas. The graduation rate of the Pulled In students who enrolled at UTA was very similar to that of the average UTA student, suggesting these students performed well once they entered UTA with little evidence of mismatch. Earnings 7-9 years after high school graduation also increased, although this result is more sensitive to choices made in estimation.

After the implementation of the policy, the Pushed Out students were no less likely to attend public colleges or universities in Texas, but rather shifted away from UTA to other, less selective campuses. Despite attending less selective institutions, Pushed Out students were no less likely to graduate with a bachelor's degree from any Texas public institution, nor did they suffer any earnings consequences. These results are quite similar for students of different races, free and reduced price lunch status, and gender.

## **Discussion/Policy Recommendations**

This paper sheds insight into the effects of the Top Ten Percent Policy on student outcomes. This policy increased access to an elite public university for students who would not traditionally attend that type of school prior to the policy change. These students succeeded, and this increased access and graduation did not come at the expense of

students who were pushed out of UTA as a result of the policy.

These results suggest that concerns about Pulled In students being harmed due to fears of student-school mismatch are not consistent with the data. Further, Pushed Out students appear not to be harmed, in part because they attend other institutions in state. These results suggest that many students are benefitted without much observable harm to students who are pushed out.

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