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Editorial

Access to higher education: Introduction to the special issue



College enrollments have been rising around the world. In just the first decade after the millennium, participation rates in tertiary education rose by 10 percentage points or more in several regions including Europe, East Asia, and Latin America (Altbach, Reisberg, & Rumbley, 2009, p. 198). Enrollment trends in the United States, an early leader of the shift to mass tertiary education, appear relatively stagnant by comparison: the proportion of recent high school graduates enrolling immediately in some type of postsecondary education rose dramatically between 1960 and the late 1990s, but has remained relatively stable at about 66% since then (National Center for Education Statistics, 2014, Table 302.20). In the US and other countries where initial college entry rates have always been comparatively high, policy attention has increasingly shifted to the next frontier, namely college completion.

In this context, a special issue devoted to college access in the United States might, at first glance, appear to be a bit behind the curve. It might be argued that the US is already doing a good job on the access front. We, however, would argue that college access should be defined broadly. To borrow from the subtitle of Caroline Hoxby's (2004) influential edited volume, College Choices, "where to go, when to go, and how to pay for it" is just as important as whether an individual goes to college. Even if policymakers ultimately only cared about college completions, evidence indicates that the likelihood of completing college depends in part upon these many choices made on the access margin, and that these choices are often not made optimally. Second, even while levels of college enrollment have risen across the board, gaps in enrollment between high and low income families are actually greater for recent cohorts than for those born in the early 1960s (Bailey & Dynarski, 2011), and the college enrollment rates among black and Hispanic recent high school graduates in 2013 (57% and 60%, respectively) are only now reaching the same level as that of white Americans in 1989. Importantly, these gaps cannot be fully explained by differences in academic preparation. Thus, the US clearly has a ways

to go before we can declare "mission accomplished" with respect to college access.

This mission is important because there is compelling evidence regarding the value of postsecondary education. Rigorous quasi-experimental evidence suggests that an additional year of college leads to an increase in wages of approximately 9%, even for students at the margin. These wage returns are on top of possible gains in health, happiness, and positive social spillovers from having better educated more productive citizens (for a recent summary of the literature on pecuniary and non-pecuniary returns to college, see Oreopoulos & Petronijevic, 2013). While a bachelor's degree appears to offer the most substantial payoffs, two-year degrees (often in highly applied fields) also confer significant benefits, and even those who enter college but drop out without any degree do better on average than those who never enroll at all.

In this special issue, we have gathered articles from some of the leading economists studying issues of college access, broadly defined. All articles were reviewed by at least two reviewers, including one of the issue editors. Lindsay Page and Judith Scott-Clayton open the issue with a review of the economic research on barriers to college access, and the effectiveness of policies designed to address these barriers. A contribution of their review is its recognition that financial aid is only one of several important and often intertwined college access strategies. Thus, in addition to reviewing the financial aid literature, they also summarize the evidence on informational and behavioral interventions, academic programs targeted to students in the transition to college, and affirmative action policies intended to reduce racial and socioeconomic gaps in college access.

The special issue then presents 9 original empirical papers that both extend prior work on college access and in some cases break entirely new ground. The first three papers are focus on understudied aspects of financial aid policy; the fourth examines a program that combines aid with college coaching; the next three papers examine non-financial barriers and interventions to improving

college choice; and the last two examine the consequences of students' enrollment decisions. We briefly introduce each article below.

Caroline Hoxby and George Bulman ask whether the federal income tax deduction for tuition and fees leads to additional college enrollments. In a clever and convincing research design (only made possible by virtue of dense deidentified tax data), they examine enrollment patterns for students in families above and below the income cutoffs for eligibility for the tuition and fees deduction. The authors show that the significant subsidy provided by the tax deduction does not generate additional enrollments in college. The authors go on to discuss why this may be the case and ways in which the subsidy could be made more salient to families. An additional contribution of this study is to show how regression discontinuity can be modified to take into account that, within a narrow range around the cutoff, some families are able to manage their reported income to ensure eligibility.

From this excellent contribution on tax subsidies, we move to Andrew Barr's novel work on the impacts of state merit aid on army enlistment. Barr notes that a significant portion of military enlistees cite the GI Bill and its associated funding for college enrollment as a major reason for why they joined the military. Barr shows that the introduction of state merit aid programs leads to a meaningful reduction (about 6%) in male military enlistments, particularly among lower income students. He interprets these findings as showing that the students at the margin are credit constrained and were using military benefits and pay to work around the constraint. State merit aid therefore relaxes the credit constraint for a number of students and promotes immediate enrollment. His backof-the-envelope calculation suggests that about 15-25% of merit-aid-eligible recruits are credit constrained in their choices.

Mark Wiederspan examines the impact of access to federal student loans on community college enrollment and persistence. Prior work has highlighted that, nationally, about 9% of community college students do not have access to federal student loans because their college does not participate in the program (The Institute for College Access and Success, 2014). While participating and nonparticipating community colleges may be quite different, Wiederspan takes advantage of the fact that colleges drop in and out of the program over time. Using a differencein-differences design with administrative data from one state, he generates credible estimates of the effects of loan availability by comparing loan use and college outcomes for college-year cohorts that did and did not have access to loans. He finds that the availability of loans increases enrollment intensity and credits earned, though loan availability does not have statistically significant impacts on degree completion.

The next article, by Celeste Carruthers and William Fox, transitions from examining pure financial aid interventions to the examination of an ambitious place-based college access initiative in Tennessee called "Knox Achieves". Knox Achieves made community college free (by waiving any tuition and fees not otherwise covered by financial aid) for any public high school senior who agreed to meet

with a mentor, graduate from high school, and enroll in a Tennessee community college. This program served as the model for the new statewide Tennessee Promise program implemented in 2015, and has been cited as inspiration for other free community college proposals at the state and federal level. Carruthers and Fox implement a differencein-difference analysis taking advantage of cross-county, cross-cohort variation in access to the program, as well as cross-school variation in intensity of implementation within Knox County. They augment this intent-to-treat analysis with a propensity score analysis that matches participating students to similar students in untreated (or less intensely treated schools), and subject their results to extensive robustness checks. The intent-to-treat estimates indicate that students exposed to Knox Achieves are 3-5 percentage points more likely to enroll in college, with substantially larger effects for those that actually participate. While it is difficult to attribute the effects of this bundled program to one particular component, the authors note that the financial aid component was surprisingly low-cost to provide (less than \$1000 per participant) given that a high proportion of community college tuition and fees was already covered by other aid programs, suggesting that the message of "free college" and the mentoring may have been important factors.

The importance of information, messaging and mentoring is explored further in the subsequent three papers. Ben Castleman, Laura Owen and Lindsay Page examined a collaboration between Albuquerque Public Schools (APS) and the University of New Mexico (UNM) aimed at reducing "summer melt" among college-intending high school graduates. Students in APS who had been admitted to University of New Mexico were randomly assigned to receive a counselor based in their high school, a counselor based at the University, or no outreach. The counselor outreach was intended to increase a sense of belonging and smooth the emotional and bureaucratic transition to college. Perhaps due to relatively low rates of summer melt in this sample (which is higher achieving than the targeted populations in the authors' prior summer melt work), counselor outreach does not increase fall enrollments overall in a statistically significant way. However, large gains are found for Hispanic males, the subgroup for which summer melt rates were highest in the control group. This work suggests that some students do benefit from in person mentoring and a helping hand to bridge the gulf between high school and college. This paper represents a valuable complement to the authors' prior work on preventing summer melt and promoting college persistence.

Joshua Goodman, Michael Hurwitz and Jonathan Smith take up the issue of information constraints from another angle: spillovers within families. Given the importance of information and mentoring highlighted in existing research, the authors rightly note that little is known about the potential effects of information spillovers and role models within families. Using data on 1.6 million sibling pairs of SAT-takers, the authors find high correlations between siblings' college choices. One fifth of younger siblings enroll in the *same college* as their older brother or sister, and younger siblings are about 15–20 percentage

points more likely to enroll in four-year colleges or highly competitive colleges if their older siblings do so first.

While the other papers in the issue draw upon US data, US students are not the only ones facing informational and financial barriers to college access. We are therefore especially pleased to include a contribution that examines college access outside the US context. Justine Hastings, Christopher Neilson, Anely Ramirez and Seth Zimmerman expand our knowledge about students' lack of knowledge on college costs and financial returns. These authors utilize data from a large scale custom designed survey of high school students in Chile. Students have extremely noisy (though correctly centered) estimates of the costs of attendance. Potentially more concerning is the fact that students overestimate by 39% the earnings of recent graduates from the students' degree program of choice. Moreover, students perform quite poorly on financial literacy questions in general. These informational errors have consequences: those who overestimate costs are less likely to matriculate, while those who overestimate earnings are more likely to choose programs with poorer graduation and post-college outcomes.

The final two papers in the issue examine the consequences of students' college choices. Jessica Howell and Matea Pender's contribution is directly on point in that it asks whether the initial choice of institution has implications for net price paid and likelihood of graduation. The authors conduct their analysis with a unique data set that matches College Board data (on SAT scores and score sending) with enrollment data from the National Student Clearinghouse. They show that many low income students are "undermatched" in terms of the selectivity of the institution to which the student could gain admission. As a result, there is a very real possibility that these low income students could significantly increase their probability of graduating with a bachelor's degree, while also lowering or hardly affecting the student's net cost of attendance. These latter numbers stem from institution level data in the IPEDS and National Post-Secondary Aid Survey. Howell and Pender's simulations suggest that via switching institutions, low-income under-matched students could raise their predicted probabilities of graduation by 13.5 percentage points.

Finally, Lesley Turner uses an individual fixed-effects approach to estimate the impact of community college attendance on the labor market outcomes of welfare recipients, a highly disadvantaged group whose returns to community college have not been well-established. Turner

also takes advantage of rich transcript data to disentangle the role of credits versus credentials. She finds that women who attend college after entering welfare earn substantially more post-enrollment than would have been predicted based on their pre-college earnings patterns. Interestingly, she finds little return to community college credits on their own for non-completers in this sample; returns appear to be driven by gains among those who complete degrees.

Overall we believe that this volume represents an impressive set of papers and findings that further our knowledge about college access and its implications. We hope that this special edition strengthens the foundation for future work in this critical and intellectually vibrant area.

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