Contents lists available at ScienceDirect

Economics of Education Review

journal homepage: www.elsevier.com/locate/econedurev



Celeste K. Carruthers^{a,*}, Umut Özek^b

^a Department of Economics, Stokely Management Center, University of Tennessee, Knoxville, TN 37996-0570, United States ^b Center for Analysis of Longitudinal Data in Educational Research, American Institutes for Research, 1000 Thomas Jefferson Street, NW, Washington, D.C. 20007, United States

ABSTRACT

all, albeit for a short time.

ARTICLE INFO

Article history: Received 7 May 2014 Revised 22 March 2016 Accepted 29 March 2016 Available online 18 May 2016

JEL Classification: 123 128 122

Keywords: Financial aid Merit aid Higher education Human capital Labor force participation

1. Introduction

Students in public colleges and universities rarely face the full cost of their enrollment. Academic year 2012–2013 expenditures per full-time equivalent student, net of expenditures on operations unrelated to instruction, were

\$22,120 for four-year public colleges and universities and \$11,055 for public two-year colleges. At the same time, average tuition and required fees amounted to \$8070 per student in public four-year institutions and \$2792 in two-year institutions.¹ In addition to public subsidies that flow directly to colleges and universities, students themselves are subsidized with an assortment of financial aid packages

© 2016 Elsevier Ltd. All rights reserved.

Although a wealth of research has shown that financial aid reduces hurdles to college en-

rollment, much less is known about how students react to the common occurrence of los-

ing aid midway through their college careers. Using longitudinal data on two cohorts of

Tennessee public college students and regression discontinuity designs centered around

merit-based HOPE scholarship renewal benchmarks, we find that losing one's scholarship results in a small degree of detachment from college and a rise in earnings of about 14

cents per dollar of lost aid. We see no local impact, however, on timely degree comple-

tion, which implies that HOPE loss may have merely accelerated a small number of stu-

dents' migration out of college. It remains to be seen how students fare farther below the renewal threshold, or whether they are better off for having had the HOPE scholarship at



^{*} We thank the Tennessee Higher Education Commission and Tennessee Department of Labor and Workforce Development for providing access to data used in this study. We are grateful to Joshua Price, Tim Sass, Mai Seki, Judith Scott-Clayton, Mark Showalter, Peter Hinrichs, anonymous referees, and participants of the 2012 Southern Economic Association meetings, the 2013 CALDER meetings, the 2013 Association for Education Finance and Policy meetings, and the 2013 Association for Public Policy Analysis and Management meetings for valuable comments and suggestions. All errors are our own.

^{*} Corresponding author. Tel.: +1 8659746000.

E-mail addresses: carruthers@utk.edu (C.K. Carruthers), uozek@air.org (U. Özek).

¹ Source: authors' calculations and Snyder and Dillow (2015). We begin with 2012–2013 expenditures per full-time equivalent student listed in Table 334.10 and subtract per-FTE expenditures on research, public service, hospitals, scholarships/fellowships, and independent operations. We then subtract a fraction of interest, depreciation, operations/maintenance, institutional support, and auxiliary expenditures apportioned to those categories. Tuition and required fees are from Table 330.10. It is important to note that this is a comparison of direct costs to direct payments. Incorporating indirect costs of enrollment including opportunity costs will substantially increase students' effective payments.

and low-interest loans. Generally financed by state and federal governments, such aid is motivated by multifaceted positive externalities of higher education (Oreopoulos & Salvanes, 2011) as well as credit constraints that pose hurdles to college enrollment. Financial aid is intended to increase access to college, increase persistence and progression through college, and increase the likelihood of college completion. Voluminous research has shown that financial aid awards can affect the extensive margin of initial college enrollment and significantly increase the likelihood that a student attends college,² although this is certainly not true of all financial aid vehicles.³ In a review of this area of research, Deming and Dynarski (2010) point to transparent financial aid programs as being the most effective at increasing college enrollment.

A smaller but guickly expanding literature examines how financial aid affects student persistence, behavior, and graduation, conditional on postsecondary enrollment. Most relevant to our question are studies of performance-based scholarships that set aspirational requirements for scholarship renewal at key points in students' progression. Scott-Clayton (2011) demonstrates that West Virginia's PROMISE scholarship increases credits earned, grade-point averages, and the likelihood of receiving a bachelor's degree. The impact of PROMISE on persistence appears to be driven in part by structural incentives, because scholarship-holders are more likely to meet college credit and courseload benchmarks that are tied to scholarship renewal. Interim results for a multi-state experiment in performance-based aid include modest gains in credit accumulation for treated students (Patel, Richburg-Hayes, de la Campa, & Rudd, 2013). Responses to performance-based aid requirements are not always as intended: Cornwell, Lee, and Mustard (2005) show that requirements for renewing Georgia's HOPE scholarship result in strategic course withdrawals and credit reductions among marginal students.

Although it is clear that students respond to the threat of losing scholarships, surprisingly little is known about how students behave after scholarship loss. Dee and Jackson (1999) and Henry, Rubenstein, and Bugler (2004) provide descriptive profiles of students who lose Georgia's HOPE scholarship. Scholarship loss tends to be associated with lower credit accumulation and a decreased likelihood of degree receipt (Henry et al., 2004), as well as more difficult science, engineering, and computing programs (Dee & Jackson, 1999). More recently, Scott-Clayton and Schudde (2014) find suggestive evidence that community college students are more apt to leave college if they fail to meet Satisfactory Academic Progress benchmarks and face the threat of losing need-based Pell grants.

Here, we identify the effect of losing merit-based financial aid on students' engagement with college, as well as students' substitution of work for college. We focus on Tennessee public colleges and universities, where a large merit-based financial aid program has collected more than \$2 billion for a broad base of eligible students. Collegegoing students in Tennessee qualify for the state's HOPE scholarship - a fixed transfer which covers a large share of tuition and fees at in-state public and private colleges with modestly above-average high school performance or a modestly above-average ACT score. Although the merit thresholds for obtaining HOPE are well within reach for most college-ready students, the thresholds for retaining HOPE once enrolled are effectively much higher. We examine the college and work behavior of over 21,000 fulltime first-time Tennessee college students who entered college with Tennessee HOPE scholarships between 2004 and 2005. Twenty-nine percent of these students lost their HOPE scholarship after two semesters. This point in time coincides with the first HOPE renewal milepost, which requires a GPA of at least 2.75 after accumulating 24 credits. We utilize regression discontinuity identification strategies to estimate the effect of losing the HOPE scholarship at the 24-credit renewal point on academic and labor outcomes. Findings complement those of Scott-Clayton and Schudde (2014) by examining the loss of aid in different college sectors (two-year and four-year public) and by focusing on a renewal benchmark that is higher and more binding than Pell maintenance requirements.⁴ We assess whether students who are academically on track to complete college are dissuaded from doing so by the withdrawal of meritbased aid.

Broad-based merit aid programs are often criticized for predominantly benefitting students who would have enrolled and completed college without additional aid. If so, typical scholarship holders should be insensitive to the loss of aid, and the behaviors highlighted by Cornwell et al. (2005) and Scott-Clayton (2011) may be driven by a nonpecuniary aversion to losing financial aid more so than financial pressure. This, in turn, would imply that building more "nudges" into scholarship programs would be a cost-effective improvement to merit aid. But if losing one's merit scholarship results in substantially weaker engagement with college and a shift toward work, this behavior would be consistent with the idea that such scholarships relieve financial constraints to attending and progressing through college.

Ultimately, we find support for both stories: losing merit aid has a discernible negative effect on engagement with college and a positive effect on engagement with work, but deviations on both margins are subjectively small. We estimate that losing HOPE decreases persistence by 2.9 percentage points at the renewal threshold, perhaps up to twice that much when we make assumptions about unknown final grade point averages. Courseloads fall by less than one credit upon losing HOPE, and earnings increase by up to \$245, or 14 cents per dollar of withdrawn aid. Although subgroup impacts are imprecise with overlapping confidence intervals, the effect of losing HOPE on persistence is more pronounced for community college students and students with lower ACT scores, while the estimated labor response is stronger for four-year college students and students from the higher-income half of

² Inter alia, Carrell and Sacerdote (2013); Cornwell, Mustard, and Srid-

har (2006); Dynarski (2000, 2003); Kane (2003); Seftor and Turner (2002)

³ Bruce and Carruthers (2014); Hansen (1983)

⁴ Students at the 2.75-GPA HOPE renewal threshold are well above the normal 2.0-GPA standard for Satisfactory Academic Progress, and very few who lose HOPE are able to successfully appeal or regain the scholarship.

Download English Version:

https://daneshyari.com/en/article/354268

Download Persian Version:

https://daneshyari.com/article/354268

Daneshyari.com