

Postsecondary enrollment and the recession

During the “Great Recession” of December 2007 through June 2009, enrollment rates increased at 2-year, 4-year public, and 4-year private postsecondary institutions. In their article “The Upside of Down: Postsecondary Enrollment in the Great Recession” (*Economic Perspectives*, Federal Reserve Bank of Chicago, fourth quarter 2012, http://www.chicagofed.org/digital_assets/publications/economic_perspectives/2012/4Q2012_part1_barrow_davis.pdf), Lisa Barrow and Jonathan Davis investigated the relationship between changes in the unemployment rate and college enrollment rates to determine whether enrollment rose more than expected during the recession. The researchers used data from the Current Population Survey (CPS) and the National Center for Education Statistics’ Integrated Postsecondary Education Survey (IPEDS), along with Census Bureau population data.

Barrow and Davis constructed a model comparing the normal rate of expected increase (based on recent trends and population increases) in postsecondary enrollment with the actual increase in enrollment from 1975 to 2007. They then compared the unemployment rates during the 2007–2010 period with their model’s expected enrollment figures and reported some interesting results. Enrollment rates at 4-year institutions increased by 7.9 percent between 2004 and 2007, but during the 2007–2010 period enrollment rates increased by 20.5 percent.

The extent to which enrollment rates changed with the unemployment rates varied by type of

postsecondary institution. Rates at 2-year, 4-year public, and 4-year private institutions were 12.7 percent, 5.0 percent, and 15.1 percent higher, respectively, than if unemployment had been a constant 4.6 percent. Rates of enrollment increased from 2007 to 2010 among all racial and ethnic groups, with the largest increases observed among African-American and Hispanic groups. Changes in enrollment rates associated with unemployment rate changes were found to be greater for students ages 24 and older than for younger students.

In terms of total enrollment, the researchers estimate that 2.1 million more people were enrolled at postsecondary institutions in the 2007–2010 period than their model projected. They also determined that—even after taking into account the costs of attending a postsecondary institution, including the opportunity cost of not being employed for a year, discounting for inflation, and assuming that a year of additional education permanently raises one’s earnings by 8.5 percent per year—the lifetime average net benefit for each person who enrolled because of the recession totaled \$1,570.

Getting paid for a better future?

Shouldn’t learning be its own reward? Or would compensating students and teachers for higher test scores yield positive effects on both educational attainment and students’ eventual careers?

A study from Northwestern University’s C. Kirabo Jackson poses the question asked in its title, “Do college-prep programs improve long-term outcomes?” (National Bureau

of Economic Research, Working Paper No. 17859, February 2012, revised September 2012, <http://www.nber.org/papers/w17859>) and attempts to answer it by looking at the educational attainment and long-term employment effects of the Advanced Placement Incentive Program (APIP).

Jackson describes the APIP as “a high school intervention that includes cash incentives for both teachers and students for passing scores earned on AP [Advanced Placement] exams, teacher training, curricular oversight, and test-prep sessions.” Many colleges grant course credit to students who obtain high scores on AP exams. Jackson’s study measures the impact of the APIP program—which started to be instituted in 1996 to encourage high school juniors and seniors from low-income families to take AP courses and exams—on students’ college attendance, college graduation rates, labor force participation, and earnings.

The researcher used high school and college data from the Texas Education Agency and Texas Higher Education Board to determine the participants’ educational attainment and Texas unemployment insurance records to determine the participants’ labor force participation and earnings. His goal was to provide credible evidence that introducing college preparatory programs into urban high schools increases the educational attainment of disadvantaged students and helps improve the students’ labor market outcomes.

Jackson found that not only were more students participating in APIP, but that the students who attained higher AP scores also attended more college classes, stayed in school

longer, had higher college graduation and labor force participation rates, and had higher earnings.

Jackson's research shows that programs like APIP can produce substantially improved outcomes for students who participate in the program. And because there are no documented "ill effects" of APIP, he says, there are no real reasons to not participate. The coupling of monetary motivation with additional teacher training allows both the teachers and students to be better off. Almost sounds too good to be true, but Jackson's research shows otherwise.

Do high-achieving, low-income students miss out?

Countless hours of studying and hard work in high school can lead to acceptance into one of the nation's selective colleges or universities. High achievers—the top 10 percent of students who take the ACT or SAT college entrance exams—are often accepted into and attend selective schools. However, the majority of low-income high achievers do not even apply to selective institutions; they gravitate toward nonselective local institutions or community colleges. In today's competitive college application environment, it seems odd to see such opportunities bypassed when many selective and highly selective institutions offer attractive financial aid packages to high-achieving, low-income students.

In "The Missing 'One-Offs': The Hidden Supply of High-Achieving, Low Income Students" (National Bureau of Economic Research, Working Paper 18586, December 2012, <http://www.nber.org/papers/w18586>), authors Caroline M. Hoxby and Christopher Avery

show that the application behavior of low-income high achievers is substantially different than that of high-income, high-achieving students. The authors analyze the entire U.S. population of high-achieving students in the graduating class of 2008 and use ACT, Inc. and The College Board data for individual, self-reported information regarding where students sent their assessment scores—that is, to which schools they applied for admission.

Using U.S. Census Bureau geographical data, the authors are able to pinpoint low-income high achievers to a neighborhood and match a profile of family income and adult education level to the student. Using the 2008 American Community Survey, a student is classified as low income if his family's 2008 income level was in the bottom quartile of families with a high school senior; that is, the family income was at or below \$41,472. A family income in the top quartile—\$120,776 or above—was used to categorize a student as high income. The authors state that there were at least 25,000 and probably 35,000 low-income high achievers in the high school class of 2008 in the United States. Most low-income high achievers reside in New England, the Mid-Atlantic states, southern Florida, coastal California, and large cities such as Atlanta and Chicago. Other areas of high achievers include Minnesota, Kansas, and other Midwestern states.

Why are these high achievers missing out on applying to schools that could provide an excellent college education and may very well offer an abundance of financial aid? Hoxby and Avery suggest that admissions staff from selective colleges underestimate the large number of these students and often rely

continually on "feeder" schools to send along low-income applicants. Also, admissions staff are less likely to visit a high school if fewer than 20 potential applicants attend an information session; hence, students in rural areas or small towns may miss out on the opportunity to attend selective-college recruiting sessions because the students' area is ignored by recruiting efforts. Admissions staff review only those students who apply, and as best put by the authors, "...many colleges look for low-income students where the *college* is instead of looking for low-income students where the *students* are."

Selective colleges procure mailing lists from ACT, Inc. and The College Board so they can send brochures to students who meet the school's admissions criteria. The brochures are generic and provide tuition costs but not necessarily all financial aid options, so low-income students see what high-income students see: the tuition sticker price. Mailed brochures do not differentiate between high-income and low-income high achievers.

Hoxby and Avery classify low-income, high-achieving students into two groups by application behavior. "Achievement-typical" students apply to college in the same way as their high-income peers: they apply to at least one selective school and a safety school, where the student's scores are more than five percentiles above the school's median scores. Achievement-typical, low-income students are highly concentrated in large metropolitan areas and often attend selective-admission high schools. In fact, 70 percent of achievement-typical students reside in only 15 urban areas. Counselors at selective-admission-based high schools are more likely to have attended a selective college themselves

than counselors at nonselective high schools.

“Income-typical” students tend to apply to a single, nonselective local institution or community college—behavior in line with other low-income students. Income-typical students tend to apply only to colleges whose median scores are at least 15 percentiles below their own scores. Because close to half of income-typical students reside outside of urban areas, these students are

less likely than achievement-typical students to be recruited by a selective college. Hence, income-typical students have a location disadvantage with selective schools, whereas achievement-typical students are more likely to visit selective schools or attend the recruitment sessions they offer.

Hoxby and Avery conclude by suggesting that selective schools should rely on their alumni base to recruit and reach out to income-typical

students who live outside of urban areas. While this idea may help solve location bias, educating alumni about current admissions and financial aid policies may be difficult. The authors also revisit the idea of written brochures tailored to the student’s income situation. The authors note that while this study uses descriptive data, they are conducting followup studies to identify effects of educating low-income students about college prospects. □