Accounting for Demographics and Risk in Postcollege Earnings

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Key Points

- Current accountability in higher education is primarily focused on *equality*—the application of the same metrics to all schools no matter whom they enroll.
- But an accountability system that judges schools only on former students' earnings outcomes will reward schools with certain demographic profiles over others—in the context of this report, colleges with fewer Black and low-income students.
- To apply any kind of accountability metric fairly, it's necessary to account for the hand a school is dealt in the demographic makeup of its students, just as it's necessary to assess how well or how poorly a school is doing in comparison to peers facing similar challenges.

It is absurd to expect the same results from a hospital that serves primarily young, healthy people and one that serves elderly patients with multiple morbidities. But that is exactly what is done in higher education. Today, regardless of whether a college is open to all or highly selective, both types of colleges are accountable for their outcomes without considering the varying populations they enroll.

Like laws that forbid rich and poor alike to sleep under bridges, current accountability in higher education is primarily focused on *equality*—applying the same metrics to all schools no matter whom they enroll. But because schools serve varying populations of students representing different "risk profiles," if *equality of opportunity* for all students is the goal, then an *equitable accountability system* is needed.[1] Such a system would promote continuous improvement through rewards and sanctions based on the comparison of outcomes among schools serving comparable demographics.

To help illustrate how much demography matters when one tries to hold institutions accountable for their outcomes, consider postcollege earnings, which researchers and policymakers have started to focus on.[2]

As is well-known, families' demographic and economic backgrounds closely correlate with academic preparedness, the type of college a student attends, and the likelihood that students will graduate and thereby increase their chances of finding financially rewarding jobs.[3] Consequently, higher education accountability systems that rely primarily on institutional or programmatic outcomes, such as graduation rates, postgraduation earnings, and student loan default and repayment rates, make sense. But when they fail to consider students' social, economic, and demographic circumstances, these systems are simply rewarding selective institutions while incentivizing less selective schools to become more selective or, worse, have little incen-

tive to add value to their students because administrators do not have simple or cheap ways to help underserved students succeed.[4]

A family's assets—educational, social, and financial—can make it possible for a student to attend the best-resourced schools from pre-K through high school. Not only can they make going to college an expected part of what one and one's peers do, but by providing academic rigor, extracurricular experiences, advanced courses, and test preparation tutorials, these assets provide a leg up on the application process, the college culture, and the postcollege networking that opens the doors to employment opportunities. Without these resources, students enter college, if they enroll at all, with serious disadvantages that will affect everything from their academic accomplishments to their earnings potential.

As a result, an assessment of a college's performance would be more relevant, transparent, and likely to lead to improvement if it considered the performance of institutions enrolling comparable groups of at-risk students.

To illustrate that the elephant in the room (demographics) is easy to see, I identified 444 public and 688 private, not-for-profit, primarily four-year colleges and universities for which the relevant data on wages and demographics were available.[5] These colleges were divided into quintiles based on average median earnings of students who are working 10 years after they first enrolled. The available data include all students, whether they graduated or dropped out and with no regard to the time they spent in school.

To test how strongly demographics are correlated with postcollegiate earnings, four student groups likely to experience lower earnings were chosen: Black, Hispanic, low-income (whose federal Pell Grant eligibility serves as a proxy for socioeconomic status), and marginally prepared academically students (those facing a greater risk of not graduating). I also included a group that could be expected to experience higher earnings: students coming from households in the highest quintile of income distribution. Table 1 shows the results, with the selected demographic characteristics correlated with average median earnings that are reported for the institutions' former students.

As Table 1 makes evident, the percentage of Black students increases from the institutions with the highest earnings among former students to those with the lowest earnings. Likewise, for the

Table 1. Average Median Earnings by Demographic Characteristics and Institutional Sector

Earnings Quintile Among Private and Public Institutions	Number of Colleges	Average Median Earnings of Former Students (Dollars)	Percentage Black	Percentage Hispanic	Percentage Pell	Graduation Rate (Percentage)	Percentage of Parents in Top Income Quintile
Private Q1	137	36,009	18.55	7.69	42.71	50.25	27.18
Private Q2	137	41,428	11.98	9.87	36.23	56.2	31.03
Private Q3	138	45,132	10.76	12.49	33.25	60.7	35.44
Private Q4	138	50,368	8.91	12.16	27.28	67.43	41.09
Private Q5	138	64,563	5.57	11.17	19.12	80.89	55.54
Public Q1	89	32,997	33.74	6.82	49.2	39.19	20.81
Public Q2	89	38,148	13.71	11.36	38.16	44.64	29.34
Public Q3	89	42,111	10.4	12.85	34.89	53.42	31.39
Public Q4	89	46,129	7.6	19.63	34.72	60.1	35.56
Public Q5	88	57,364	6.07	14.63	26.98	72.44	42.91

Source: Author's calculations based on College Scorecard, Integrated Postsecondary Education Data System, and the Opportunity Insights dataset.

percentage of Pell-eligible (i.e., low-income) students, the percentage increases as earnings decline. And the reverse takes place when observing overall graduation rates: The higher the earnings quintile that an institution is in, the higher the percentage of completers.

In this case, limited to students in four-year schools, Hispanic students are primarily concentrated in states with high levels of wage inequality, which have been shown to correlate with high levels of social mobility for college-educated populations.[6] Consequently, Hispanic students represent the inverse of what is found for Black students, although this phenomenon is likely not reflected for the two-year colleges many low-income Hispanic students attend.[7]

Meanwhile, institutions whose former students go on to earn the highest incomes tend to enroll students who come from high-income families.

The bottom line is that an accountability system that judges schools only on former students' earnings outcomes will reward schools with certain demographic profiles over others—in the context of this report, colleges with fewer Black and low-income students. The implication, of course, is that schools with too many Black or poor students are likely to be perceived as inferior no matter how much value they may be creating for their students.[8]

To be sure, then, demographics matter. Institutions of higher education are not dealt an even hand; some must serve large numbers of under-resourced students, many of whom had few opportunities—social, cultural, and financial—to prepare for college-level work and therefore face formidable challenges as they strive to complete their degree. Other schools, typically better funded and with stronger reputations, work hard at admitting only the most promising students, hoping to maintain or improve their outcomes metrics.

In conclusion, to apply any kind of accountability metric fairly, it's necessary to account for the hand a school is dealt in the demographic makeup of its students, just as it's necessary to assess how well or how poorly a school is doing in comparison to peers facing similar challenges. To fail to do this is to leave schools free to continue either admitting only the most prepared students they can attract or doing a poor job while excusing themselves because they serve a large percentage of low-income and minority students.

About the Author

Jorge Klor de Alva is the president of Nexus Research and Policy Center, a nonprofit research and policy advocacy organization whose goal is to improve colleges striving to educate nontraditional and underserved students.

Notes

1. This text is based on Jorge Klor de Alva, "Accounting for Demographics, Selectivity, and Risk in Postcollege Earnings," in *Student Outcomes and Earnings in Higher Education Policy*, ed. Jason D. Delisle, American Enterprise Institute, January 26, 2022, https://www.aei.org/research-products/report/student-outcomes-and-earnings-in-higher-education-policy/.

2. See, for example, Kevin Miller and Shai Akabas, *Which Colleges Are Worth the Cost?*, Bipartisan Policy Center, February 2022, https://bipartisanpolicy.org/download/?file=/wp-content/uploads/2022/02/EP_-_What_Colleges_Are_Worth_Report_RV4.pdf; Michael Itzkowitz, *Out with the Old, in with the New: Rating Higher Ed by Economic Mobility*, Third Way, January 27, 2022, https://www.thirdway.org/report/out-with-the-old-in-with-the-new-rating-higher-ed-by-economic-mobility; and Howard P. McKeon et al., *A New Course for Higher Education: Strengthening Access, Affordability, and Accountability*, Bipartisan Policy Center, January 2020, https://bipartisanpolicy.org/wp-content/uploads/2020/01/WEB_BPC_Higher_Education_Report_RV8.pdf.

3. Anna Manzoni, "Equalizing or Stratifying? Intergenerational Persistence Across College Degrees," *Journal of Higher Education* 92, no. 7, (April 2021): 1028–58, https://www.tandfonline.com/doi/full/10.1080/00221546.2021.1897966?scroll=top&needAccess=true; Timothy J. Bartik and Brad J. Hershbein, "Degrees of Poverty: The Relationship Between Family Income Background and the Returns to Education" (working paper, W. E. Upjohn Institute for Employment Research, Kalamazoo, MI, March 2018), https://www.econstor.eu/bitstream/10419/202882/1/1016149662.pdf; and Anthony P. Carnevale, Ban Cheah, and Andrew R. Hanson, *The Economic Value of College Majors*, Georgetown University, Center on Education and the Workforce, 2015, https://cew.georgetown.edu/cew-reports/valueofcollegemajors/.

4. Bridget Terry Long, "The College Completion Landscape: Trends, Challenges, and Why It Matters," in *Elevating College Completion*, ed. Frederick M. Hess and Lane Erickson Hatalsky, American Enterprise Institute, June 26, 2018, https://www.aei.org/research-products/report/elevating-college-completion/.

5. These data are drawn from the US Department of Education's Integrated Postsecondary Education Data System and the department's College Scorecard data on median earnings of students working and not enrolled 10 years after entry. The most recently reported data are for calendar years 2014–15. Additional data come from the Opportunity Insights dataset. I used the dataset employed for Raj Chetty et al., "Mobility Report Cards: The Role of Colleges in Intergenerational Mobility" (working paper, National Bureau of Economic Research, Cambridge, MA, July 2017), httsp://www.nber.org/papers/w23618; and Barron's Educational Series, College Division, ed., *Barron's Profiles of American Colleges 2009* (Hauppauge, NY: Barron's Education Series, 2008).

6. See Jason D. Delisle and Cody Christensen, "Economic Mobility Conundrums: A Closer Look at the Opportunity Insights University Rankings," American Enterprise Institute, June 24, 2020, https://www.aei.org/research-products/report/economic-mobility-conundrums-a-closer-look-at-the-opportunity-insights-university-rankings/; and Caroline M. Hoxby and Sarah Turner, "Measuring Opportunity in U.S. Higher Education" (working paper, National Bureau of Economic Research, Cambridge, MA, January 2019), https://www.nber.org/papers/w25479.

7. Approximately 41 percent of Hispanics attend public two-year colleges. Excelencia in Education, "Hispanic-Serving Institutions (HSIs) Fact Sheet: 2019–20," April 2021, https://www.edexcelencia.org/research/publications/hispanic-serving-institutions-hsis-2019-2020-fact-sheet. See also J. Oliver Schak et al., *Broken Mirrors II: Latino Student Representation in Public State Colleges and Universities*, Education Trust, September 11, 2019, https://edtrustmain.s3.us-east-2.amazonaws.com/wp-content/uploads/2014/09/10123122/Broken-Mirrors-Latino-Student-Representation-at-State-Public-Colleges-and-Universities-September-2019.pdf.

8. On the value added of minority-serving institutions, see, for example, Lorelle L. Espinosa, Robert Kelchen, and Morgan Taylor, *Minority Serving Institutions as Engines of Upward Mobility*, American Council on Education, 2018, http://acenet.edu/news-room/Documents/MSIs-as-Engines-of-Upward-Mobility.pdf.