

DISCUSSION PAPER SERIES

IZA DP No. 17408

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Comment on 'The Ebbing Tide: How Will Higher
Education Adapt to Demographic Change?'**

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ABSTRACT

Incorporating Changes in Race, Gender, and Academic Field at Colleges and Universities - A Comment on ‘The Ebbing Tide: How Will Higher Education Adapt to Demographic Change?’*

Jacob L. Vigdor (2024)'s noteworthy contribution in “The Ebbing Tide: How Will Higher Education Adapt to Demographic Change?” estimates the impact of demographic change on colleges and universities. Here, I highlight two critical factors that should be considered in a model aimed at understanding changes in college enrollment that will shape the future of higher education: college major choice and demographic diversity, including the race/ethnicity, and gender of students. More broadly, incorporating more nuanced measures of demand for institutions of higher education and their programs of study into a model of enrollment changes would be a useful extension of this work.

JEL Classification: J1, I2

Keywords: higher education, college major choice, race, gender, ethnicity

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Much discussion has surrounded precipitous declines in college enrollments forecast to hit institutions of higher education in the coming years due to falling birth rates (Bauman 2024). Yet despite the considerable attention paid to this potentially transformative event, relatively few concrete estimates have been produced to predict how higher education may be transformed on a broad scale.¹ In this environment, college and university administrators will read Jacob L. Vigdor (2024)'s "The Ebbing Tide: How Will Higher Education Adapt to Demographic Change?" with great interest as they weigh the potential impacts of the so-called "demographic cliff" on their campuses specifically (Boeckenstedt 2022).

Vigdor begins by considering possible explanations for the decline in college enrollments in recent years, finding notable support for the explanation grounded in the economic recovery from the Great Recession which can match both the timing of the national drop in enrollments and the magnitude of the decline. This makes sense from a basic labor economics perspective: As employment prospects in the broader labor market improve, opportunity costs of college attendance rise, and thus college-age individuals are more likely to opt out of college enrollment. Nevertheless, on the local level, Vigdor notes that state-level unemployment rates cannot explain the variation in the drop in enrollment across institutions over time.

Local demographics, however, seem to be closely linked with institutional enrollment changes, particularly for bachelor's only and masters-granting regional institutions, which appear to be more vulnerable to demographic changes compared with larger R1 institutions which are expected to continue to grow. Thus, Vigdor's analysis predicts diverging enrollment trends for most R1 institutions and other colleges and universities into the future, and he is able to report projected changes in enrollments for institutions in the sample which will be of great value to college administrators. Vigdor then discusses interventions which might help colleges and universities address enrollment declines. Admittedly, many of these interventions have been well-known throughout the most recent enrollment declines, and thus it is hard to see how these will serve as a significant means of altering the dynamics to avoid institutional closures for those institutions at greatest risk.² This in turn raises questions about the students who may lose access to a local college or university as a result and face increased barriers to college attendance as distance to school rises (Wozniak 2018).

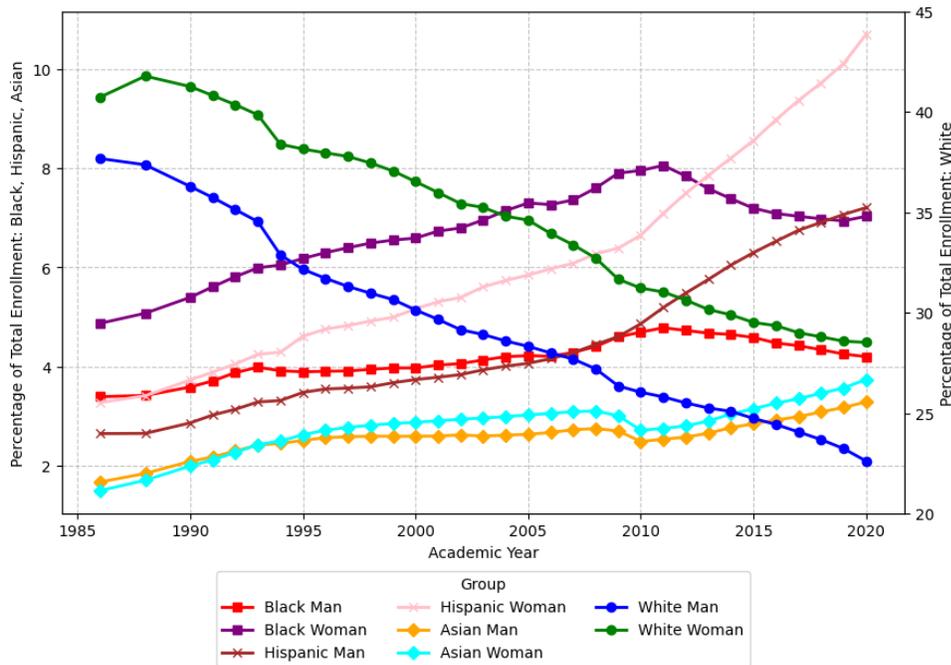
While Vigdor's article is an important step in the right direction toward quantifying specific impacts on institutions and thus helping universities prepare for coming challenges, his analysis does not fully capture the seismic changes occurring in demographics and higher education in important ways that limit the utility of this exercise. In this short piece, I point out a couple of missing pieces that could be brought to bear on the important question of institutional survival to suggest ways in which future research could expand on Vigdor's approach to provide a more complete picture of demographic change in the United States, how it might impact colleges and universities, and thus how institutions might respond in more creative ways to adapt and continue to serve their critical missions.

¹ An important exception is Grawe (2018), which builds projected estimates at the regional level and by institution type, but does not provide forecasts at the institutional level.

² The parallels with K-12 school closures, also driven by demographic change, are strong here (Grose 2023), and future research should consider their implications in tandem.

First, demographic change has not been evenly distributed. Vigdor’s analysis leverages geographical variation in population declines, but ignores important changes in the U.S. population by race and ethnicity which are also likely to affect college enrollments.³ As many other studies have shown, rates of college attendance differ quite significantly across demographic and socioeconomic groups (e.g., see Grawe 2018, chapter 9). To the extent that racial and ethnic minorities are more likely to face greater barriers to college matriculation and completion (e.g., fewer financial resources), and may be less likely to have other forms of capital which can inhibit college enrollment (e.g., having parents who went to college), relying solely on changes in age-specific headcounts is likely to miss important impacts on institutional enrollment projections.

Figure 1: Percentage of Undergraduate Enrollment at 4-Year Post-secondary Institutions by Race and Gender, 1986–2020



Note: Data sourced from harmonized version of Integrated Postsecondary Education Data System (IPEDS 2024).

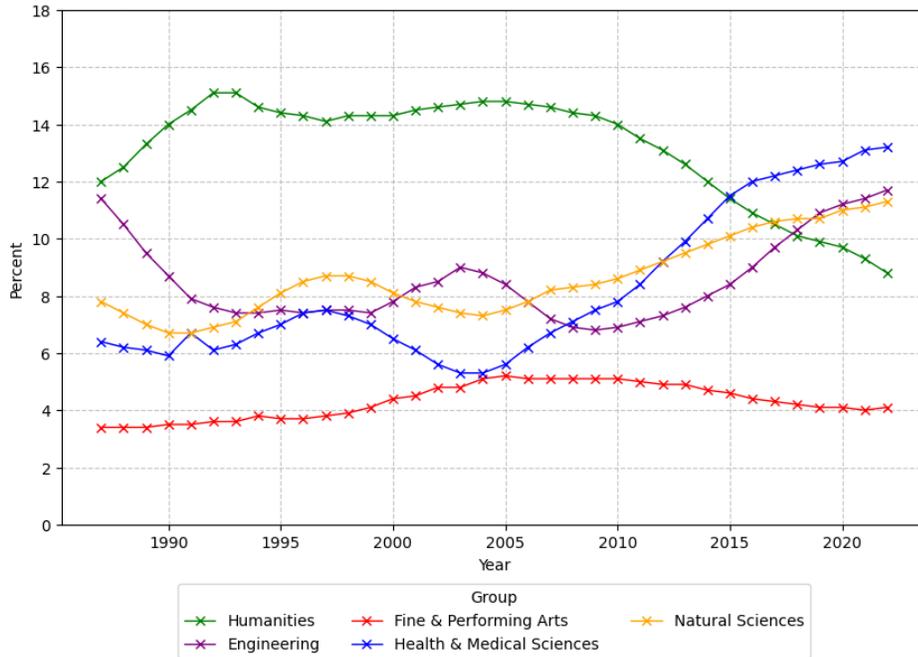
To illustrate the importance of incorporating race/ethnicity and gender into the demographic components of the model, Figure 1 describes the percentage of undergraduate enrollment at 4-year post-secondary institutions by race and gender. In it, we see that the share of non-Hispanic white men and women (noted on the right axis) has been steadily declining for several decades whereas the share of Black men and women (noted on the left axis) began to decline relatively recently, after 2011, around the same point of declining enrollments which Vigdor emphasizes. In contrast, Hispanic men and women (noted on the left axis) have generally increased their share of college enrollments, and Hispanic women’s share of college enrollment has risen especially dramatically since 2010. The enrollments of Asian men and women have also increased since 2010, though they constitute a much smaller share of overall college enrollments (noted on the left axis). Women

³ U.S. Census predictions anticipate that the share of children who are non-Hispanic White will decline to about one-third by 2060, from more than one-half of children in 2016 (Vespa et al. 2020).

have higher college enrollment in all race/ethnicity groupings, and gender gaps in college enrollment have generally risen over time as fewer men have enrolled in college, especially at four-year institutions (Fry 2023).

Incorporating changes in the population by race/ethnicity and gender into the model to develop a more nuanced measure of demand for college such as the one built by Grawe (2018) which weights headcount estimates of students of various demographic profiles by the probability of college attendance for those students, would be a significant improvement to the analysis and thus would likely yield more useful forecasts. Moreover, it would give us a clearer understanding of the link between a broader definition of demographics and college enrollment. To the extent that there are important demographic differences in ability to pay for college, such estimates could also shed light on financial challenges likely to hit institutions which support students who may be interested in enrolling in college, but who may lack the resources to pay for it.

Figure 2: Shares of All Bachelor's Degrees Awarded in Selected Academic Fields, 1987 – 2022



Note: Data sourced from American Academy of Arts and Sciences (2024).

The second profound shift in higher education which would benefit from incorporation into a model of projected enrollment changes is also a major topic of discussion in higher education, namely, the shift away from humanities majors and toward engineering and science degrees (Anderson 2023). To illustrate this shift, Figure 2 presents the shares of all bachelor's degrees awarded in selected academic fields. In it, we see that humanities degrees have declined steadily just as health and medical sciences degrees and natural science degrees have increased since around 2005. Engineering degrees began to steadily increase around 2010, around the same time as fine and performing arts degrees began to decline, which is also around the same time that Vigdor emphasizes as a turning point in college enrollments in his study.

Changes in demand for college majors may stem from the same sources which brought about the decline in national enrollments, and may all be related to a greater focus on the labor market return to a college degree and specifically to the returns to college major. Some institutions may be better situated to transition into serving new STEM majors, which may require not only faculties with different skill sets, but also costly infrastructure and investment, which not all institutions may be able provide. Incorporating the capacity of institutions to offer the types of majors that are of greater interest to students into a model of enrollment changes will also help us understand which institutions will survive going forward. Moreover, greater focus on these issues will also shed light on how enrollment shifts across majors may predict difficult changes within institutions (e.g., program closures in low-demand disciplines) that may be masked by a relatively rosy picture of continued growth in overall enrollment at most R1 institutions.

In this short comment, I have highlighted only two critical factors that should be considered in a model aimed at understanding changes in college enrollment that will shape the future of higher education. More broadly, incorporating more nuanced measures of demand for institutions of higher education and their programs of study into a model of enrollment changes would be a useful extension of Vigdor (2024)'s noteworthy contribution in "The Ebbing Tide: How Will Higher Education Adapt to Demographic Change?" A better understanding of the forces underlying changes in demand for higher education will help administrators and public officials adapt to changes on the horizon to ensure that colleges and universities are able to fulfill their missions and provide accessible higher education to all.

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