Short-Term Project Title: National Evidence of Enrollment Shifts and Labor Market Outcomes Following the Great Recession

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In anticipation of the economic turmoil facing colleges and universities due to the emergence of COVID-19 in the United States, we propose a short-term research project designed to advance knowledge about what happened in higher education following the Great Recession. The logic of this project is to inform future policy decisions in ways that can maximize student protection and return on investment. Using student- and institution-level data, we will examine what happened to the higher education landscape following the Great Recession. Specifically, we will evaluate which types of institutions increased enrollment and how their students fared in subsequent years. By gaining a greater understanding of who is helped and harmed following a major economic shock, this project will be able to inform targeted policies and identify the student groups with the greatest need for support in response to COVID-19.

For our institution-level analysis, we will focus on five groups of institutions: public four-year institutions, public two-year institutions, private not-for-profit four-year institutions, for-profit four-year institutions, and for-profit two-year institutions. Although we know that enrollment increased across institution types between 2008 and 2012, we also know that public two-year and for-profit enrollment has since declined (authors' calculations). This project will dive deeper into national data to unpack sector-by-sector changes in enrollment and academic outcomes following the Great Recession, focusing specifically on demographic shifts in college access and student success.

For each institution grouping, we will create graphs to visualize data for the following variables from 2004-05 through 2017-18 (or 2018-19 if more-recent data are available for some variables) using data from the Integrated Postsecondary Education Data System (IPEDS). In order to track enrollment **size**, we will illustrate patterns for part-time, full-time, and full-time equivalent (FTE) undergraduate, graduate, and total (undergraduate plus graduate) enrollment. We will also illustrate tuition and fee rates over time for each institution type. In order to characterize **outcomes**, we will illustrate year-over-year retention rates, cohort 150% completion rates (six-year completion for four-year institutions and three-year completion for two-year institutions), and cohort loan default rates. In order to characterize institutions' **revenue sources**, we will illustrate the percentage of revenue for each institution type that comes from Pell Grants. We will use the outcomes and revenue information to derive indicators for satisfying the federal "gainful employment" and "90/10 rule" guidelines and track indicators of the percentage of institutions in each grouping that are failing or close to failing on the measures in each year. In order to characterize **demographic profiles** at each institution type, we will also illustrate the percentage of enrolled students who are Pell Grant recipients and the percentage of enrolled students from minority racial or ethnic groups over time.

We recognize that the Great Recession itself prompted the introduction of some of these institutions; as an example, the number of for-profit four-year institutions in the IPEDS data more than doubled from 385 in 2004-05 to 839 in 2013-14. In light of this, we will also illustrate the entry (and exit) of institutions of each type across these years. We will also illustrate all the measures above (our specific measures of size, outcomes, revenue sources, and demographic profile) for each subset of institutions that originated after the Great Recession in case those institutions were attempting to be opportunistic in their revenue pursuits.

To leverage student-level data and complement analyses of broad trends in student enrollment before and after the Great Recession, we will also examine five waves of data (2000-01, 2004-05, 2008-09, 2012-13, and 2016-17) from the National Postsecondary Student Aid Study (NPSAS). Specifically, we will follow groups of students across key dimensions of race/ethnicity, low-income status, and first-generation status and illustrate the percentage of students enrolled full-time, part-time, and overall. We can also show the average tuition and fees, total cost of attendance, grants, loan amounts, and ultimate net price across sub-groups of students at each of the five institution groups we identified above for each of the five NPSAS waves.

If the data reveal sharp increases in for-profit enrollment within specific subgroups of students, the proposed project can also highlight examples of predatory behaviors at these institution types, such as high-pressure sales tactics, perverse incentive structures for employees, a disproportionate focus on marketing over student success, and more. We would like to emphasize that such claims cannot be introduced if there is not clear evidence of negative outcomes among specific sub-groups of for-profit students. To carry out a series of supplemental analyses designed to identify potentially predatory behaviors and illustrate the types of institutions engaging in these behaviors, we will carry out a cluster analysis including a number of variables that may reflect predatory activity before and after the Great Recession: cohort default rate; cohort 150% non-completion rate, percentage of total revenue from Pell Grants, and percentage allocations of total institutional expenditures. We will also explore additional measures including institutions' percentage of graduates who find job placement, graduates' median earnings, and tuition and fees. A mitigating factor that we will consider is the proliferation of online education, which is typically concentrated disproportionately within the major players in the public four-year sector (e.g., ASU, SNHU, etc.), but such analyses of the role and influence of online education will likely go beyond the scope of this project and require further exploration as well as transcript data.

Finally, using the results from the principal components analysis, we will examine changes over time in the index of the previously described measures, ranging from before the Great Recession to beyond the closures of large for-profit chains like Corinthian Colleges and ITT Tech. We will also examine the types of institutions (from our five institution groups above) most closely associated with these predatory behaviors and the characteristics of students most often served by institutions that exhibit these behaviors. We can use this index to examine if the chains that experienced closure had especially high values, if other eventually-closed institutions had especially high values before they closed, and what the extent of this activity looks like as recently as 2017-18.

Project Period: 6/1/20 – 8/15/20