Illinois Higher Education Enrollments During Recessions

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I. Research on higher education enrollments during recessions

National research in the US has shown that postsecondary enrollments are known to be impacted by economic downturns. During the Great Recession (between fall 2007 and fall 2010) total enrollment increased from 18.2 million to 21 million.[2] These enrollment increases include both traditional and non-traditional aged students. "Between 2007 and 2010 the postsecondary enrollment rate increased from 48.7 percent to 50.8 percent for those ages 18–19, from 30.5 percent to 32.6 percent for those 20–24, and from 6.7 percent to 8.5 percent for those in the 25–30 age group."[3]

In a research paper that examines the impact of the business cycle on enrollments and finances at community colleges, Betts & McFarland (1995) find that a 1 percent increase in the unemployment rate of recent high school graduates is associated with a 0.5% increase in full-time attendance at community colleges. Likewise, a 1 percent increase in the unemployment rate of all adults is associated with a 4% increase in full-time community college attendance. These findings show that all students are impacted by economic downturns, but older adult students are impacted most strongly during recessions. Part-time enrollment is also shown to be countercyclical and increases during economic downturns.[4] Leslie & Ramey (1986) find a similar relationship between economic downturns and enrollment using data at the regional level.[5]

More recently, Barr & Turner (2013) show that the effect of the unemployment rate on college enrollment has increased over time. During the Great Recession, "a 1-point increase in the unemployment rate increases the probability that an individual is enrolled by a third of a percentage point" (p. 174). "… the largest share of the increased enrollment between 2007–2010 occurred in community colleges where enrollment increased by nearly 900,000 students, or more than 32 percent. Public four-year institutions also had sizable enrollment growth, accounting for about 27.4 percent of additional students" (p.175). Nonprofit four-year institutions "absorbed about only 10 percent of the students induced to enroll with the Great Recession" (p. 175). However, "… two-year and four-year institutions (combined) in the for-profit sector absorbed nearly 30 percent of the enrollment growth during the Great Recession" and "… the size of the for-profit sector more than doubled from 2000 to 2007" (p. 175).[6]

At the moment when enrollments rise in response to an economic downturn, institutions generally face cuts in their state support. This creates both capacity constraints when demand rises and raises quality concerns as institutions attempt to serve more students with fewer resources. A 2006 study from Illinois State University finds, "Following each recession, funding for higher education in most states stagnated or declined while enrollment in

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[2] Snyder, Thomas D. 2012. *Digest of education statistics 2011*. Washington, DC: Institute for Education Statistics and the National Center for Education Statistics. Table 198.

[3] Barr, A., & Turner, S. E. (2013). Expanding Enrollments and Contracting State Budgets: The Effect of the Great Recession on Higher Education. *The ANNALS of the American Academy of Political and Social Science*, *650*(1), 168–193. https://doi.org/10.1177/0002716213500035. Based on data from U.S. Census Bureau and U.S. Bureau of Labor Statistics. Current Population Survey, October (2007 and 2010).

[4] Betts, J., & McFarland, L. (1995). Safe Port in a Storm: The Impact of Labor Market Conditions on Community College Enrollments. *The Journal of Human Resources, 30*(4), 741-765. doi:10.2307/146230. https://www.jstor.org/stable/146230.

[5] Leslie, L. L. & Ramey, G. (1986). State Appropriations and Enrollments: Does Enrollment Growth Still Pay? The Journal of Higher Education, 57(1), 1-19. https://doi.org/10.1080/00221546.1986.11778746.

[6] Barr, A., & Turner, S. E. (2013). Expanding Enrollments and Contracting State Budgets: The Effect of the Great Recession on Higher Education. *The ANNALS of the American Academy of Political and Social Science*, *650*(1), 168–193. https://doi.org/10.1177/0002716213500035.

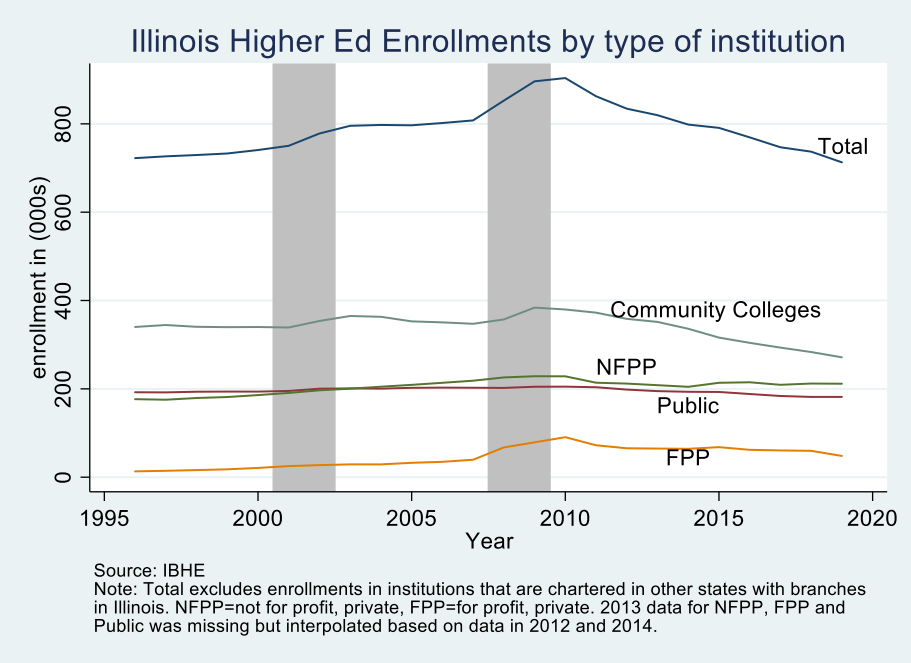
colleges and universities tended to increase as students sought credentials for employment or bided time until the economy improved." (p. 7).[7]

There is also evidence that the length of time that it takes higher education institutions to recover from state appropriations cuts is increasing.[8] Humphreys (2000) argues that "By maintaining funding to higher education during recessions, public institutions of higher education will be better able to provide quality education to students during recessions. This may reduce the duration of these spells of unemployment and should make these students more productive when they return to the labor force" (p. 410).[9] Relatedly, some academics have argued that a longer-term solution to this issue is to fund higher education counter-cyclically.[10]

II. A brief summary of data about higher education enrollments in recent Illinois recessions

Total higher education enrollments in Illinois rose during both the 2000-2001 recession and in the Great Recession that started in late 2007 and lasted until early 2009. At shown in Figure 1 below the biggest enrollment increases within the higher education industry were for community colleges, for profit private (FPP), and not-for-profit private (NFPP) colleges and universities.[11] Both FFP and NFPP colleges and universities had relatively small enrollment increases in the earlier recession but more substantial increases in the Great Recession.

Figure 1



[7] Hodel, R., Laffey, M., & Lingenfelter, P. (2006). "Recessions, Retrenchment, and Recovery: State Higher Education Funding & Student Financial Aid." https://education.illinoisstate.edu/csep/initiatives/recession.php.

[8] Doyle, W. R. & Delaney, J. A. (2011). Bouncebacks in Higher Education Funding: Patterns in Length of Time to Recovery Following Cuts in State Appropriations. WISCAPE Policy Brief. https://wiscape.wisc.edu/wiscape/publications/policy-briefs/pb012.

[9] Humphreys, B. (2000). Do Business Cycles Affect State Appropriations to Higher Education? *Southern Economic Journal,67*(2), 398-413. doi:10.2307/1061477.

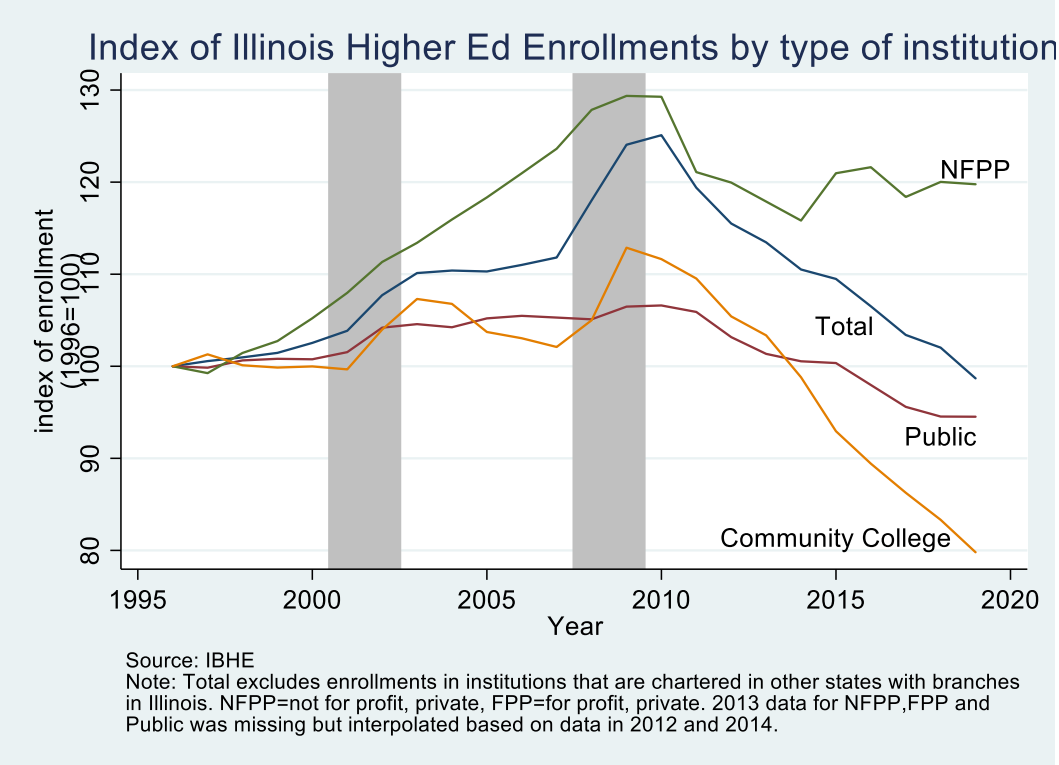
[10] See for instance, Dynarski, S. (January 19, 2020). In a Sharp Downturn, College Can Be a Shock Absorber. *The New York Times*. https://www.nytimes.com/2020/01/19/business/college-downturn-absorber.html.

[11] The raw data on which the graphs are based are contained in the appendix. We are grateful to Eric Lichtenberger of the Illinois Board of Higher Education for providing us with this data.

We look at the same data in another way in Figures 2 and 3 where we index all sectors' enrollments relative to their 1996 enrollments. We exclude FPP data from Figure 2 but depict it in Figure 3 because the scale of enrollment changes in that sector makes it more difficult to discern activity in the other sectors. Figure 2 makes clear that the increase in NFPP enrollments during the recessions was consistent with pre-existing trends toward increasing enrollments and provides little evidence that the recessions stimulated enrollment increases. On the other hand, community colleges did show a very significant increase in enrollment in both recessions that was inconsistent with pre-existing trends. Public colleges and universities also experienced increases in both recessions, although smaller than that experienced by community colleges.

Figure 3 depicts only the FPP sector and total enrollments. Between 1996 and the end of the Great recession in 2010 enrollments in FPP colleges and universities grew from about 13,000 to more than 90,000. While these enrollments were growing steadily even prior to the Great Recession, there growth accelerated substantially in 2008 and 2009. Note that in general the for-profit sector most closely resembles community colleges and we would expect similar trends at for-profits operating in Illinois. Nationally during the Great Recession, enrollments at for-profit institutions grew by 730,000 students between fall 2007 and 2010.[12] As such, recessions likely have

Figure 2

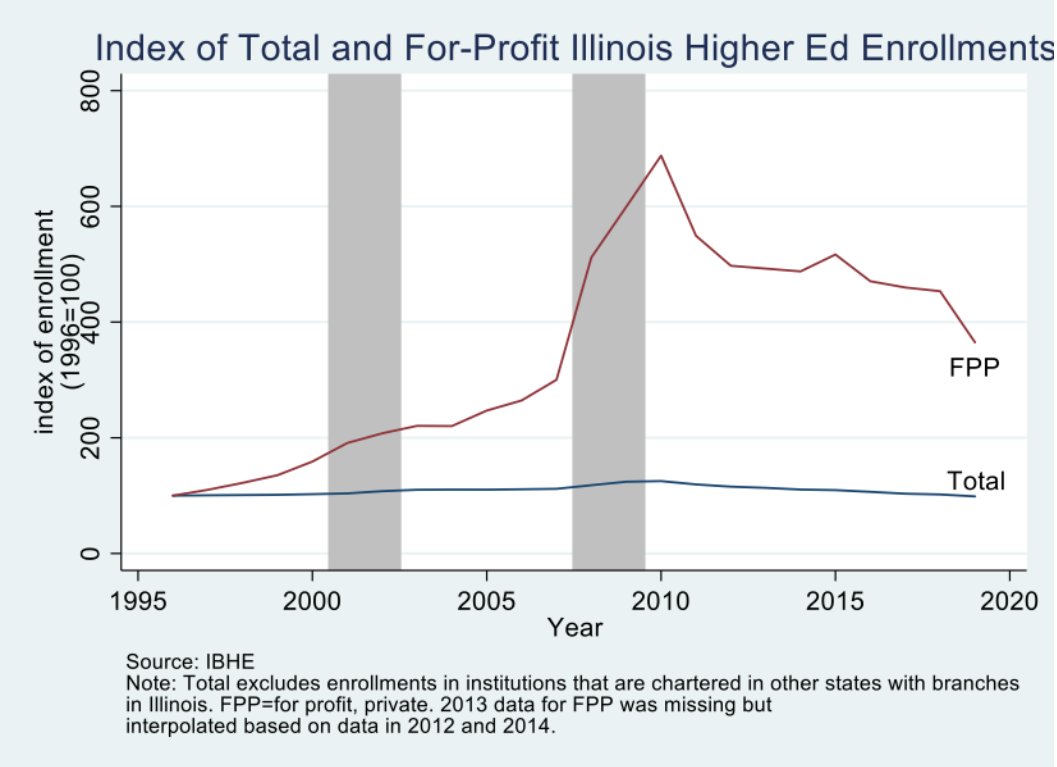


the effect of pushing more students into for-profits especially if funding for public institutions is unable to support increased demand during economic downturns. With generally much higher prices and lower quality in the for-profit sector, students are not always better off enrolling in a for-profit, which highlights the importance of maintaining capacity and quality in the non-profit sector during downturns.

[12] Barr, A., & Turner, S. E. (2013). Expanding Enrollments and Contracting State Budgets: The Effect of the Great Recession on Higher Education. *The ANNALS of the American Academy of Political and Social Science*, *650*(1), 168–193. https://doi.org/10.1177/0002716213500035.

Notice that for the three sectors with increases in trend during the recessions (Community Colleges and NFPP in Figure 2 and FPP in Figure 3), there is evidence of a post-recession dip suggesting that the increase in enrollments during the recession may have simply changed the timing of enrollments that otherwise would have occurred in the future. All four sectors have experienced declines in enrollments since the end of the Great Recession (Figures 2 and 3). By contrast, enrollment at the University of Illinois System has continued to grow consistently since the last recession, even as total enrollment at universities in the state has declined. Collectively across the three universities in the University of Illinois System, enrollment has grown from 76,886 students in the fall of 2010 to 89,270 students in 2019.[13]

Figure 3



III. How is the 2020 recession different?

Basic economic analysis suggests that college enrollments may vary with the unemployment rate. A substantial portion of the cost of attending college is foregone earnings during the period of attendance because students generally must work fewer hours and sometimes take lower paid employment when they are attending class and studying. When unemployment rises, many students realize that they are less likely to secure employment and that, even if they do get a job their wages may be lower and available work hours may be reduced. Thus, the *opportunity cost* of enrolling in higher education during periods of high unemployment is lower.

On the other hand, during periods of high unemployment student and family resources to pay for college may be reduced. The net effect of these forces cannot be determined unambiguously via theory. This conflict holds for

[13] Bauer-Wolf, Jeremy, "U of Illinois raises tuition for the first time in 6 years," Education Dive, Jan. 21, 2020. https://www.educationdive.com/news/u-of-illinois-raises-tuition-for-the-first-time-in-6-years/570819/ Accessed April 30, 2020.

both traditional college-aged students and returning adult students seeking to retrain to re-enter the workforce. The availability of need-based student financial aid, such as MAP grants in Illinois, therefore, plays an important role in reducing the tuition costs faced by students allowing postsecondary enrollment during economic downturns.

The experience of the past two recessions suggests that Illinois community college enrollments rose because of the decline in economic activity. For public and NFPP colleges and universities the experience sends a less clear message but there is some evidence that enrollments were boosted at least slightly (or at least not diminished) by recessionary declines in employment and economic activity. What does that experience suggest about the implications for Illinois higher education enrollments in the recession that is likely to emerge from the COVID-19 pandemic and stay-at-home orders?

Unfortunately, it is difficult to generalize from past experience to the present situation. This recession may be different from those of the recent past for several important reasons:

1. **Health concerns may deter some students from enrolling**. Without a vaccine or effective therapeutics to fight corona virus many potential students may feel that, at least in the short term, it is unsafe to venture much beyond the walls of their homes. Because of this, some may be reluctant to enroll in universities that could require them to attend physical classes. On the other hand, some potential students may see the increasing presence of on-line education as an opportunity to make effective use of their time when movement is constrained.
2. **Online education could change enrollment patterns**. Throughout higher education, there has been a very rapid pivot toward on-line education in Illinois and across the nation. As mentioned above, this could encourage some students to enroll but it may also deter some students who recognize that they are ill-suited for on-line learning. Students that would have attended public higher education institutions in the absence of the stay-at-home orders may also choose to enroll at lower priced community colleges if their only option is to take on-line courses. Likewise, the extent of on-line offerings in the for-profits may encourage additional enrollments in that sector.
3. **Federal government policy, especially liberalized rules with respect to collecting unemployment benefits and repayment of student debt could influence enrollment decisions in difficult to predict ways**. Recent federal government legislation has increased payment for some workers' unemployment benefits, extended the period during which those benefits can be claimed, reduced job search documentation in many cases, and eased requirements for repayment of some student debt. All of these changes could influence students' willingness to enroll in higher education. Higher unemployment benefits reduce the opportunity cost of being unemployed but also increases funds to defray the cost of education. In the past, enrolling in higher education could render an individual ineligible to collect unemployment benefits since one had to be "available for work" to collect these benefits. Whether this will still be the case in the current recession is unclear. If individuals are taking on-line classes with flexible hours, they may be available to work despite their enrollment status. Also, because the requirement that individuals must search for work while unemployed has been liberalized unemployed individuals may have more available time to enroll in higher education.

Appendix

Raw Data

Year	Period	labor force participation rate	employment-population ratio	labor force	employment	unemployment	unemployment rate	Total Fall Enrollment	Public University	Community College	NFP Private	FP Private
1996	Aug	68.8	65.2	6266495	5936670	329825	5.3	724,815	192,319	340,151	176,700	13,172
1997	Aug	68.8	65.6	6305490	6014181	291309	4.6	728,805	192,022	344,556	175,384	14,495
1998	Aug	68.8	65.8	6357874	6078419	279455	4.4	731,595	193,548	340,522	179,250	16,077
1999	Aug	69.8	66.6	6491757	6195986	295771	4.6	735,038	193,880	339,673	181,531	17,826
2000	Aug	69.3	66.3	6476765	6196136	280629	4.3	742,949	193,783	340,101	185,914	20,924
2001	Aug	68.4	64.8	6439518	6097509	342009	5.3	752,753	195,272	339,002	190,798	25,147
2002	Aug	66.9	62.5	6332078	5917303	414775	6.6	781,190	200,388	353,705	196,713	27,355
2003	Aug	66.2	61.6	6304389	5864487	439902	7	799,216	201,118	365,019	200,390	29,056
2004	Aug	66.2	62.1	6327663	5940901	386762	6.1	801,548	200,467	363,204	204,861	29,011
2005	Aug	66.7	62.9	6410083	6050646	359437	5.6	805,764	202,325	352,824	209,110	32,538
2006	Aug	67.7	64.7	6552460	6266985	285475	4.4	814,189	202,853	350,508	213,739	34,843
2007	Aug	68.5	65.1	6684622	6343732	340890	5.1	821,026	202,493	347,277	218,451	39,555
2008	Aug	67.6	63.2	6636562	6205083	431479	6.5	870,047	202,127	357,157	225,913	67,384
2009	Aug	67	59.8	6622400	5915107	707293	10.7	914,763	204,781	383,960	228,592	78,922
2010	Aug	66.8	60.1	6609418	5950971	658447	10	924,751	205,023	379,736	228,420	90,575
2011	Aug	66.3	59.7	6603943	5939511	664432	10.1	879,255	203,670	372,566	213,959	72,348
2012	Aug	65.9	60	6590143	5999586	590557	9	852,865	198,407	358,562	211,953	65,504
2013	Aug	65.3	59.4	6547571	5954206	593365	9.1		194,913	351,570		
2014	Aug	64.7	60.4	6505576	6069687	435889	6.7	806,467	193,360	336,102	204,665	64,225
2015	Aug	64.8	61	6510127	6128163	381964	5.9	802,747	192,997	316,155	213,748	68,070
2016	Aug	65	61.3	6530343	6157339	373004	5.7	779,077	188,405	304,173	214,904	61,980
2017	Aug	64.6	61.4	6484128	6163798	320330	4.9	754,895	183,833	293,417	209,197	60,558
2018	Aug	64.5	61.7	6457071	6182617	274454	4.3	744,286	181,813	283,415	212,077	59,721
2019	Aug	64.4	62	6442858	6197008	245850	3.8	720,215	181,784	271,426	211,629	48,085