

Pension Cheat Sheet Series

Trends in Higher Ed and Pensions



The **Pension Cheat Sheet** series presents short fact sheets by a board of editors and authors who are active with public pensions throughout the United States. The goal is to

offer “facts-in-a-pill” to elevate the discussion and understanding in states where pension funding threatens local city and state finances.

Craig McCrohon is a corporate attorney in Chicago and a Trustee at the Illinois State Universities Retirement System. He serves on the investment committee, and served as investment chair from 2013 to 2017.

Higher Education and Pensions

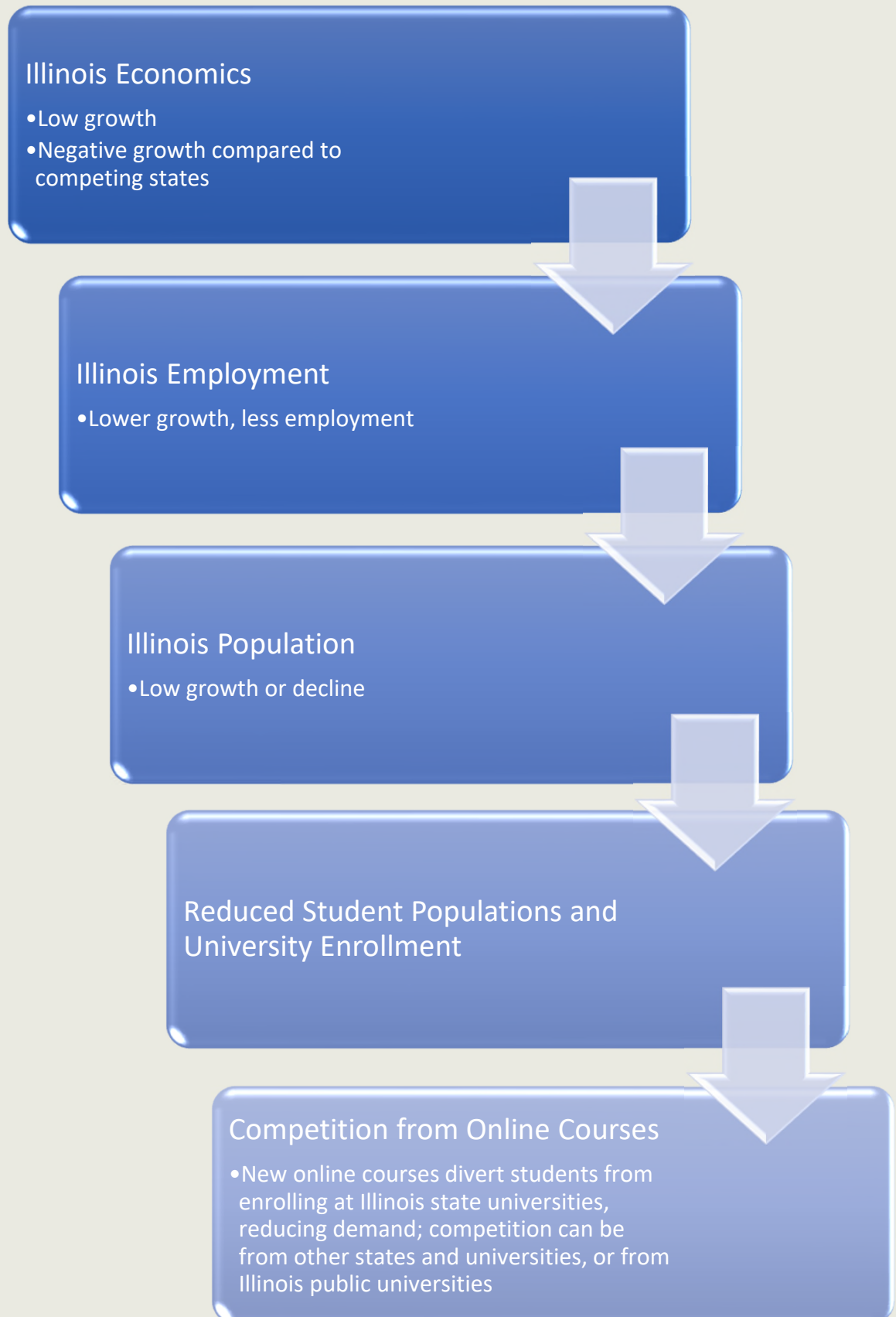
National and state trends in higher education have already stressed Illinois universities and community colleges. The pension funding crowding out of higher education funding has intensified the already precarious operation of state schools. Unlike Illinois elementary and high schools, or Illinois government agencies, the universities confront direct and immediate competition from other states. Therefore, the added pension fund pressure more significantly affects Illinois higher education than other public institutions.

Talking Points

- Unlike most other state agencies and Illinois institutions that receive state pension funding, many Illinois higher education schools compete in a regional, if not national, market. As a result, to understand the impact of pensions and crowding out, policy makers must also appreciate the underlying trends and demands affecting Illinois universities and community colleges.
- Universities suffer from a domino effect of forces. First, a mixed Illinois recovery. Second, challenges in Illinois employment growth. Third, muted population growth. Fourth, a stagnant pool of candidates for students. Fifth, general reductions in student populations. Sixth, new competition from online learning. (Yes, really - online learning.)
- As a result of the pension crowding out, combined with longer-term higher education trends, universities and community colleges are restructuring their finances and operations. For example, schools are leaning on students more than ever for greater tuition and fees. Second, staffing is being revised to include fewer tenure-tracked professors and more part-time or short-term teaching staff.
- **RESULT: Negative feedback loop.** Crushing pensions result in fewer university staff members. Fewer staff means lower employee contributions to university pension fund. Smaller fund means smaller investment returns. Smaller investment returns means need for more state funding. And so on and so on...

See Graphs on Higher Ed and Pension Trends

Cascading Impact of Economics, Employment, Demographics, University Enrollment and Pensions



First Domino - Economics

RECESSION REBOUND

CHANGES IN CHICAGO-AREA EMPLOYMENT SINCE THE GREAT RECESSION

	March 2010	March 2017	Change	Percent change
Total metro	3.1 million	3.6 million	422,928	13.5%
Cook County	2.0 million	2.3 million	242,855	12.1%
Chicago	1.0 million	1.2 million	168,304	16.6%
Downtown Chicago	479,199	593,665	114,466	23.9%
Cook without Chicago	992,981	1.1 million	74,551	7.5%
DuPage County	484,910	565,134	80,224	16.5%
Kane County	155,665	175,520	19,855	12.8%
Lake County	257,955	284,927	26,972	10.5%
McHenry County	74,895	80,857	5,962	8.0%
Will County	155,494	202,554	47,060	30.3%

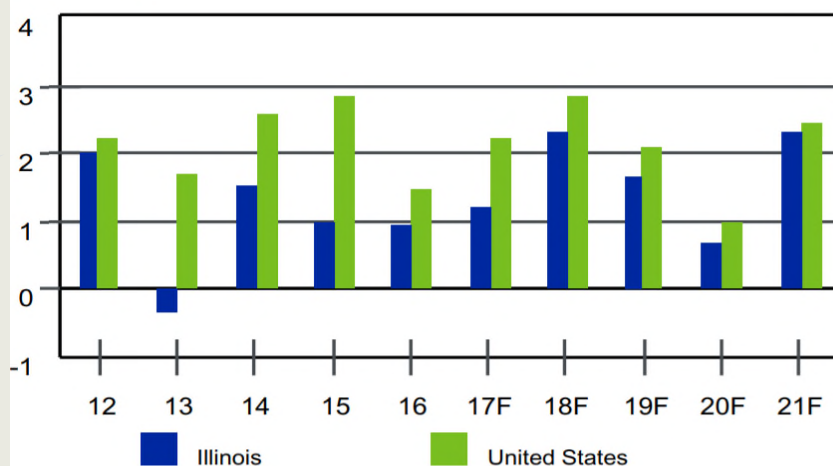
Note: Figures are for unemployment-insurance, private-sector jobs.

Source: Illinois Department of Employment Security's "Where Workers Work" publication.

Uneven Illinois growth.

Long-Term Outlook: Gross Product

% change



Sources: BEA, Moody's Analytics

Illinois growth lagging other states.

Illinois Real GDP vs the Midwest and the U.S.

(%change 2007 to 2016)

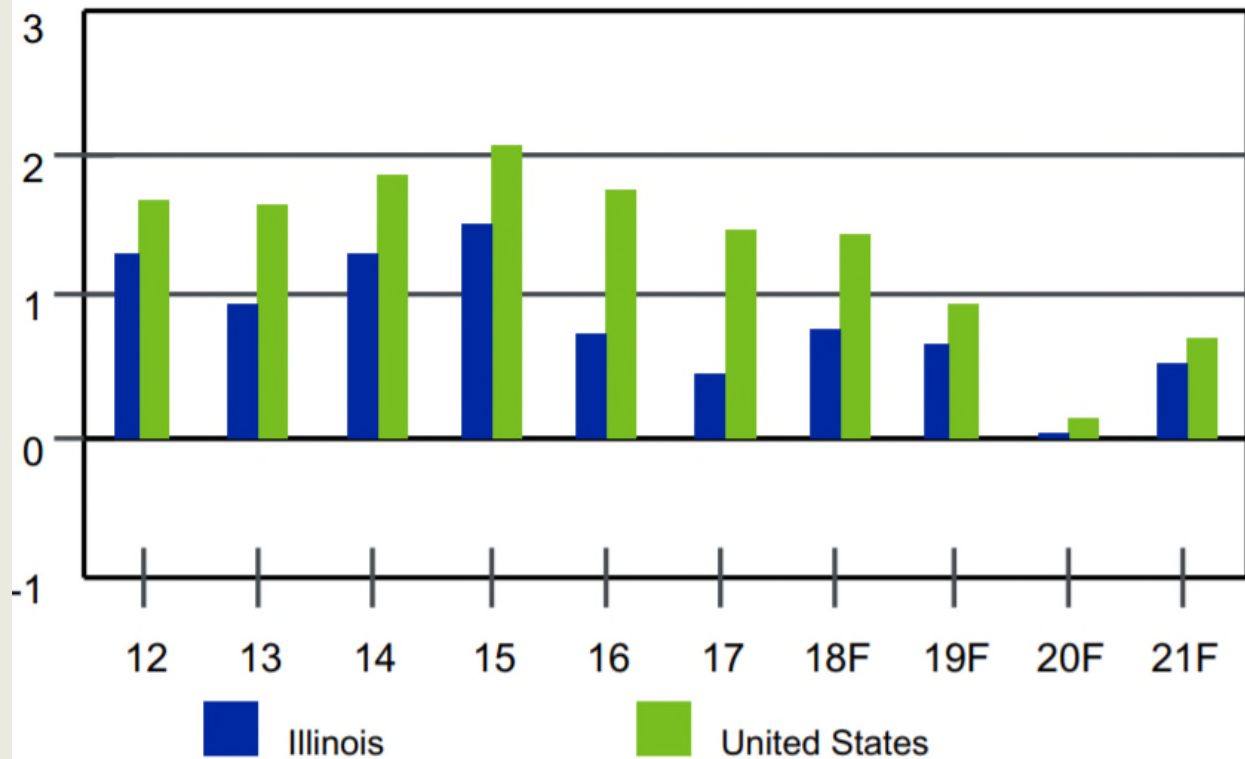
Industry	Illinois	Midwest (-Illinois)	U.S.
All industries	3.8	9.1	10.7
--manufacturing	-1.1	-0.4	-0.3
--wholesale trade	4.5	6.1	3.7
--retail trade	1.7	14.0	11.5
--transportation and warehousing	-1.1	2.1	5.4
--finance, insurance, real estate	7.7	13.9	13.6
--professional and business services	11.6	22.8	21.7
--education, healthcare	13.6	15.4	21.5
--government	-5.6	-1.5	2.4

Uneven growth and declines – reflect a mixed economic recovery.

Second Domino - Employment

Long-Term Outlook: Employment

% change

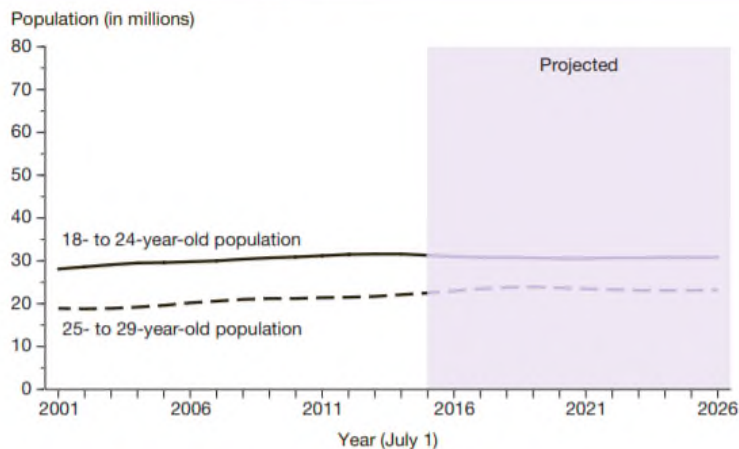


Sources: BLS, Moody's Analytics

Illinois employment growth lags other states and impedes population growth.

Third Domino - Population

Figure 15. Actual and projected population numbers for 18- to 24-year-olds and 25- to 29-year-olds: 2001 through 2026



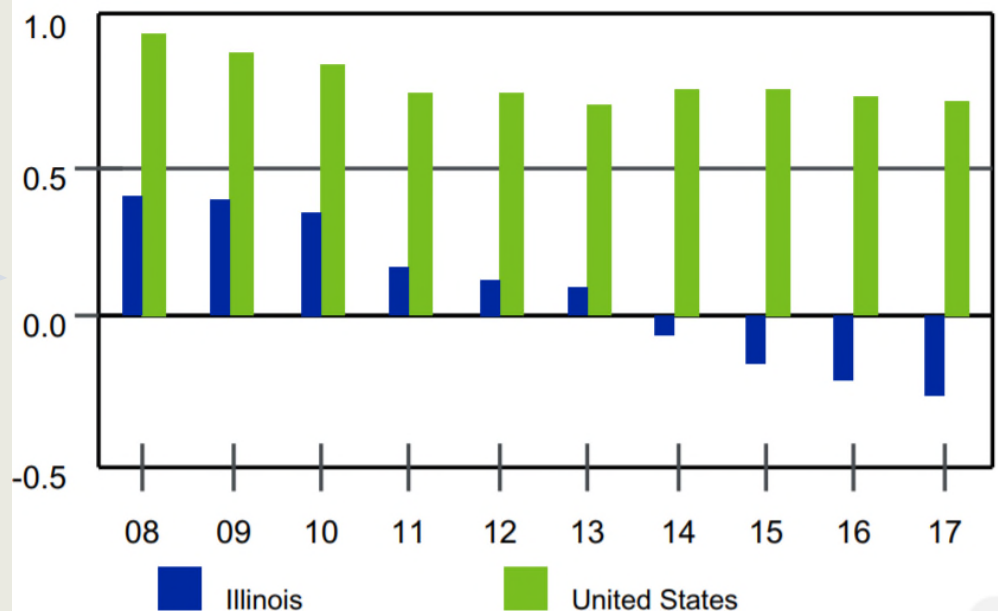
NOTE: Some data have been revised from previously published figures. Projections are from the U.S. Census Bureau's 2014 National Population Projections, ratio-adjusted to line up with the most recent historical estimate. SOURCE: U.S. Department of Commerce, Census Bureau, Population Estimates, retrieved August 4, 2015, from <https://www2.census.gov/programs-surveys/popest/datasets/2010-2015/>; and Population Projections, retrieved August 4, 2015, from <https://www.census.gov/programs-surveys/popproj.html>; and IHS Global Inc., "U.S. Quarterly Macroeconomic Model, November 2016 Short-Term Baseline Projections." (This table was prepared April 2017.)

Population growth of potential students projected to be flat.

As with the economy, population growth in Illinois lagging other states.

Population

% change



Sources: Census Bureau, Moody's Analytics

Fourth Domino - Enrollment

Nationally, universities facing a flat or declining market.

Figure 1: Percent Change from Previous Year, Enrollment by Sector (Title IV, Degree-Granting Institutions)

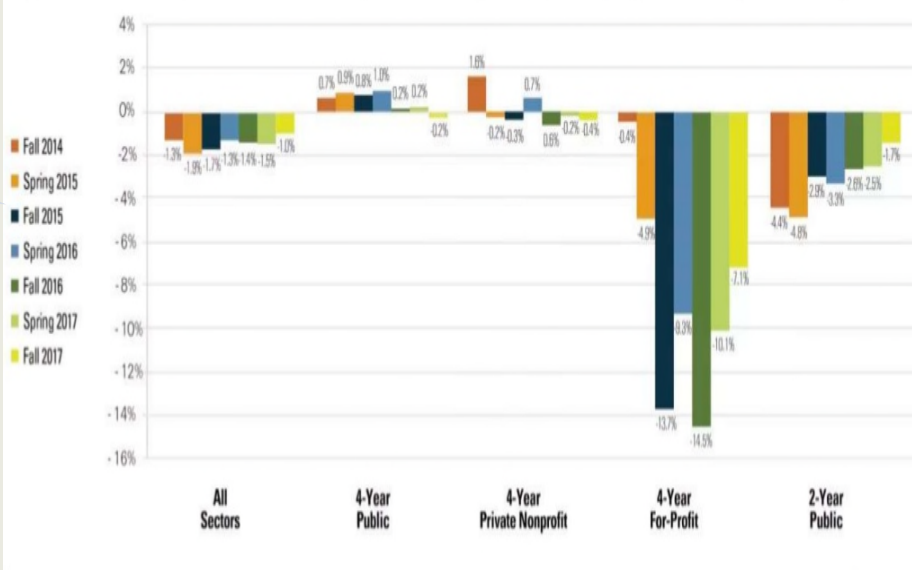


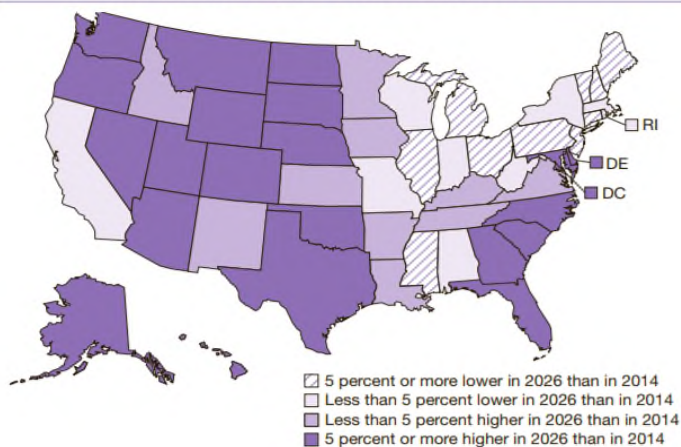
Table 1: Combined Undergraduate and Graduate Enrollment (based on FTE)

	Combined Enrollment				Change in Enrollment in 2018	
	Fall 2015	Fall 2016	Fall 2017	Fall 2018	From 2015	From 2017
CSU	3,618	2,734	2,429	2,267	-37%	-7%
EIU	7,282	6,234	5,339	5,892	-19%	10%
GSU	3,920	3,886	3,554	3,320	-15%	-7%
ISU	18,183	18,533	18,308	18,115	0%	-1%
NEIU	6,366	6,101	5,777	5,201	-18%	-10%
NIU	16,502	15,712	14,982	14,352	-13%	-4%
SIUC	14,995	13,880	12,463	10,851	-28%	-13%
SIUE	11,985	11,870	11,523	10,942	-9%	-5%
UIC	28,687	28,935	30,418	31,620	10%	4%
UIS	3,921	3,985	3,526	3,211	-18%	-9%
UIUC	47,644	48,765	49,634	50,755	7%	2%
WIU	9,561	8,934	8,134	7,260	-24%	-11%
Total	172,664	169,569	166,087	163,786	-5%	-1%

Illinois confronted with extreme variances in rates of growth and decline. Are some campuses cannibalizing from others?

Projections of Enrollment Into the Next Decade

Figure 3. Projected percentage change in enrollment in public elementary and secondary schools, by state: Fall 2014 and fall 2026



University feeder enrollment – public elementary and secondary schools.

Overall future growth challenging nationally. More challenging in Illinois. Most challenging for “directional” schools.

Figure 16. Actual and projected numbers for total enrollment in all degree-granting postsecondary institutions: Fall 2001 through fall 2026

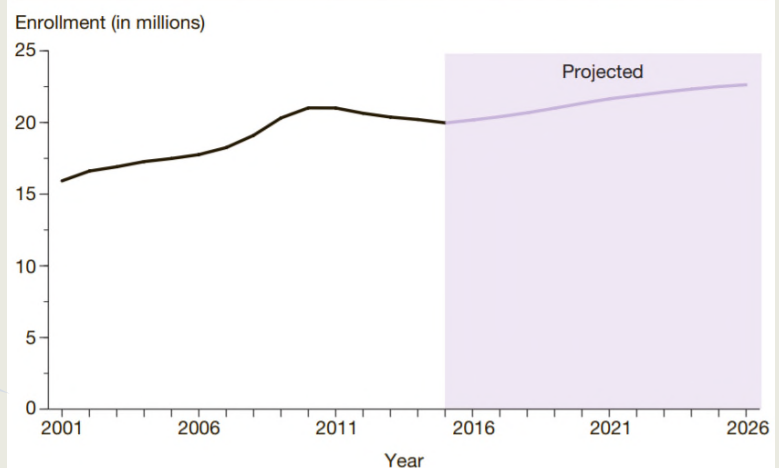
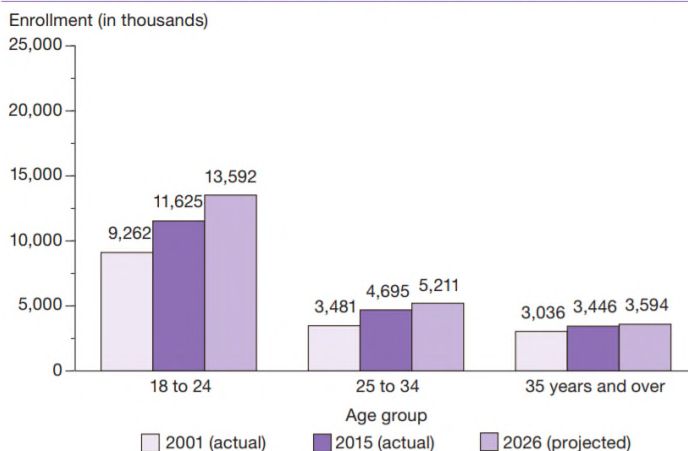


Figure 17. Actual and projected numbers for total enrollment in all degree-granting postsecondary institutions, by age group: Fall 2001, fall 2015, and fall 2026



Same story as above, by age group.

Insult to Injury – Online Education – Various Measures of Status and Trends of Online Education

Online education

The number of students taking at least one online class has grown so much that nearly one-third of students enrolled in degree-granting postsecondary institutions take an online class.

	STUDENTS TAKING AT LEAST ONE ONLINE COURSE	ANNUAL GROWTH RATE OF ONLINE ENROLLMENT	ONLINE ENROLLMENT PERCENT OF TOTAL ENROLLMENT
Fall 2002	1,602,970	N/A	9.6%
Fall 2003	1,971,397	23.0%	11.7%
Fall 2004	2,329,783	18.2%	13.5%
Fall 2005	3,180,050	36.5%	18.2%
Fall 2006	3,488,381	9.7%	19.6%
Fall 2007	3,938,111	12.9%	21.6%
Fall 2008	4,606,353	16.9%	24.1%
Fall 2009	5,579,022	21.1%	28.6%
Fall 2010	6,142,280	10.1%	31.3%

Source: "Going the Distance: Online Education in the United States, 2011" by the Babson Survey Research Group, Babson College

Post-Gazette

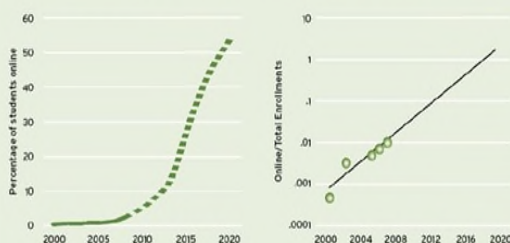
Online learning is rapidly growing

Sunny Skies Ahead (Figure 3)

Current growth trends indicate that 50 percent of all courses in grades 9–12 will be taken online by 2019.

Current growth trends indicate that 50 percent of all courses in grades 9–12 will be taken online by 2019.

Estimated and projected online enrollments of U.S. public school students in grades 9–12



NOTE: Value of 1 on the logarithmic graph indicates 50 percent market share (50%/50% = 1).

SOURCES: National Center for Education Statistics; Babson Survey Research Group; North America Council for Online Learning



Enrollments up from 45,000 in 2000 to 1,000,000 in 2007

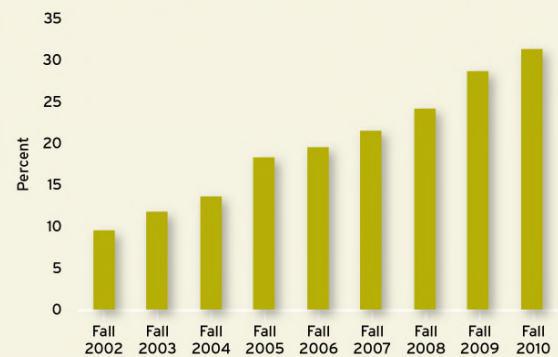
Source: Christensen & Horn (2008). How Do We Transform Our Schools?



Online Takes Hold (Figure 1)

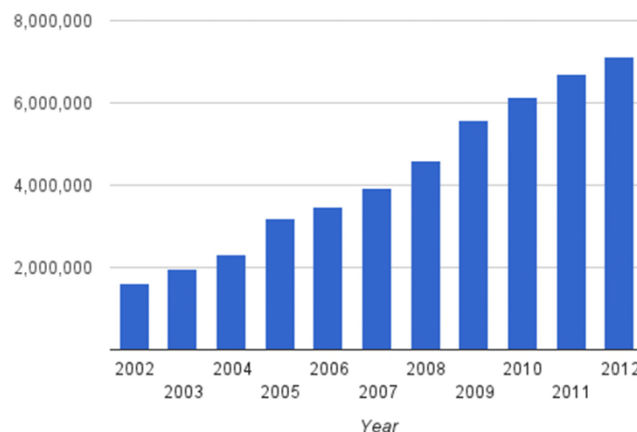
The proportion of higher education students taking at least one online course has increased steadily over the last decade.

Online Enrollment as a Percent of Total Enrollment



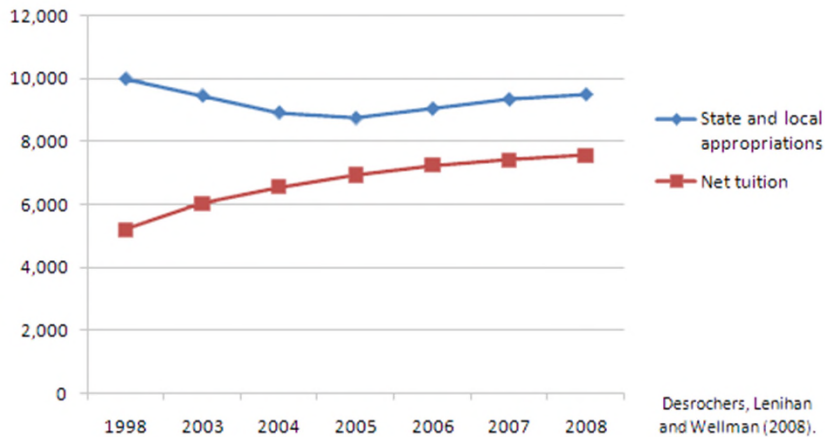
SOURCE: "Going the Distance: Online Education in the United States, 2011," Babson Survey Research Group

College Students Taking at Least One Online Course



Impact of Trends on University Revenue and Structure – Lower Pension Contributions!

**Public research institutions
(Average revenues per student)**



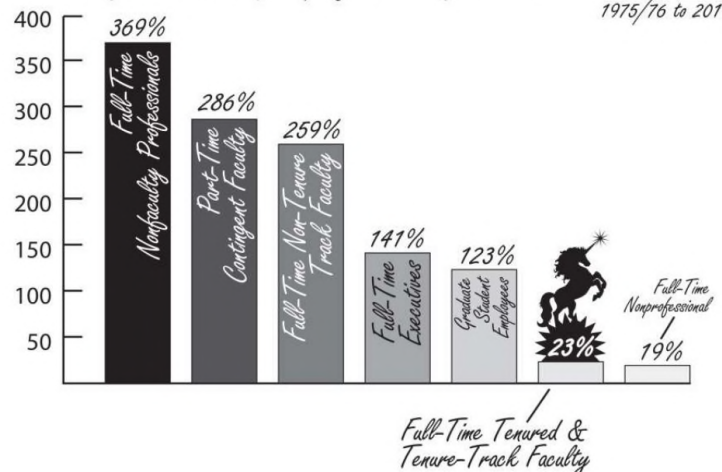
Tight supply of students, together with increasing online competition, results in flatter growth in tuition.

Probably worse for Illinois, and even worse for State universities other than Champaign and Chicago.

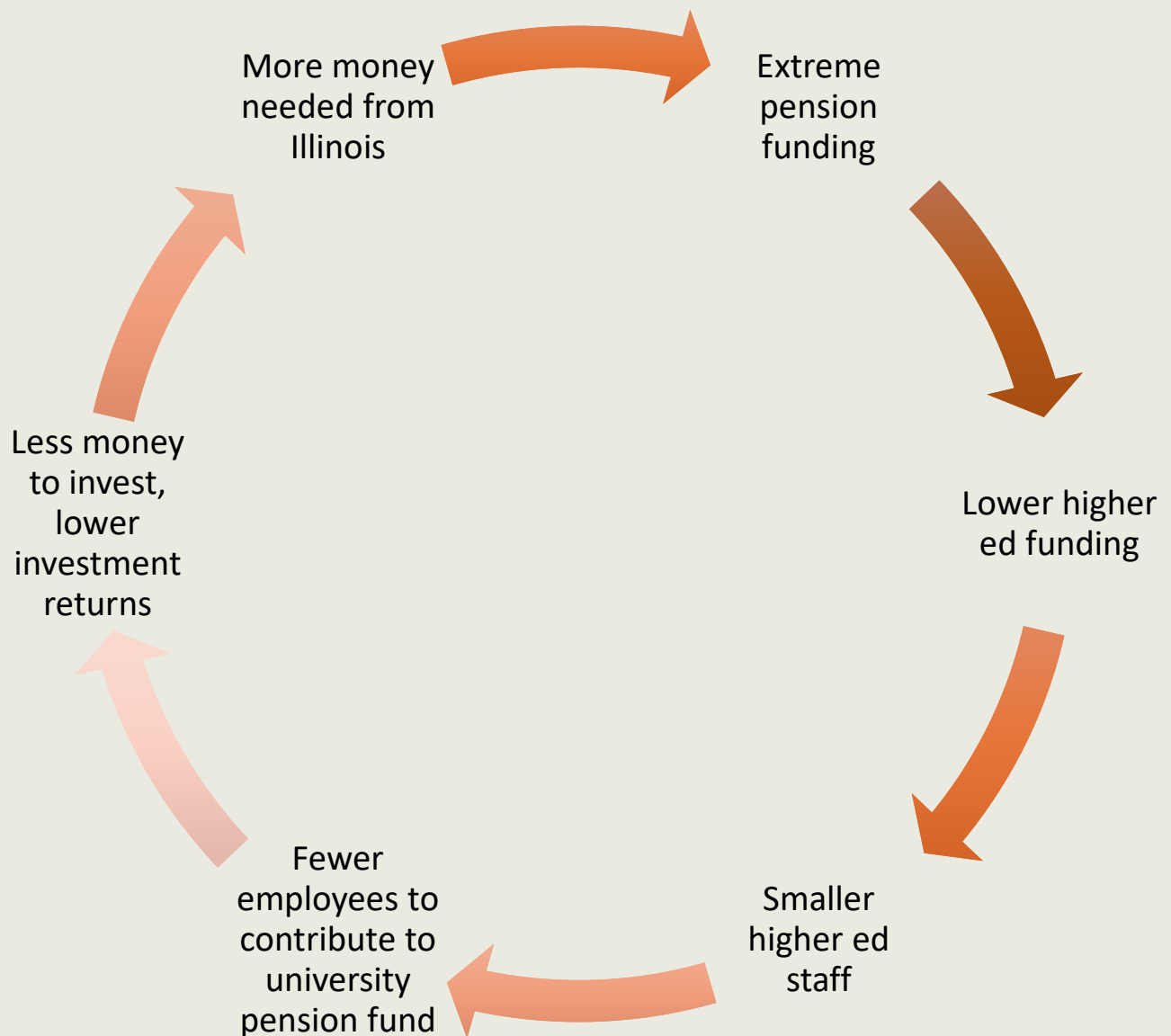
To accommodate changes, universities may restructure staff – more part-timers, fewer tenure track, more short-term junior faculty members.

RESULT: FEWER EMPLOYEES TO CONTRIBUTE TO ILLINOIS UNIVERSITY PENSIONS

Percentage Increase of Employees in Higher Education Institutions 1975/76 to 2011



The Negative Feedback Loop



Pension Cheat Sheet Series

Pension360 has, or will receive from its board of authors, cheat sheets on the following topics:

State Comparison of Constitutional Pension Protections

List of State Pension Reforms Nationally

Summary of Illinois Constitutional and Legal Arguments Protecting Pensions

Risk-Mitigating Investment Strategies for Pensions Before the Next Big Crash

Personal Pensions Perspectives – Term of Employee Pensions - Illinois

Personal Pensions Perspectives – Terms of Employee Pensions - California

Personal Pensions Perspectives – Terms of Employee Pensions - New Jersey

Illinois Pension Crowding Out - The Numbers

Who Get's What - Graphs of Annual Pension Payments

Pension Population Politics - When Will Tier II Members Exceed Tier I Members

Pension Asset Transfers

Pension Buyouts - Worth the Risk and Trouble?

Pension Particulars - Ways to Raise or Lower Funding Without Spending a Dollar

Illinois Pension Dashboards

Chicago and Cook County Pension Dashboards

Pension Funding – California – Tax Base and Cash Flow

Pension Funding – Illinois – Tax Base and Cash Flow