

# KEY TAKEAWAYS

Price discrimination in the form of tuition discounts accounts for an ever-increasing share of tuition at public colleges and universities.

The average discount rate for four-year public research institutions was 26.03 percent in the 2002-03 school year; by 2011-12 the average discount rate grew to 32.89 percent.

State policymakers – governors, legislators and board members – are key to promoting healthy fiscal policies and managing rising costs.

Research indicates that tuition discounting can increase net tuition revenue to colleges but also lead to higher costs for students and, for students who do not receive discounts, higher costs and student loan debt.

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# EDUCATION REFORM

## A HIDDEN CAUSE OF RISING TUITION

### Tuition Discounting in Public Colleges and Universities

Why does tuition increase faster than inflation? And why does tuition continue to increase even when states increase their investments in public colleges and universities? These questions have perplexed policymakers and higher education consumers alike. Though tuition setting can be very complicated, one of the drivers for rising costs is price discrimination in the form of tuition discounts.

In 2008-09, the average published tuition and fee rate for four-year public institutions was \$6,811, but the average net revenue per student was only \$5,564 – a difference of \$1,247, or more than 18 percent.<sup>1</sup> This difference is referred to as a tuition discount. Tuition discounting is the practice of awarding targeted financial incentives to students, usually in the form of merit awards or need-based grants. Importantly, a tuition discount is not real money; it is an intentional markdown or revenue foregone. Colleges have a variety of motivations for discounting tuition, such as increasing the college's academic profile, enticing wealthy full-pay students to enroll, or increasing the diversity of the student population. Though the practice has its benefits, if not managed well it can lead to large increases in costs for the majority of students and dissuade low-income students from enrolling at all.<sup>2</sup>

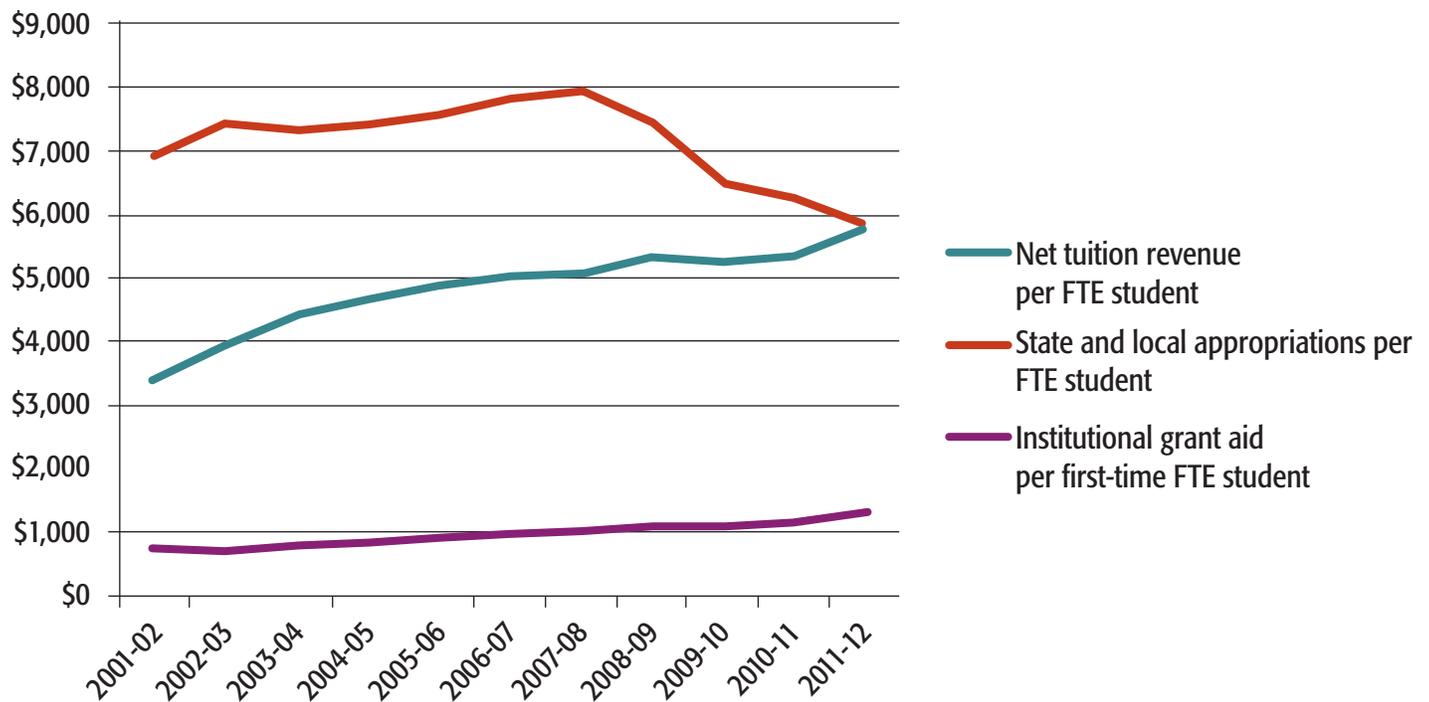
In this issue of *The Progress of Education Reform*, we examine tuition discounting, with specific attention focused on the impact state-legislated tuition caps can have on the practice.



## BACKGROUND

Financing higher education systems is a growing challenge for states throughout the nation. Traditionally, the cost of higher education has been met with contributions from students, families, state governments, the federal government and the institution.<sup>3</sup> However, this model underwent significant change, especially in the context of the economic recession. As state and local investments in higher education have been reduced and enrollments have grown, the difference in net tuition revenue (student and family share), state appropriations and institutional aid per student has shifted. Figure 1 illustrates the expenditures in each of these areas since 2001.

Figure 1: Net tuition revenue, appropriations & institutional aid, 2001-12, in constant 2012 dollars

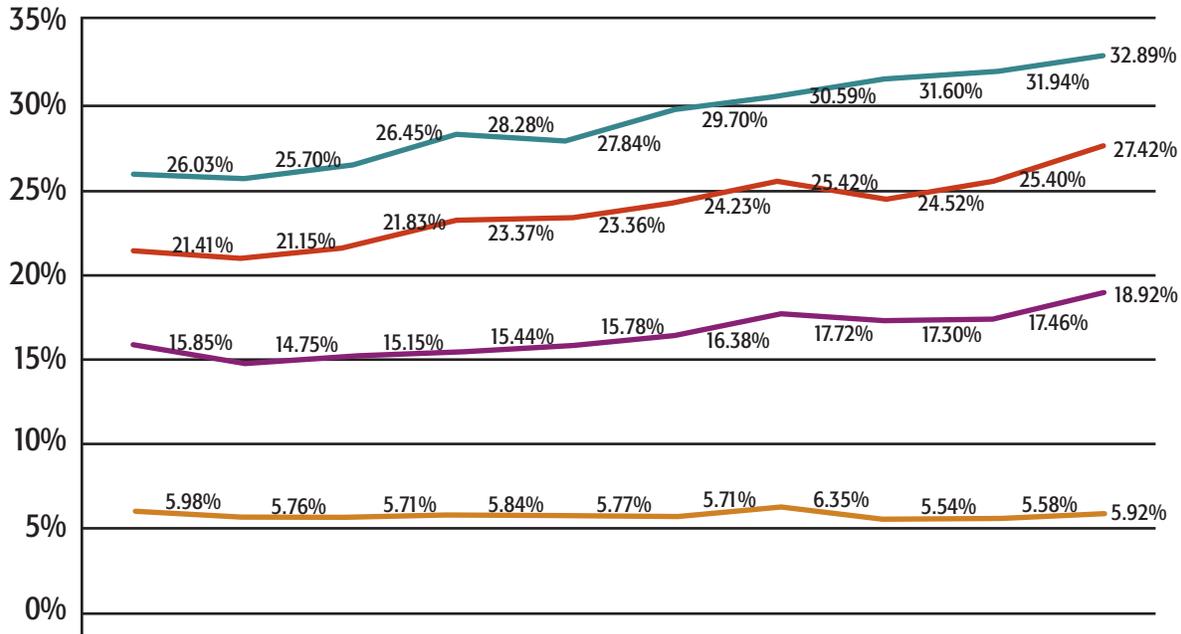


Source: National Center for Higher Education Management Systems (NCHEMS)

It is argued that recent losses in state appropriations have resulted in increased tuition costs for students. While evidence supports the presence of this relationship, it does not always explain why college costs are increasing faster than inflation. What seems to be clear is that a \$1 increase in state funding to institutions does not always equal a \$1 increase in published tuition and fee rates, due in part to tuition discounting practices.

Institutions use tuition discounting to target aid or leverage – to borrow a term from the field – students to grow or maintain enrollments. This is accomplished by providing targeted financial incentives, typically scholarships or institutional grants, to particular students based on their academic profile or other attributes. Following National Association of College and University Business Officers (NACUBO) standards, we calculate the tuition discount rate as the ratio of the average institutional aid per first-time student and the published tuition and required fee rate. Figure 2 on the following page shows how discount rates have changed by sector over the past 15 years.

Figure 2: Tuition discount rates by sector, 2003-12, calculated in constant 2012 dollars

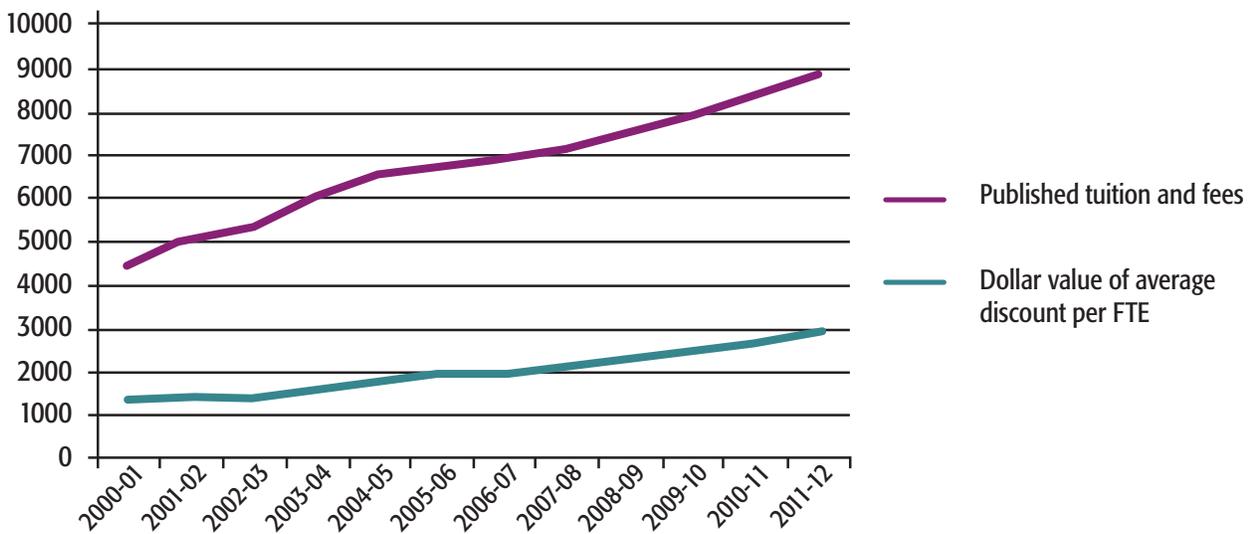


	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Public 2-Year	5.98%	5.76%	5.71%	5.84%	5.77%	5.71%	6.35%	5.54%	5.58%	5.92%
Public Research	26.03%	25.70%	26.45%	28.28%	27.84%	29.70%	30.59%	31.60%	31.94%	32.89%
Public Other 4-Year	15.85%	14.75%	15.15%	15.44%	15.78%	16.38%	17.72%	17.30%	17.46%	18.92%
Total U.S.	21.41%	21.15%	21.83%	23.37%	23.36%	24.23%	25.42%	24.52%	25.40%	27.42%

Source: Author's calculations from data provided by NCHEMS

While discount rates have been creeping upwards, tuition costs have also increased anywhere from 1 percent to 10 percent from 2000 to 2012. This has been especially salient in public research institutions, where published tuition and discount rates have been climbing faster than any other sector. Figure 3 shows that tuition and the dollar value of discounts have been rapidly increasing in these schools.

Figure 3: Published tuition and fees and discounts, all public research institutions, in 2012 dollars

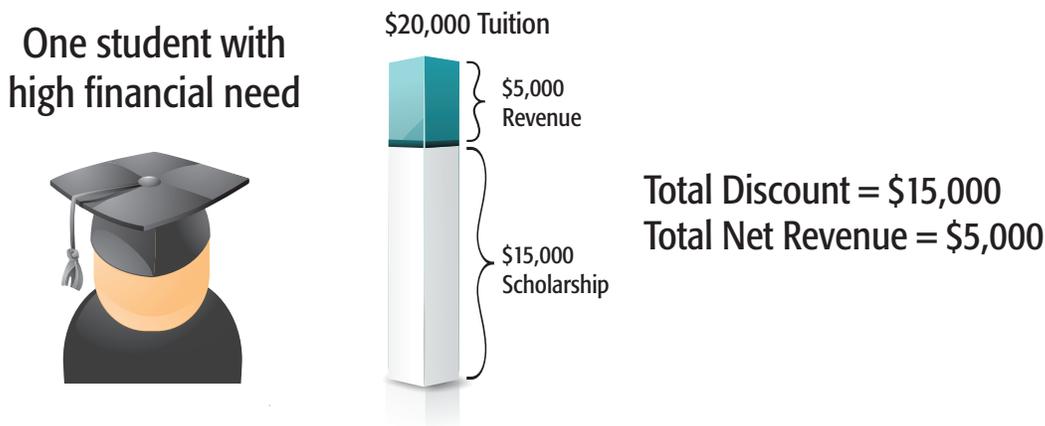


Source: Author's calculations from data provided by NCHEMS

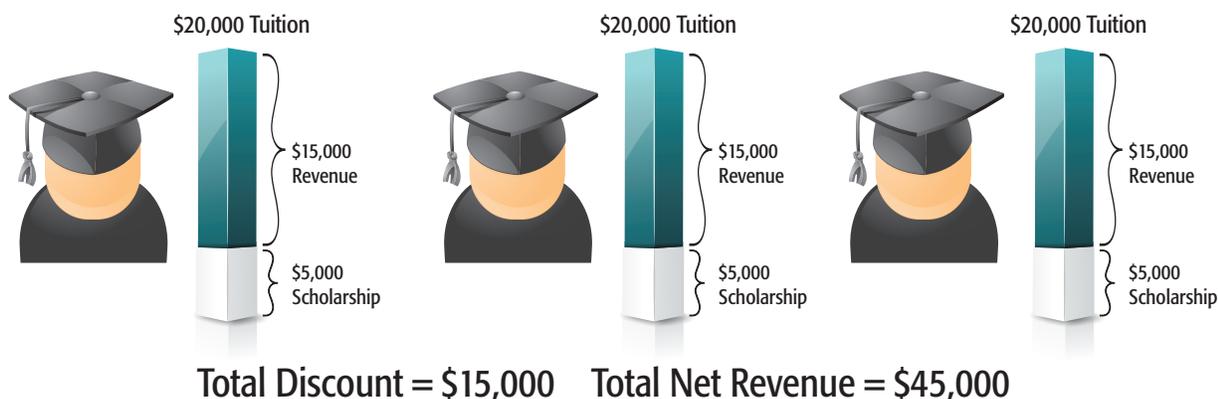
Tuition discounting is a form of price discrimination. Price discrimination occurs when producers (in this case, colleges and universities) charge different prices to different consumers (students). This practice is traditionally intended to “provide incentives to those desirable students who are able to pay ... but unwilling to pay the sticker price to attend the institution.”<sup>4</sup> It is also used to attract larger numbers of higher paying non-resident – domestic and international – and gifted academic students who can raise the academic profile and financial health of their college. Though discounting can help institutions achieve a variety of important goals, its long-term sustainability is unknown.

Ever-escalating tuition rates are a concern to all. However, due to prevalence of tuition discounting, fewer and fewer students actually pay the published tuition rate. This is because institutions that employ tuition discounting must inflate their published tuition rates above the level actually needed to operate the college in order to build in revenue margins sufficient to accommodate variable pricing programs. For example, if a hypothetical college needs \$7,500 in average net tuition revenue to operate its campus, it may elect to publish a tuition rate of \$10,000 – building in a \$2,500 average discount – that will appear to the recipient as a scholarship or grant. The illustration below shows how institutions can manipulate discounts to generate different amounts of tuition revenue from the same published cost. In this example, a student with high financial need generates a fraction of the revenue as compared to students with less need.

## Tuition Discounting in Practice



### Three students with little or no financial need



Source: Adapted from NPR interview, <http://www.npr.org/2014/04/24/306167197/when-money-trumps-need-in-college-admissions>.

Importantly, the *cost* of tuition discounting can be difficult to interpret. Common accounting principles used in higher education imply that discounts are *expenditures*, that they are an actual cost to the institution. This is how discounts appear in institutional financial reports and most public finance statements. Economists offer an alternative definition, arguing that discounts are actually revenue foregone, as institutions never intended to collect the revenue in the first place. Rather, they simply chose to charge a lower rate to some students than others. Discounts are not costs but rather a strategy to achieve certain revenue levels. To economists, the more important indicator is not necessarily published tuition but instead net tuition revenue per student.

## IMPLICATIONS

While tuition discounting can be an effective institutional strategy for maintaining enrollments or increasing net tuition revenue during unpredictable fiscal periods, policymakers and practitioners are beginning to ask questions. Because tuition discounting requires institutions to inflate the costs of college above the actual amount needed for basic operations, the strategy may actually diminish access for underserved students. This is because low-income and minority students are particularly sensitive to changes in published prices.<sup>5</sup>

College trustees and policymakers may question the sustainability of operating budgets based on sizeable tuition discounting practices. It is legitimate to ask: How long can colleges continue to push tuition costs faster than inflation in order to build in competitive discounts? Answers to this question are beginning to emerge. Calling its previous high tuition/high aid tuition discounting strategy a "shell game," Concordia University, Saint Paul (Minnesota) officials recently decided to end the campus' discounting strategy and, consequently, cut its published tuition by more than \$10,000.<sup>6</sup> Other private colleges – including Ashland University,<sup>7</sup> Converse College<sup>8,9</sup> and the University of Charleston<sup>10</sup> – have followed suit.

## STATE POLICY EXAMPLES

State policymakers play an important role in debating and managing college costs. One strategy policymakers have pursued is instituting strict tuition caps. Though imprecise, tuition price caps can slow the expansion of price discrimination policies. By controlling the sticker price of tuition, policymakers can limit the degree to which campuses can discount it.

### *New York*

In 2011, Gov. Andrew Cuomo signed **Senate Bill 5855**.<sup>11</sup> Dubbed the NY-SUNY 2020 Challenge Grant Program, this legislation limited year-over-year resident tuition increases in the CUNY and SUNY systems to \$300 per year between 2011-12 and 2015-16. The legislation also required that nonresident tuition increases could not exceed 10 percent over the prior year. At the same time, SB 5855 made the promise that state appropriations to the SUNY and CUNY systems would not fall below 2011-12 levels. Finally, SB 5855 required the SUNY and CUNY boards to develop five-year Master Tuition Plans, which had to be delivered to the legislature in late 2011.

According to legislative testimony offered by Nancy Zimpher, chancellor of the SUNY system, the NY-SUNY 2020 Challenge Grant program has led to unprecedented price predictability for students and families.<sup>12</sup> The framework provided by the regulated tuition increases, in conjunction with the state's maintenance of effort component, laid the groundwork for the five-year Master Tuition Plans to be drafted.

### *Colorado*

In light of declining state support for higher education, the Colorado legislature granted increased tuition-setting authority to state institutions in 2010 by way of **Senate Bill 10-003**. This legislation prohibited institutions from increasing tuition more than 9 percent without submitting a financial accountability plan to the Colorado Commission on Higher Education, the state's official statewide coordinating board, for approval. The accountability plan had to detail how institutions would preserve access for low-income students in light of a large tuition increase. Several institutions submitted financial accountability plans that included large tuition discounts for low- and middle-income students.

The result was dramatic tuition increases at many of the state's public colleges and universities. In 2014, Gov. John Hickenlooper and the Colorado General Assembly approached the problem in a new way. Under **Senate Bill 14-001**, the College Affordability Act, state support to higher education increased by \$100 million but capped tuition increases at 6 percent. This policy resembles New York's practice of combining increases in state support with known tuition caps. The effect of this change in policy is not yet known, but, according to the Colorado Commission on Higher Education, all public colleges have agreed to maintain tuition increases at or below 6 percent in 2014-15.

## Virginia

In Virginia, tuition-setting authority rests with campus governing boards; however, the legislature has intervened at times in order to limit tuition increases. In 1999-2000, tuition was reduced by the General Assembly. Additionally, the General Assembly vacated the governing boards' authority to set tuition through 2002. When tuition setting authority returned to college governing boards, institutions increased tuition in the spring semester of 2013.<sup>13</sup> The increases also came amid reductions in general fund appropriations to higher education. In 2003-04, tuition in four-year public institutions increased 17.3 percent compared to the 2002-03 school year.

More recently, the Virginia legislature employed a different approach to controlling tuition costs. A fund was established in 2007 rewarding institutions that were able to keep tuition increases at or below 6 percent. Increases of more than 6 percent were allowed provided the additional increases were directed toward undergraduate financial aid, an example of tuition discounting. The 2008 legislature continued the same practice, more than doubling the size of the fund and reducing the allowable increase to 4 percent. Due to fiscal constraints, this practice has been discontinued, and a cap on tuition increases is currently not in place through the legislature. From 2008-09 to 2011-12, tuition increased 19.8 percent.<sup>14</sup>

## Iowa

Iowa uses a base-plus funding model for higher education, where each year's appropriation is based on the prior year's allocations, including any increases or cuts based on changes over the past year.<sup>15</sup>

In response to a platform endorsed by the governor, the Iowa Board of Regents froze tuition for the three public four-year institutions in the state for the past two years. For the 2014-15 fiscal year, the freeze was offered in exchange for a 4 percent increase in state appropriations, granted through [H.F. 2437](#).

## CONCLUSION

Rising tuition is a topic of interest for policymakers and the public alike. Though variability in state appropriations plays an important role in explaining changes in college costs, it is not the only cause – tuition discounting also plays an important role in driving up college costs. Though colleges may have legitimate and reasonable reasons for engaging in discounting – such as raising the institution's academic profile, encouraging the enrollment of diverse students or increasing net tuition revenue during unstable fiscal periods – policymakers need to be aware of this practice and its effects on college costs and accessibility.

Several states have attempted to arbitrarily cap tuition rates. This practice can slow the use of discounts, but the use of caps alone is not a permanent solution to the policy. A leading practice appears to be the combining of predictable increases in state appropriations with tuition rate limits. This type of legislative – *quid pro quo* in the form of providing additional state support in return for restrained tuition rate increases – may be an effective policy tool for managing college prices.

## RESEARCH & RESOURCES

According to extensive analysis completed by Nicholas Hillman in 2012, unfunded aid can be used to leverage revenue but only up to a certain point.<sup>16</sup> Using unfunded aid increases net revenue for all of the 174 schools in the analysis; however, those returns diminish after a discount rate of 13 percent or more. Given these results, schools that do not discount may be at a “competitive disadvantage” in the current higher education marketplace. At the same time, excessive discounting may adversely impact an institution's net tuition revenue.

Another study looked at the impact of modern practices in public and private colleges in the U.S. The report, [Separate and Unequal](#), found that hyper-competition among U.S. colleges and universities – fueled by tuition discounting and competitive pricing strategies – has actually diminished diversity in selective colleges and universities.<sup>17</sup> Among academically well-prepared students, African-American and Latino students were less likely to enroll in selective colleges. These students from the most price-sensitive populations more often enrolled in low-cost open-enrollment colleges. These students were retained and graduated at much lower levels than their cohorts who attended more selective institutions.

## ENDNOTES

- 1 Sandy Baum, Lucie Lapovsky and Jennifer Ma, *Tuition Discounting: Institutional Aid Patterns at Public and Private Colleges and Universities, 2000-01 to 2008-09* (New York, NY: College Board, September 2010) <https://trends.collegeboard.org/sites/default/files/trends-2010-tuition-discounting-institutional-aid-report.pdf>.
- 2 Anthony P. Carnevale & Jeff Strohl, *Separate and Unequal: How Higher Education Reinforces the Intergenerational Reproduction of White Racial Privilege* (Georgetown Public Policy Institute, 2013) <http://cew.georgetown.edu/separateandunequal>; Donald E. Heller, "Student Price Response in Higher Education: An Update to Leslie and Brinkman," *The Journal of Higher Education* Vol. 68, No. 6 (1997): 624.
- 3 D. Bruce Johnstone, "Higher Educational Accessibility and Financial Viability: The Role of Student Loans" (paper presented at the World Report on Higher Education: The Financing of Universities, Barcelona, Spain, May 24-25 and November 28-30, 2005) [http://gse.buffalo.edu/org/inthigheredfinance/files/publications/student\\_loans/\(2005\)\\_higher\\_education\\_accessibility\\_and\\_financial\\_viability\\_the\\_role\\_of\\_student\\_loans.pdf](http://gse.buffalo.edu/org/inthigheredfinance/files/publications/student_loans/(2005)_higher_education_accessibility_and_financial_viability_the_role_of_student_loans.pdf).
- 4 David W. Breneman, James L. Doti and Lucie Lapovsky, "Financing Private Colleges and Universities: The Role of Tuition Discounting," *The Finance of Higher Education: Theory, Research, Policy, and Practice* (Agathon Press, 2001).
- 5 Ibid Heller, p 624
- 6 Ellen Berman, "Tuition Disruption," *University Business* (November 2013): 23-26.
- 7 Karen Farkas, "Ashland University will reduce tuition \$10,000 next year," last modified August 27, 2013, [http://www.cleveland.com/metro/index.ssf/2013/08/ashland\\_university\\_will\\_reduce.html](http://www.cleveland.com/metro/index.ssf/2013/08/ashland_university_will_reduce.html).
- 8 Converse College website, *Tuition Reset Fact Sheet*, accessed August 20, 2014, <http://www.converse.edu/admission/undergraduate-admission/tuition-and-fees/tuition-reset-fact-sheet>.
- 9 Ibid Berman, p 23
- 10 Blake Ellis, "University of Charleston: How we cut tuition by 22%," *CNN* online article, last modified February 7, 2012, [http://money.cnn.com/2012/02/07/pf/college/university\\_charleston\\_tuition/](http://money.cnn.com/2012/02/07/pf/college/university_charleston_tuition/); Brad Tuttle, "One College Slashes Tuition by 22%, Promises No More Silly Financial-Aid Games," *Time* online article, last modified February 7, 2012, <http://business.time.com/2012/02/07/one-college-slashes-tuition-by-22-promises-no-more-silly-financial-aid-games/>.
- 11 Press release, *Governor Cuomo signs NY2020 Legislation*, August 9, 2011, <https://www.governor.ny.gov/press/08082011NYSUNY2020Legislation>.
- 12 Nancy Zimpher, "2013 NY SUNY 2020 Testimony," accessed August 20, 2014, <https://www.suny.edu/govtrelations/state/testimony/2013-ny-suny-2020-testimony>.
- 13 State Council of Higher Education for Virginia, *2013-2014 Tuition and Fee Report*, July 2013, <http://www.schev.edu/Reportstats/TuitionFees/2013-14TFReport.pdf>.
- 14 Author's calculations from NCHEMS data
- 15 SRI International, *States' Methods of Funding Higher Education*, last modified August 21, 2012, [http://www.sri.com/sites/default/files/brochures/revise-sri\\_report\\_states\\_methods\\_of\\_funding\\_higher\\_education.pdf](http://www.sri.com/sites/default/files/brochures/revise-sri_report_states_methods_of_funding_higher_education.pdf).
- 16 N.W. Hillman, "Tuition discounting for revenue management," *Research in Higher Education*, 53(3), 263-281. doi:10.1007/s11162-011-9233-4, 2012.
- 17 Ibid Carnevale & Strohl, p 9

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