Pulling Up the Higher-Ed Ladder

Myth and Reality in the Crisis of College Affordability

ROBERT HILTONSMITH
About Demos

Demos is a public policy organization working for an America where we all have an equal say in our democracy and an equal chance in our economy.

Our name means “the people.” It is the root word of democracy, and it reminds us that in America, the true source of our greatness is the diversity of our people. Our nation’s highest challenge is to create a democracy that truly empowers people of all backgrounds, so that we all have a say in setting the policies that shape opportunity and provide for our common future. To help America meet that challenge, Demos is working to reduce both political and economic inequality, deploying original research, advocacy, litigation, and strategic communications to create the America the people deserve.
INTRODUCTION

In today’s competitive economy, nothing is more important than getting a college education. Yet college tuition costs in the U.S. have been increasing at a breakneck pace, making college unaffordable for millions of Americans. In the last decade alone, the average tuition at public 4-year universities has risen by nearly $3,000.1 There is a broad consensus that out-of-control tuition is a serious problem for the nation, making it much more difficult for young people, particularly those from low-income families and communities of color, to complete a college degree.2 However, there is no such agreement on why tuition is increasing. Experts have blamed rising tuition on everything from administrative bloat,3 to increased availability of grants and loans,4 to campus construction booms.5 Demos and others, in contrast, have focused on declining state funding as the culprit,6 as we demonstrate in our Great Cost Shift series. Although academics7 and media8 alike have tried to put the question to rest, public confusion on this issue is one reason why effective solutions remain illusory in almost every state.

This brief attempts to pinpoint the cause(s) of spiraling tuition by taking a deep dive into public university revenue and spending data from the National Center for Education Statistics’ Delta Cost Project Database.9 In the brief, we split public 4-year universities into two categories: research institutions—schools that have a high level of research activity and award a significant number of doctorates—and master’s and bachelor’s universities—schools that primarily award master’s and/or bachelor’s degrees.10 Research institutions consistently enrolled about 60 percent of all undergraduates at public 4-year institutions in the decade covered by the brief, while master’s and bachelor’s universities accounted for the remaining 40 percent. We find that declining state appropriations for higher education is indeed the primary driver of rising tuition, responsible for 79 percent of tuition hikes at public research universities11 between 2001 and 201112 and 78 percent of tuition hikes at public master’s and
bachelor’s universities over the same decade. Increased spending on administration accounts for another 6 percent and 5 percent, respectively, at the two categories of institutions, and increased grant and loan aid has had a negligible effect, at most. Finally, the purported construction boom’s impact on tuition has been minimal as well, as we estimate spending on construction has accounted for 6 percent of tuition increases at both research and master’s/bachelor’s universities.
SPENDING AT PUBLIC UNIVERSITIES: A SNAPSHOT

Overall spending per student grew at a modest pace over the past decade: expenditures rose 8 percent and 1 percent, respectively, at research and master’s/bachelor’s universities between 2001 and 2011. Spending on “education and related expenses”—spending on the core educational mission of universities, including spending on instruction, student services, and a share of administrative and operations costs—climbed at an even slower pace, rising just 5 percent at research institutions and 4 percent at master’s/bachelor’s universities, as depicted in Figure 1. We focus on education and related spending in this brief because they are the expenses paid for by tuition revenue and state support. Other spending, including on auxiliary enterprises (including dormitories, dining services, and athletics) and federal grants and contracts, are primarily self-funded by revenue from their own independent activities and services.

As the figure shows, increased spending on instruction and student services accounted for the majority of the spending increase; administrative/support expenditures rose just $172 and $42 per student, respectively, at the two institutional categories.

Figure 1: Education and Related Spending Per Student, 2001-2011

Notably, these spending increases pale in comparison to tuition increases: net tuition revenue—total revenue from tuition and fees, net of institutional aid—at research institutions rose by $3,628 per student and by $2,463 per student at master’s and bachelor’s universities. These large tuition increases, coupled with slow spending growth, suggest that the cause(s) must be on the revenue side of the balance sheet, and that administrative “bloat” and student aid are at most minor contributors to tuition increases. However, before we can definitively label these oft-cited factors as myths, we need to dig a little deeper into each to see whether the spending trends in smaller expense categories match the observed modest increases in spending overall.
THE CAUSE(S) OF RISING TUITION: MYTH AND REALITY

Administrative “Bloat”

When experts speak of administrative bloat, they are generally referring to excessive spending beyond what is necessary to support the core academic functions of a university. To understand whether the past decade’s increases in education and related spending (outside of spending on instruction) are justified or excessive, we need to dig deeper: did universities add positions or spend more—in wages or benefits—on existing employees? If hiring increased, were the added positions necessary to support the school’s changing needs? And we need to widen our net beyond the “administration and support” category in Figure 1, since the increased per-student spending on student services—which includes admissions, career counseling, and financial aid administration—could be viewed as unnecessary as well.

Figure 2: Average Number of Employees Per 1,000 Students by Job Classification, 1990-2012

As Figure 2 shows, the number of employees per thousand students changed little between 1991 and 2011. Research institutions employ just 7 more staff per thousand students than they did in 1991, and 17 fewer than in 2001. Master’s and bachelor’s universities employ 18 more staff per thousand students than two decades earlier, and just 2 more than a decade before. The composition of universities’ staff, however, has changed dramatically. At both types of institutions, the relative number of full-time faculty has remained approximately constant and the number of executives and administrators has actually slightly decreased relative to the size of the student body. Both types of institutions are employing substantially more part-time faculty and professional staff—admissions and human resources staff, IT workers, athletic staff, and health workers—while the relative number of non-professional staff—workers providing clerical, technical, skilled craft, or maintenance services—shrunk dramatically.

Do these additional professional staff constitute bloat, or are they necessary additions to serve universities’ changing needs? Though data doesn’t identify the exact functions performed by these additional employees, we can nevertheless draw a few conclusions. First, the number of professional staff hasn’t increased much in the past decade: just 6 more positions per thousand students at research universities, and 8 more at master’s and bachelor’s schools. Given the additional support services required over the past decade—more IT workers to serve schools’ increased technology needs, additional staff to the growing adjunct workforce, among others—the rise in professional staff seems warranted.

In fact, a different culprit is responsible for much of the increased spending on both support staff as well as the rising expenditures on instruction: health care costs. On average, the amount spent by public universities to provide health insurance rose by nearly $2,700 per employee between 2001 and 2011, a 40 percent increase. This huge rise in health care costs more than accounts for the increased spending shown in Figure 2. Thus, we find that the small increase in administrative spending over the past decade rules out administrative bloat as a major cause of rising tuition. And between rising health care costs and additional necessary staff capacity, we can explain even the small rise in spending on administration, meaning that the oft-discussed phenomenon of administrative “bloat” may not actually exist.
Increased Student Aid

The claim that increased student aid causes tuition to rise was originated by William Bennett, the secretary of education under Ronald Reagan, in a 1987 *New York Times* opinion piece. Numerous academic studies since have tested the Bennett hypothesis, and though a few have found some link between rising aid and tuition in at most one sector of higher education, the vast majority have “...found not a shred of evidence of an empirical relationship,” as David Warren wrote in the *Washington Post*. As Warren notes, three major federal reports in the last fifteen years have each surveyed the existing academic literature, and each concluded that no such relationship exists.

The most recent, conducted by the Government Accountability Office (GAO) in 2011, took advantage of a unique “natural experiment” to test the Bennett hypothesis: the substantial increases in Stafford Loan limits between 2007 and 2009. In 2007, the yearly loan limits, adjusted for inflation, ranged from $2,925 for freshmen to $6,125 for upper classmen. By 2009, they had risen to $5,750 and $7,825, respectively. All told, the yearly borrowing limit for all undergraduates increased by an average of $2,340. However, average tuition at public 4-year universities rose by just $540 over the same two years, in line with recent historical averages, leading the GAO to reject the possibility of a relationship between the two. Additionally, these increases in borrowing limits were the first since 1993, meaning that the inflation-adjusted value of the limit had declined for more than a decade during which tuitions rose steadily. All told, both the empirical evidence and academic consensus deem the Bennett hypothesis false.
College Construction: Bubble or Hot Air?

Spending at colleges on auxiliaries, including dormitories and dining services, has indeed increased significantly over the past decade, rising $1,789 per student at research institutions and $524 per student at master’s and bachelor’s universities. However, revenue from these enterprises, which cover most of the costs associated with them, has risen even more rapidly; in 2011, revenue from auxiliary enterprises actually exceeded spending by a significant margin.

Overall spending on construction is harder to isolate, because funding for construction projects comes from a variety of sources: separate appropriations from state governments specifically for capital projects, private gifts also earmarked for building, and debt, the repayment of which is in some cases paid for by students. According to Moody’s, debt at the 224 largest public universities and university systems increased by $79 billion between 2000 and 2011, leading to an additional $3.37 billion in yearly debt repayment costs over the same period.

To get an idea of the maximum impact that the additional borrowing could have on college costs, enrollment at the largest public institutions—approximating the 224 universities and university systems included in the Moody’s data—totaled 10.2 million in fall 2012. If all debt service costs were paid for by students, this would yield a figure of $367 per student in increased debt service costs over the past decade.

So, is the purported construction binge at universities responsible for rising tuitions? No. Even if all additional borrowing costs over the past decade were paid for by students, the increases could account for at most 11 percent of increased tuition. However, only a fraction of that cost is paid by students, as laws in some states (including California and New York, two of the states with the largest public university systems) require that debt service costs be paid for by taxpayers. And in many other universities, borrowing costs are paid for by increased room and board or special fees, not through tuition. Though we can’t estimate an exact impact on tuition, if we fairly estimate that half of these costs are paid for by students, we find that increased borrowing to fund college construction could account for about 5 percent of the tuition increases over the past decade. Clearly, increased college construction costs are not a major cause of rising tuition.
Spending and Revenues at Public Community Colleges

This brief focuses on public 4-year institutions because much of the research and public debate naming administrative bloat, excessive construction, or increased federal aid as a driver of tuition increases is limited to 4-year schools. However, it would feel incomplete not to discuss community colleges, which enroll nearly half of all public university students and provide a vital pathway to a degree, particularly for low-income students or students of color.

The spending and revenue picture at community colleges points even more clearly to cuts in state support as the major cause of rising tuition over the past decade. As Figure 3 shows, spending on education and related expenses has declined by 12 percent, with cuts spread relatively evenly across instruction, student services, operations and maintenance, and administration and support. These across-the-board spending declines immediately eliminate both administrative bloat and increased federal aid as potential causes of tuition increases at public community colleges. And though we don’t have good data on spending on capital projects at community colleges, the fact that all other expenditure categories have suffered cuts makes it extremely unlikely that these schools have been spending excessively on construction.

Figure 3: Education and Related Spending Per Student
As Figure 4 shows, net tuition revenue has supported a larger share of education and related expenses at community colleges as well, though the increase is not as dramatic as that at public 4-year schools. Still, tuition now pays for 36 percent of all education and related expenses at public community colleges, up from 22 percent just a decade earlier. In dollar terms, the decline in state support per student—$1,682—actually surpasses the increase in net tuition revenue per student—$1,014. Thus, we estimate that declining state support has been responsible for (more than) 100 percent of increased tuition at community colleges.

**Figure 4: Net Tuition and State Support Shares of Education and Related Spending**

- **2001**
  - State Tuition: 22%
  - Net Tuition: 68%
  - Other: 10%

- **2006**
  - State Tuition: 29%
  - Net Tuition: 67%
  - Other: 4%

- **2011**
  - State Tuition: 36%
  - Net Tuition: 59%
  - Other: 5%

THE REAL CULPRIT: CUTS IN STATE SUPPORT

If neither rising spending nor increased aid is primarily driving tuition increases, what is? If we turn to the revenue side of the balance sheet, the answer becomes clear: declining state support. As Figure 5 shows, over the past decade, state support for research institutions fell by $3,081 and declined $2,067 at master’s and bachelor’s universities, in near-lockstep with tuition increases. Because education and related expenses are funded nearly entirely by tuition and state monies, declining state support has caused a dramatic shift in the share of these expenses paid for by students and the government. As Figure 5 shows, more than half of education and related expenses at public universities is now paid for through tuition, up from about 35 percent in 2001.

Figure 5: Net Tuition and State Support, 2001-2011
Shares of Education and Related Spending

Figure 5 also illustrates a disturbing fact: public higher education in this country no longer exists. Because more than half of core educational expenses at “public” 4-year universities are now funded through tuition, a private source of capital, they have effectively become subsidized private institutions. Higher education has long been considered a public good, because an educated populace...
To make the relationship between declining state support and tuition increases crystal clear, we use the data derived in the sections above to estimate the size of the contribution of each factor to tuition increases in Figure 6. We estimate that declining state support is responsible for 79 percent of increased tuition at research institutions and 78 percent at master’s and bachelor’s universities. Increases in instruction costs (largely due to increases in health insurance premiums) are responsible for 9 percent and 11 percent, respectively, of tuition increases at the two types of institutions, and increased spending on administrative and support functions, some of which is also due to rising health care premiums, accounts for the remaining 6 and 5 percent. Finally, rising spending on campus construction accounts for 6 percent of increased tuition at each institutional category.
Figure 6: The Causes of Rising Tuition

Source: Author’s calculations of Delta Cost Project data
In the past, state funding for education often rose and fell along with the economy: since higher education funding is viewed as “discretionary” spending, it is often a target for cuts when states are forced to close recessionary holes in their budgets. However, in the past decade, state funding for higher education has diverged from that trend. Six years after the great recession, state higher education funding per student remains 27 percent below its prerecession level. Unfortunately, declining state support for higher education means that many students today have no choice but to take on significant debt to finance their educations, the negative effects of which are increasingly evident in young people’s lives.

However, if we’re to ensure that the last clear pathway to the middle class in this country remains open, restoring state support for higher education is only a start. To eliminate the pile of debt that most students must now borrow just to finance their education, we need comprehensive policy reform that views higher education as a necessity, and ensures that federal and state government support for higher education is maintained at a level that allows any middle- or working-class student to obtain a college degree without mortgaging their future.
1. All dollar figures in this brief have been adjusted for inflation.
11. The Delta Cost Project data divides public 4-year universities into 3 groups (research, master’s, and bachelor’s) following the basic Carnegie Classifications: http://carnegienclassifications.uiuc.edu/enumerations/basic.php. We collapse the latter two categories in our data.
12. Years in the report refer to school or fiscal years; i.e. 2011 represents the 2010/2011 school/fiscal year.
17. Generally speaking, professional positions require an associate’s degree or higher, while non-professional jobs often require only a certificate or on-the-job training. For more detail, see the Bureau of Labor Statistics, http://www.bls.gov/ia/gtgs/ia54.htm.
20. For a partial summary of the literature supporting the Bennett Hypothesis as well as a suggested revision to it, see Andrew Gillen, Introducing Bennett Hypothesis 2.0, Center for College Affordability and Productivity, February 2012, http://eric.ed.gov/?id=ED536151.
23. Desrochers and Hurlburt, Trends in College Spending.
27. A full description of the Wisconsin Idea can be found at http://wisconsinidea.wisc.edu/.