College tuition increases and faculty labor costs: A counterintuitive disconnect*

Gary Rhoades** (University of Arizona) &

Joanna Frye*** (University of Michigan)

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** Gary Rhoades is Professor and Director of the University of Arizona's Center for the Study of Higher Education. His research focuses on the restructuring of academic institutions and professions, as in two books, *Managed professionals: Unionized faculty and restructuring academic labor* (SUNY Press, 1998), and (with Sheila Slaughter) *Academic capitalism and the new economy* (The Johns Hopkins University Press, 2004). He is currently working on an update of *Managed professionals*, entitled, *Organizing professionals: Negotiating a new academy*.

*** Joanna Frye is an advanced doctoral student at the University of Michigan's Center for the Study of Higher and Postsecondary Education. Her doctoral dissertation, "In Pursuit of Survival: The Effects of State Funding on Public Institutions' Faculty Employment Strategies," focuses on public institutions' responses to the changing dynamics of higher education finance. She is currently a senior research assistant at the National Center for Institutional Diversity at the University of Michigan.

@ April 2015 by Gary Rhoades and Joanna Frye Direct all correspondence to:
Gary Rhoades, Professor and Director
Center for the Study of Higher Education
College of Education
University of Arizona
Tucson, AZ 85721
(520) 626-4097
grhoades@email.arizona.edu

Executive Summary

Have academic labor costs been a major driver of tuition increases in the 2000s? The assumed relationship between faculty costs and college tuition is at the heart of three realms of public policy activity: (1) college affordability; (2) technology-mediated course delivery; & (3) adjunct faculty union organizing and faculty union contract negotiation.

Yet the current report's findings, based on a distinctive new data set, point to a counterintuitive disconnect between college tuition increases and faculty labor costs.

- * (a) In every public sector of higher education the full-time faculty salary outlays per FTE student declined from 2003 to 2013. (Table 1)
- * (b) In every sector of higher education, except private research/doctoral and non-selective liberal arts colleges the full-time faculty salary outlays as a share of total education and general expenditures declined from 2003-2013. (Table 3)
- * (c) In every sector of higher education, except public research/doctoral there was a reduction in the tenured/tenure track share of full-time faculty from 2002-2013. (Table 4)
- * (d) In every sector of higher education, there was a decline in the average number of tenured/tenure track full-time faculty, per 1,000 FTE students, from 2002-2013. (Figure 5)
- * (e) In every sector of higher education there was a reduction in the faculty share of the professional workforce from 2002-2012. (Table 6)
- * (f) In every sector of higher education, except public research/doctoral and private research/doctoral the average number of full-time faculty per 1,000 FTE students from 2002-2012 declined more than or increased less than that of full-time executive/administrators and full-time other professionals. (Table 7)
- * (g) In every sector of higher education, except public masters, public bachelors, and public two-year, the average number of full-time faculty per 1,000 FTE students in 2012 was less than the combined totals of full-time executive/administrators and full-time other professionals. (Table 7)
- * (h) In every sector of higher education, except public research/doctoral and public two-year, total instructional salaries and wages as a share of education and general salaries and wages declined from 2002-2013. (Table 8)
- * (i) In every sector of higher education, total instructional salaries and wages as a share of total education and general expenditures declined from 2003-2013. (Table 9)
- * (j) In every public sector of higher education, except public bachelors, and in non-selective liberal arts colleges the total instructional salaries and wages per FTE student declined from 2002-2013. (Table 10)

- * (k) In every sector of public higher education the average number of full-time faculty per 1,000 FTE students was flat or declined from 2002-2013. (Figure 11)
- * (1) In every sector of higher education except private research/doctoral university, there was a reduction in the full-time faculty share of the faculty workforce from 2002-2013. (Table 12)
- * (m) In every sector of higher education except private research/doctoral university and selective liberal arts college, the growth in the average number of full time faculty was less than that of part-time faculty from 2002-2013. (Table 13)
- * (n) In every sector of higher education, with the exception of selective liberal arts colleges and private research/doctoral universities, the average number of part-time status faculty per 1,000 FTE students from 2002-2013 great faster than the average number of full-time status faculty, which in three cases actually declined (although in public two-year colleges the average number of part-time status faculty fell, but it fell slightly slower than did the average number of full-time faculty per 1,000 FTE students). (Table 11)

In short, academic labor costs are not driving tuition increases. The trend lines run in opposite directions. Relative academic labor costs have gone down as tuition has gone up. Students are paying more to go to colleges that are spending less on instruction.

Something is wrong with this picture.

It is time to challenge and reverse the ongoing disinvestment in academic labor that has accompanied the ongoing increase in tuition, to develop policy levers to redress misplaced priorities. It is time to ensure that students get more educationally for what they are paying more for. And it is time to counter policy discourse that claims faculty interests run counter to those of students. The counter-directional relationship between academic labor costs and tuition increases is not just counterintuitive, but also likely is counterproductive. We should be questioning the cost of moving monies away from instruction, and concentrating on the educational returns of investment in instruction.

COLLEGE TUITION INCREASES AND FACULTY LABOR COSTS: A COUNTERINTUITIVE DISCONNECT

College affordability is now a huge policy issue. So it should be given escalating tuition, student debt levels, and default rates. In this context, faculty salaries are often framed as a major driver of college costs. Thus, the question that drives our study is, "Have academic labor costs been a major driver of tuition increases in the 2000s?"

The presumed linkage between faculty costs and rising college tuition is at the heart of three realms of public policy. It is evident in the logics framing public discourse and policy in each of these realms. Moreover, the core assumption about academic labor costs driving tuition increases underlies public policy discourse about the need for a "new business model" of staffing and producing higher education. The prevailing presumption is that higher education's current, faculty-centric "business model" is unsustainable in its dependence on continued tuition increases or greater public investment, neither of which is believed to be "realistic" in the current or future political environment.

Current assumptions are not new. One of the core beliefs in the 1980s and 1990s that drove efforts to restructure academic institutions and employment was that "personnel costs account for the overwhelming proportion of an institution's costs, and faculty account for the overwhelming proportion of such personnel costs." (Rhoades, 1998a, p.33)

In subsequent years, numerous reports have called into question the linkage between college tuition and academic labor costs. Perhaps the most authoritative of those reports have been generated by the Delta Cost Project (e.g., Desrochers and Kirshtein, 2014). Compiling national data collected by the federal government through the

Integrated Postsecondary Education Data System (IPEDS), the Delta Cost Project attempts to adjust and standardize postsecondary finance data to mitigate challenges posed by changes in the data set over time. Since developing the database in 2008, the organization has published annual trend reports on higher education finance including the *Trends in College Spending* series and various issue briefs.

Yet the public discourse of policymakers and managers persists.

More recently, researchers have constructed a larger and more precise set of IPEDS data that improves upon key limitations of the Delta Cost Project Database, affording an opportunity to further explore the possible connection between college tuition and faculty labor costs (Jaquette and Parra, 2014). The new data set allows for more meaningful comparisons between institution types, making it particularly suited to the question at hand, the answer to which might vary across and within types of higher education institutions. For instance, the new data set avoids collapsing or combining multiple institutions within a public state system into a single "observation" or case (e.g., the University of Texas system); rather these institutions are appropriately disaggregated into multiple cases. This distinction is important because personnel and costs vary significantly among public institutions in the same system, such as between UT Austin and UT San Antonio.

So the dataset makes possible more precise comparisons between public and private higher education organizations. 1 Moreover, with its inclusion of for-profit higher education institutions, the dataset also allows for comparisons between patterns in organizations in not-for-profit sectors and those in proprietary higher education.

The data we present are organized around three "logics" that underlie the framing of public policy. The first logic frames faculty simply as costs, and as the central costs in colleges and universities. This cost containment logic consistently characterizes faculty labor as expensive, not as producing value. That is an ironic, because faculty members are the academy's "production" workers—they produce instruction, research, and service.

The second logic rests on the belief that higher education as an industry suffers from a "cost disease" caused by being too labor-intensive and too labor expensive. This cost disease logic sees academics as the overriding labor cost that is increasingly expensive but not increasingly productive. The solution is inferred from the experience of other industries, and is posed as new technologies that have reduced per unit of production labor costs in other industries. The key, then, to containing tuition is believed to be reductions in faculty labor costs.

The third logic emphasizes the problem of faculty as fixed, enduring costs, the problem of which is compounded by the expensive nature of academic labor. The solution lies in flexible types of faculty employment, which are inhibited by the due process embedded in tenure track faculty employment. This at-will conception is to minimize production labor costs by maximizing the use of just-in-time employment, suggests that the unionization of adjunct faculty, and indeed the unionization of academic employees generally is a cost driver of tuition increases.

Faculty as expensive labor costs to be contained

Concerns about college affordability can and do easily translate into claims about the linkage between tuition increases and faculty salaries. That would seem to make sense. Professors are commonly foregrounded as the central labor costs and cost drivers

in higher education. A particular focus of criticisms about expensive faculty labor is tenured faculty, whose expenses are incurred and compounded for an entire career.

During the recession the assumption that tuition increases are driven by faculty salaries played out in public policy at many colleges and universities and in some states. Faculty (and staff) salaries were frozen to limit tuition increases. Later, as campuses and systems decided to give faculty raises, headlines echoed administrators' framing of the issue—such increases require and are the reason for tuition increases.

"Tuition increase to address faculty salaries." (Balty and Seltzer, 2015, ECU Today)

"Proposed UNC system tuition increases would go toward faculty salaries."
(Stancill, 2015, Charlotte Observer)

"Faculty and staff reaction to salary raise, tuition increase." (Staff reporter, 2014, The Sunflower)

"Is UNM tuition hike needed to raise pay?" (Bush, 2014, Albuquerque News Journal)

"CNU increases tuition for faculty raises." (Crawford, 2013, The Voice)

"Miami University raises tuition, gives raises to faculty, staff." (Noble, 2013, WCPO Digital)

"University of Kentucky plans 6 percent tuition hike, 3 percent raises."
(Blackford and Truman, 2011, Herald Leader)

Typical of the pattern, as the country headed into a recession, the Washington state legislature established a four-year salary freeze for faculty, staff, and academic student employees, unless they were promoted. Towards the end of that period,

discussion of whether to lift the freeze generated a headline in *The Daily*, "Lifting salary freeze could increase tuition," (Dickson, 2012) that matched the Provost's account (p.1):

[I]f the state isn't willing to contribute more money to the university to pay for increases to state-funded salaries, students could foot the bill. [Provost Ana Mari] Cauce said this isn't a new phenomenon—a fraction of tuition has always gone toward paying salaries. 'That's the way it has always been; it's a part of what tuition pays for,' Cauce said.

The framing assumption, then, from one state and campus to another, and as posed by Provost Cauce, is that the connection between tuition increases and faculty salaries is positive, historical, and timeless.

But what is the evidence about such a direct and positive relationship between college tuition and faculty salaries in the 2000s? We first consider changes in the salary outlays for these faculty. Then we turn to the numbers and proportions of the most "expensive" faculty, full-time and tenure stream academics.

What, then, have been the full-time faculty salary outlays per FTE student from 2003 to 2013, by institutional type?

Insert Table 1 here

Although average tuition is lower in public than in private universities and colleges, tuition increases have been greater in the publics. So it is noteworthy that in every segment of public higher education, with tuition rising annually, salary outlays for full-time faculty per FTE student declined between 2003 and 2013. In a counterintuitive pattern, as tuition increased, salary outlays decreased. The decreases ranged from 2% in

public research/doctoral universities to 8.25% in public two-year colleges. In public masters and public bachelors institutions, the decreases were 6.73% and 5.54%.

What about in private colleges and universities? In non-selective liberal arts colleges, salary outlays for full-time faculty per FTE student also declined, by 6.53%. For the other private sectors—private research/doctoral, private masters, and selective liberal arts—salary outlays increased, by 8.3, 8.29, and 7.01% respectively.

Yet, those increases are the *total* increases for the decade. They are considerably less than the accumulated, *annual* tuition increases during that time period, which for private four-year institutions were 29.17%.

Insert Table 2

So tuition increased more than three times the faculty salary outlays per FTE student in the three private sectors in which full-time faculty salary outlays actually increased.

Next, we examine full-time faculty salary outlays as a share of total education and general expenditures, from 2003-2013, by institutional sector. The point here is to consider the centrality of salary outlays for the full-time faculty. In addition, we are interested in the directionality of this centrality—is it increasing, decreasing, or stable?

Insert Table 3 here

Full-time faculty members are significant, but they are far from being the central or overriding costs in higher education. In 2003, they accounted for less than 20% of E & G expenditures in all but one sector (public masters) of higher education. By 2013, they accounted for only 14.2% to 19.4% of total E & G expenditures in the various sectors of higher education. The lowest percentage was in public research/doctoral universities, which are prime targets of critiques about expensive faculty.

As to their directionality, as a share of total E & G expenditures salary outlays for full-time faculty declined from 2003-2013. In every sector of public higher education they declined significantly, even dramatically, from 36.43% in public masters universities to 8.92% in public two-year colleges. They declined by a little over 15% in both public research/doctoral and public bachelors institutions.

Such faculty salary outlays also declined in two of the four private sectors, though to a far lesser extent. In private masters and selective liberal arts institutions they declined 1.36% and .14%. In the other two segments of private higher education (research/doctoral and non-selective liberal arts), the salary outlays of full-time faculty as a proportion of total E & G expenditures increased—but the increase was a tiny one, less than 1% (.06% and 48%).

In a decade of considerable tuition increases, then, the salary outlays of full-time faculty clearly have *not* been a contributing factor.

The counterintuitive disconnect between tuition increases and academic labor costs is even more clear when full-time faculty are disaggregated. The cohorts of new hires in the NCES' last (2003) National Survey of Postsecondary Education Faculty revealed that the growth area of employment in full-time positions was off the tenure track (Schuster and Finkelstein, 2006). As Table 4 shows, that pattern has held:

Insert Table 4 here

Policymakers tend to equate full-time faculty with tenure stream faculty. That is a false equation. The salaries and terms of employment for full-time faculty off the tenure track fall well short of those on the track. Tenured/tenure track faculty are the most "expensive" faculty. But their numbers have declined as a share of full-time faculty.

In every sector of higher education except public research/doctoral universities (where the share increased by 2.06%) the tenured/tenure track share of full-time faculty declined from 2002-2013. The two sectors with the largest decline were private—non-selective liberal arts colleges (19.62%) and private masters universities (7.96%). Three of the four public sector segments declined 6.62% (public two-year), 4.38% (public bachelors), and 3.65% (public masters). The decreases in selective liberal arts (5.46%) and private research/doctoral (3.06%) institutions completed a strong industry wide trend in decline of tenured/tenure faculty's share of the full-time faculty workforce.

Although the trend line was clear in an industry wide pattern, there has been wide variation in the actual share of tenured/tenure track faculty. The share was lowest in non-selective liberal arts (37.1%) and public two-year sectors (52.7%). It was highest in three of the public sectors—masters (78.5%), bachelors (75.1%), and research/doctoral (74%). The shares in the three other private sectors were 68.7% (selective liberal arts), 67.1% (research/doctoral), and 60.4% (masters). So tenure track faculty ranged from 37.1 to 78.5% of full-time faculty. Yet to most policymakers and the public this is an invisible segment of the professoriate.

Consider now the average number of full-time faculty by tenure status, per 1,000 FTE students, from 2002-2013.

Insert Figure 5 here

In every sector of higher education, there was a decline in the average number of tenured/tenure track full-time faculty, per 1,000 FTE students, from 2002-2013. Again, there was much variation in the actual average number, from highs of 51.9 and 50 per 1,000 FTE students in private research/doctoral and selective liberal arts to lows of 15.4

and 19.9 in public two-year and non-selective liberal arts institutions. But the universal trend line, across sectors, was decline in that number. If the decline was quite small (.89%) in selective liberal arts colleges, it was nevertheless significant throughout the other sectors. There it ranged from double-digit declines of 25.35%, 23.78%, 13.94% and 11.77% in public two-year, non-selective liberal arts, public research/doctoral, and public masters institutions, to still significant declines of 9.23%, 7.1% and 6.09% in public bachelors, private research/doctoral, and private masters institutions.

In sum, across a range of measures and across sectors of higher education the segment of the faculty that is the focus of policymakers and academic administrators, an the segment that has the best salaries and working conditions has declined in absolute and relative terms, in salary outlays and faculty numbers. Such patterns belie the claim that faculty labor costs are driving the ongoing tuition increases.

By way of transitioning to the ensuing section of the paper, with its analytical focus on higher education's so-called "cost disease," we return to a headline about the relationship between tuition and faculty salaries. A March 6, 2012 story in the *Montana Kaimi*n had the headline, "Tuition increase to fund faculty pay raise." (Blum, 2012) Linking the tuition increase to a new contract negotiated with the University Faculty Association, the story indicated that:

The 5 percent hike students saw fall semester will repeat next fall. Of the revenue generated from the increase, about 75 percent of it will be applied to pay increases for faculty, said Associate Commissioner for Communications and Resources Kevin McRae. (p.1)

The level of the tuition increase far exceeds the level of the faculty salary increases of 1 and 2 percent later described in the story. Even more tellingly, the story included a "Correction" that was provided a week later, on March 14.

McRae clarified the specifics of that figure [75%] after the University Faculty
Association challenged his calculations. McRae said that of the revenue
generated from tuition hikes, 75 percent will go toward pay raises for all
University of Montana employees. This includes staff and administrators, not just
faculty members as was reported. Just more than 40 percent of the revenue
generated from tuition hikes will go toward faculty pay raises. (p.1)

The issue raised by this editorial correction relates again to faculty's place in the higher education employment and cost structure. Contrary to what many people believe, as shall be seen in the next section, faculty members are not the only professionals and professional costs on campus.

The "cost disease," stagnant productivity of faculty labor frame

Higher education is said to suffer from "cost disease," a classic concept and chronic condition characteristic of personal services industries (Baumol, 1967; Baumol and Blackman, 1983, 1995; Baumol and Bowen, 1966). The condition stems from the labor intensive nature of production in such sectors, as in higher education. There is also a tight link between labor intensive production and perceptions of quality, which makes it difficult to realize the productivity gains experienced in other industries with new technologies that reduce production labor costs.

Advanced nearly fifty years ago, the concept of higher education's cost disease, and of faculty's role in that, receives much play in the current public discourse, as well as

in academic studies of higher education's cost (Ehrenberg, 2002). The disease is that as a labor force, faculty's costs inexorably rise because they are stubbornly resistant to mechanisms and models of substantially increasing productivity that would contain or reduce those costs. This public framing of the issue is evident in a quote from Ron Ehrenberg, a leading economist of higher education, explains tuition increases at Cornell,

Ehrenberg, who also is director of the Cornell Higher Education Research
Institute, said the 'root cause' of the continual increase in tuition 'is the failure of
faculty productivity to grow.' In other words, 'Our output in terms of the
numbers of students we are educating doesn't change...' (Lang, 2006)

Similarly, such an explanation is evident in Ehrenberg's book, *Tuition rising*, in which he identifies faculty salary increases and the absence of increases in productivity as the related problems that plague higher education and drive up tuition.

But first and foremost, [the historical rise in tuition] was attributed to the fact that the nature of the educational process did not permit selective private academic institutions to share in the productivity gains that were occurring in the rest of the economy. ...[T]he productivity of faculty...as measured by the number of students that were educated each year, did not change very much, primarily because low student-faculty ratios were felt to be essential to high-quality college education. (Ehrenberg, 2002, pp.5-6)

The focal point of Ehrenberg's analysis, as well as of Bowen's (1967) historical analysis of the cost disease is selective private universities. But the analytical points about the failure to realize productivity gains among faculty have been extended more broadly. Thus, relatedly, for instance, Zemsky's (1994) concept of the "academic

ratchet" refers to an ongoing pressure from faculty to reduce teaching loads to do more research. The disease is that there is an endemic pressure towards ever lower levels of productivity, measured by course load (a different measure than student/teacher ratio or per capita credit hour or degree production).

In current policy deliberations, higher education's cost disease is said to be particularly manifest and more deeply rooted in the resistance of the sector's workforce to technological changes that in other industries have led to productivity gains. Many think tanks, foundations, policy makers, and academic leaders now pose the increased use of information and communication technologies to deliver education as a cure for increasing productivity and reducing production costs in higher education. For instance, a 2013 report by the American Institutes of Research, "Productivity, technology, and innovation," opens with the basic argument:

Recent financial constraints mean that universities cannot depend on extra money to solve problems like stagnant graduation rates, high rates of remediation, and poor student performance. Instead, the future of higher education depends on its becoming more productive and innovative, often through the use of technology.

Similarly, a McKinsey Report frames the intertwined cost, productivity, and quality problems (how to contain costs, increase productivity, and sustain or enhance quality) as seemingly insurmountable, and then identifies examples of institutions that have successfully met the challenges. One of the key, core mechanisms is incorporating an expanded use of information technologies. The report suggests: "Using new teaching technologies can lower costs substantially and raise quality at the same time." (Cota et al., 2011, p.5)

The attraction of such solutions to a range of policy players and policymakers has been longstanding, dating back well into the 1990s. Consider the following description of a 1995 conference that convened a range of such players to address the cost disease.

It was this set of issues that occasioned a conversation between the two of us, with our backgrounds in academic restructuring, and Educom a pioneer in facilitating IT applications and organizer of the recently launched National Learning Infrastructure Initiative. Educom asked us to think about how the infusion of information technology into the educational process can reverse the declining productivity of American higher education. Eventually, our conversation grew to include an eighteen-member roundtable, which Educom convened in June 1995, consisting of higher education administrators, policy analysts, faculty members, and independent information technology consultants. (Massy and Zemsky, 1995)

Educom subsequently became Educause, which over the last decade and a half, along with other policy players such as the Gates Foundation, has fostered the growth of IT in higher education. To bring the story full circle, one of the originators of the concept of cost disease in higher education, William G. Bowen, though originally a skeptic as to the transformative potential of technology, has in his words, become a "convert":

I am today a convert. I have come to believe that 'now is the time'—that far greater access to the Internet, improvements in Internet speed, reductions in storage costs, and other advances have combined with changing mindsets to suggest that online learning, in many of its manifestations, can lead to good learning outcomes at lower cost.

The prevailing thinking, then, is that the current business model in higher education is either irreparably broken or unsustainable. New realities call for new technologies that offer virtual solutions to concrete (bricks and mortar), material (financial) problems. The promise of online education is that it makes possible a significant scaling up of productivity even as faculty labor costs are scaled down.

Such a characterization of the cost disease, and of its technological solution, however, fails to recognize the changing structure of costs in higher education over the past decades. As will be detailed below, faculty represent declining shares of the professional workforce in higher education. Similarly, instructional expenditures are declining in many sectors of the academy as a share of total institutional salaries and of institutional expenditures.

If higher education suffered from a cost disease that was chronic and exacerbating rising tuition over time, then one would expect to see the ful-time faculty share of the professional workforce at the very least holding steady or growing substantially. That has not been the case. Indeed, quite the opposite has been true.

Insert Table 6 and Figure 6 here

In every sector of higher education there was a reduction in the faculty share of the professional workforce from 2002-2012. Moreover, the decline was substantial, in a time period when tuition (and enrollment) was increasing substantially. In all but two sectors (public research/doctoral at 6.22% and private research/doctoral at 8.96%) the decline was in double digits. It was highest in three private sectors—private masters, selective liberal arts, and non-selective liberal arts at 15.48, 16.97, and 22.11%.

The counter-directionality is striking. Fewer faculty are doing more (with less):

That greater productivity runs counter to the cost disease claim.

Further, in absolute terms faculty's share of professional employment has been lower than is widely recognized. In five of the eight sectors of higher education the proportion was less than 50%. And given assumptions about bureaucracy in the public sector, it may seem counterintuitive that there is no private sector of higher education in which faculty were more than 46.4% of the professional workforce.

In the national data gathered on professional employment in higher education, there are three categories—executive/manager, faculty, and other professionals (professionals with advanced degrees who are working in various support occupations). As evidenced in Table 7 and Figure 7, in every sector of higher education, with the exception of public research/doctoral and private research doctoral, the average number of full-time faculty per 1,000 FTE students from 2002-2012 declined more than or increased less than that of full-time executive/managers and other professionals.

Insert Table 7 and Figure 7 here

In four sectors (public masters, public bachelors, non-selective liberal arts, and public two-year) the average for faculty declined, whereas for other professionals it increased, often quite substantially. For example, in non-selective liberal arts colleges, the average number of full-time faculty per 1,000 FTE students declined by 9.31%, compared to a 37.71% increase of other professionals.

The pattern is not, as the proponents of a cost disease would have it, of declining faculty productivity, but rather of other professionals' proliferation. It is the non-instructional professional personnel whose numbers and share of the professional

workforce are increasing. It is their per-unit cost that is increasing. Therefore, it is their "productivity" that is declining.

Even in sectors where the average for full-time faculty increased slightly the increase for other professionals was far greater. In private masters and selective liberal arts institutions, where full-time faculty per 1,000 FTE students increased by .01% and 2.1%, that paled in comparison to 26.53% and 42.26% increases for other professionals.

Focusing now on executive/managers, in five sectors of higher education, the increase in executive/managers was in double digits. Those increases were 16.32% for public bachelors, 16.81% for non-selective liberal arts, 19.86% for private masters, 31.78% for selective liberal arts, and 39.30% for private research/doctoral. Such numbers start to approach the cumulative level of tuition increases during the same time period. And such numbers are suggestive of a cost disease of "administrative bloat" that has occasionally captured public attention in policy institute reports and academic books (Desrochers and Kirshtein, 2014; Ginsberg, 2011; Greene, 2010) but that has rarely translated into policy levers to reduce these costs.

It is striking that in all four private sectors of higher education the increase in average full-time executive/managers per 1,000 FTE students was very high. Indeed, private research/doctoral universities are the only institutions in which that growth exceeded the growth of other professionals. That belies popular conceptions of public sector bureaucracy and inefficiency. It also suggests a very different sort of cost disease than one that is drive by faculty and production labor costs.

The absolute numbers of professional employees in the three categories of professional employment are also quite revealing. One might think that the greater

average growth of executive/managers and other professionals is a reflection of the far smaller size (and baselines) of these workforces. Yet that is not the case (as noted in Table 3X, full-time faculty generally account for less than half of the professional workforce). In every sector of higher education, except public masters, public bachelors, and public two-year, the average number of full-time faculty per 1,000 FTE students in 2012 was less than the combined totals of full-time executive/managers and other professionals.

Insert Table 7 here

Moreover, even in those three sectors, the average number of full-time faculty per 1,000 FTE students was only slightly more than the combined totals of executive/managers and other professionals. In public masters, the average for full-time faculty was 44.23, versus 40.62 full-time employees in the other two categories. In public bachelors it was 46.33 faculty versus a combined average of 43.92 for the other two. And in public two-year colleges, the combined average was 32.8 for full-time faculty, versus 25.02 for the other two categories of professional employment.

By contrast, the differences were far greater in the other sectors, but more heavily weighted to non-faculty personnel. Thus, for instance, in public research/doctoral universities, the combined average of executive/managers and other professionals was 76.86 per 1,000 FTE students, compared to 63.73 full-time faculty.

Quite substantial differences, weighted toward non-faculty professionals were evident in all four private sectors. In private research/doctoral the combined average was 131.28, as compared to 97.99 for full-time faculty. This was the one segment of higher education in which executives/managers grew faster than other professionals. In the case

of private masters, the combined average was 59.65, versus 48.52 for faculty. In selective liberal arts and non-selective liberal arts colleges, the combined averages for executive/managers and other professionals were 80.51 and 69.84, versus 68.89 and 50.85 for full-time faculty.

Notably, the average number of full-time other professionals per 1,000 FTE students in non-selective liberal arts and private research/doctoral (44.23 and 91.91) were themselves almost as much as the average number of full-time faculty (50.85 and 97.99). And in public research/doctoral universities the average number of other professionals (65.2) exceeded that of faculty (63.73).

In terms of numbers, then, not only are full-time faculty not the only professionals on campus, they are not the numerically dominant category of professional employee.

The prominence of non-faculty professionals in private higher education sectors is particularly interesting. The highest average numbers of non-faculty professionals are found in the highest tuition types of institutions (including public research/doctoral universities). Again, that would suggest a very different cost disease than the one referred to in the policy discourse, which targets faculty productivity as the problem.

Now we turn to data on instructional expenditures as a share of institutional expenditures. Are higher education institutions concentrating greater or lesser shares of their total expenditures on the core instructional mission? To the extent that higher education's cost disease is a malady of the faculty workforce, we would expect to see increases in instructional salaries' share of total salaries for all employees. We would also expect that faculty salaries would account for a large share of total salaries. And we would similarly expect those salaries to be an increasing share not just of total salaries

but of total institutional expenditures, as well as to account for a large share of those expenditures.

Yet we find no such industry pattern. Quite the contrary.

Insert Table 8 here

In every sector of higher education, except public research/doctoral universities and public two-year colleges, total instructional salaries and wages as a share of education and general salaries and wages declined from 2002-2013. The two exceptions prove the rule. In neither case was the increase greater than 1% over the entire decade (.96% in public research/doctoral and .82% in public two-year—i.e., annual "increases" of .09 and .08%). That is a tiny fraction (1.7%) of the cumulative tuition increases of 57% and 48.19% in those two sectors (see Table 2). Moreover, in public two-year institutions, there was a decline in the share from an earlier high of 57.4% in 2004 and a peak of 57.8% in 2011 to 57.2% in 2013.

Instructional expenditures, then, cannot reasonably be said to be driving the level of tuition increases in the 2000s. There was an industry-wide trend of the share of these expenditures decreasing at the same time as tuition was increasing. Not only were the trend lines not directly related, they have moved in opposite directions.

The proportion of instructional salaries and wages as an absolute share of institutional salaries and wages is also noteworthy. That proportion further undermines the claim that faculty salaries are the overriding cost drivers of tuition increases. In three sectors (public research/doctoral, selective liberal arts, and non-selective liberal arts) instructional expenditures were less than half of total educational and general salaries and wages. In three other sectors (public bachelors, private research/doctoral, and private

masters) the share was a little over half. In the remaining two sectors (public masters and public two-year) the share was 54.6% and 57.2%--a majority, but not a huge one.

What, then, of the instructional salaries' share of total education and general expenditures? In every sector of higher education total instructional salaries and wages as a share of total education and general expenditures declined from 2003-2013.

Insert Table 9 & Figure 9 here

The decline in every segment of the public sector was in double figures, from 13.13% in public masters to 10.51% in public research/doctoral. Thus, where tuition increased the most, instructional salaries' share of institutional expenditures decreased.

In private higher education, the instructional salaries' share of total education and general expenditures decreased only slightly, from 2.31% in private masters to .43% in private liberal arts non-selective. Yet tuition increased quite a lot over the decade in this sector.

Again, the absolute shares are striking, particularly given the common perception that faculty salaries are the major contributor to costs in higher education. In no sector of higher education were total instructional salaries and wages' share of total education and general expenditures greater than 29.3% (private masters). The lowest share is in public research/doctoral, in which less than a quarter (23.5%) of total E & G expenditures are instructional salaries.

Now, we look to the per-unit cost of instructional salaries. In every public sector of higher education, except public bachelors and non-selective liberal arts colleges, the total instructional salaries and wages per FTE student declined from 2002-2013.

Insert Table 10 here

The decreases ranged from double digits in public two-year (12.82%) and non-selective liberal arts colleges (12.01%) to 7.11% in public masters and a slight .45% in public research/doctoral. In these sectors, instructional salaries and wages per FTE student declined as tuition costs for students escalated.

Even in those segments of higher education in which the per-student instructional salaries increased, the rise was gradual and well below the substantial tuition increases of the same period. Only in private research/doctoral institutions was the rise in double figures (12.96%), which is less than half the increase in tuition during the decades for all private four-year institutions. The increases in private masters and public bachelors were 6.08% and 6.12%), which is roughly one-fifth and one-tenth the increases in private and public four-year institutions' tuition increases over the decade. And the increase in selective liberal arts (4.35%) was similarly quite small, a little more than one-seventh of the increase in tuition. None of this represents convincing evidence of declining faculty productivity (the "cost disease") being a major cost driver of tuition increases.

In sum, the data belie the existence of an enduring, chronic cost disease as it relates to the faculty workforce. What is overlooked by the claimed "cost disease" of production labor/faculty labor costs, and of the remedies that are provided, is the actual structure of professional employment in academe, and the significant rise of non-production professional labor costs.

Over the past several decades, the numbers and proportions of support professionals has increased substantially, to the point where their numbers approach that of full-time faculty in two private sectors, and exceed it in public research/doctoral universities. Rhoades (1998b) has called them "managerial professionals." The numbers

of such other professionals are connected to the rise of "academic capitalism" (Slaughter and Rhoades, 2004). Part of that "knowledge/learning regime is that colleges and universities have tried to move to the market in order to generate new revenues, and have also tried to more actively monitor faculty and production work.

Despite policymakers' failure to recognize the significance of the growing numbers of managerial professionals, and notwithstanding the residual categorization of these employees in national data as "other" or "support" professionals, they are not a minor category of professional employment. There are three categories of these managerial professionals (Rhoades and Sporn, 2002). Some are involved in entrepreneurial activities, in fund raising and technology transfer, for instance. Others, due to massification (increased numbers of non-traditional students), are engaged in providing various services to students. Still others, in an era of increased accountability, are engaged in quality assurance, in staffing teaching centers, offices of instructional assessment, and the like. The latter managerial professionals are managing instructional (and other) technologies, as well as monitoring and measuring faculty productivity and quality, as new quality assessment and auditing schemes get imposed on and developed by college and university administrations.

Ironically, then, colleges and universities are hiring more full-time personnel in managerial professional categories of employment (and in executive/manager positions) even as they are deprofessionalizing faculty employment by hiring increased proportions of contingent faculty in part-time, precarious positions.

The flexible labor business model and threat of unionization frame

Public discourse about the broken business model of higher education often centers on the problem of the industry's fixed labor costs, that due to tenure are resistant to change. An intractable inflexibility is said to be grounded in college and universities' lifetime investment in faculty members who cannot or will not be released. The broad claim of a need for greater "flexibility" in academic employment is linked to labor costs.

Over the past decade, though, growing numbers of adjunct faculty are being hired in a "just-in-time" business model that is actually not just in time for either faculty or students. These faculty members are at-will, and at the whim of the employer, who may open or cancel a class at the last minute, just as they may renew or non-renew in the absence of any process focused on quality and performance. That is problematic not only for faculty, but also for students. When adjunct faculty members are hired last minute, literally days or a week before class starts, that not only hampers their ability to prepare the class, it also compromises the learning conditions of students, who lack access to a professor and materials. Indeed, a survey of 500 adjunct faculty made just this point.

The survey data suggest that campus administrations have too often reached beyond the demands of flexibility to a level of arbitrariness in hiring practices unrelated to fiscal prudence, reasonable flexibility, or any real educational purpose. (Street et al., 2012, p.16)

Of course, some flexibility in staffing is necessary and beneficial, but as the report notes, over two-thirds of the faculty are contingent, and many adjunct faculty have been "temporary" for a decade or more. It seems that the at-will approach simply aims to minimize labor costs and maximize managerial flexibility.

It is in this context that there has been increased unionization among adjunct faculty. Unionization can bring at least some measure of process, though often still quite limited in the case of adjunct faculty. A case in point is the adjunct faculty union at George Washington University, affiliated with SEIU's Local 500. The contract provides for notice of appointment, evaluations, "good faith" consideration for re-appointment, a class cancellation payment if a class is cancelled less than 21 days before the class starts, and benefits including professional development. But there is still tremendous flexibility of administrators in hiring and non-renewal.

Nevertheless, the public discourse and policy focus continues to be on the need for more academics to be working with little to no due process rights in a system of "flexible" employment. From this perspective, unionization is seen as a threat, which can quickly translate into a claim that it will drive up costs, and therefore tuition. Consider this headline and quotes from a Wall Street Journal story, "Colleges' use of adjuncts comes under pressure: As 'road scholars' unite, administrators warn of higher costs from shifting faculty makeup" (Belkin and Korn, 2015), which leads with the observation, "For decades, the nation's colleges and universities have tried to hold down costs by shifting from reliance on tenured professors to an army of cheaper adjunct instructors. Now that business model is starting to crack, as adjuncts increasingly are winning battles to unionize and schools, in response, have begun to offer long-term contracts and better pay to more of their instructors." (p.1) The article then invokes the impending threat of less flexible contracts that increase the pay of adjunct faculty, quoting the chief executive of the American Association of University Administrators:

In response, more university presidents are negotiating pay raises and long-term contracts for full-time work to stave off union inroads. All of this adds pressure to costs, which administrators warn could translate into higher tuition. "I go to meetings and there's a lot more discussion about it than there was even two years ago," said Dan King, chief executive of the American Association of University Administrators. "Now it's a very sober conversation…because as adjuncts organize, personnel costs are going to go up, and we are going to have to deal with that." (Belkin and Korn, 2015, p.2)

Another marker of the way in which the business model works, and of the threat that unionization of low-wage workers is believed to pose comes from those consultants and law firms who work in the field of "union avoidance," what labor unions would characterize as a euphemism that "labor busting" firms. Consider one such article from Mintz-Levin on employment matters, entitled, "Are unions targeting adjunct faculty?" (Horton, 2014)

Traditionally, non-union adjunct faculty have been a source of greater flexibility and significant cost savings for universities facing tight budgets. Whereas a tenured professor may earn upwards of six figures, the median pay for an adjunct professor teaching one three-credit course is usually less than \$5,000. And, so long as adjunct professors are limited to less than 30 work hours per week, they are not entitled to health insurance under the Affordable Care Act (ACA). This only compounds the cost savings and further incentivizes universities forced to operate under shrinking budgets to retain more and more faculty on a contingent,

part-time basis. ... A successful unionization campaign could significantly chip away at this flexibility and cost-savings.

What do the data show in the 2000s, in regards to the flexibility of academic employment, during a time of continued increases in tuition? Throughout the 2000s, the academic workforce has become less and less a full-time workforce. Starting with a per capita measure, in every sector of public higher education the average number of full-time faculty per 1,000 FTE students from 2002-2013 was either flat or declined.

*** Insert Figure 11 here***

Moreover, the higher education sector (public higher education) with the largest percentage tuition increases experienced flat or declining per capita numbers of full-time faculty. The change was not dramatic, but in percentage terms it ranged from 13.7% in public two-year to 6.8 and 6.63% in public masters and public bachelors institutions (in public research/doctoral the percentage change was basically flat, a .27% increase).

In the private sector, only non-selective liberal arts colleges experienced a decline, of 3.48%. In the three other segments of private higher education the average number of full-time faculty per 1,000 FTE students increased, in two cases in double digits (28.63% in private research/doctoral and 11.96% in selective liberal arts), and in the third (private masters) by 5.39%.

In absolute terms, how much managerial "flexibility" is embedded in the structure of academic employment? The absolute average numbers and shares of full and part-time faculty per 1,000 FTE students are striking.

Insert Table 11 here

In 2013, the average number of part-time status faculty exceeded that of average full-time status faculty in three sectors, public two-year, non-selective liberal arts, and private masters. And the average part-time number exceeded that of average full-time faculty by a considerable amount, constituting two-thirds (66%) in public two-year, 60% in private masters, and 55% in non-selective liberal arts institutions.

The lowest shares (28% and 29%) were in private and public research/doctoral universities. In public masters and public bachelors institutions, the percentages were even more substantial (42% and 44%), and in selective liberal arts colleges the share was 45%. Thus, there is a great deal of "flexibility" in the structure of academic employment, and would continue to be even if segments of the adjunct faculty workforce unionized.

The pattern of increasing flexibility and managerial discretion in the employment of faculty is even more evident in the full-time faculty share of the faculty workforce. In every sector of higher education except private research/doctoral university, there was a reduction in the full-time faculty share of the faculty workforce from 2002-2013.

Insert Table 12 here

Moreover, the reduction in share was substantial. In five of the seven sectors it was a double digit decline over the ten years, from 17.84% in private masters to 10.82% in public bachelors. By the end of the decade no segment of higher education had even three-quarters of its faculty in full-time positions. And as reviewed in Tables 5 and 4, every sector in higher education saw a decline during this time in the average number of tenure-track faculty per 1,000 FTE students, and all higher education sectors except public research/doctoral experienced reductions in the tenure-track faculty share of the full-time faculty workforce. In five of the sectors the decline was in double digits.

A further indicator of the extensive and growing managerial flexibility in relation to the academic workforce is the growth of part-time faculty. In every sector of higher education except private research/doctoral university and selective liberal arts college, the growth in the average number of full time faculty was less than that of part-time faculty from 2002-2013.

Insert Table 13 here

Beyond just the trend line, the differential rates of growth are remarkable. In non-selective liberal arts colleges, the percentage increase for part-time faculty was nearly six times that of full-time faculty. In public masters it was nearly three times. In public research/doctoral the average number of part-time faculty grew nearly twice as fast as did that of full-time faculty. In private masters the growth in the average number of part-time faculty was 15% faster than for full-time faculty. In public bachelors and public two-year institutions the growth was 9% faster. In short, a major increase in managerial flexibility in just a decade, and a decade of continued tuition increases above the cost of living.

A per capita measure further highlights the extraordinary pace of this growth in the course of a decade. In every sector of higher education, with the exception of private research/doctoral universities and selective liberal arts colleges, the average number of part-time status faculty per 1,000 FTE students from 2002-2013 grew faster than the average number of full-time status faculty, which in three sectors actually declined (though in public two-year colleges, which experienced great increases in enrollments, the average number of part-time status faculty per 1,000 FTE students fell slightly less than did the average number of full-time faculty.

Insert Table 11 here

The differential between part and full-time faculty was dramatic. The smallest differential was in private masters, in which the pace of growth in average part-time status faculty per 1,000 FTE students was nearly five times that of full-time faculty. In public research/doctoral universities, the differential was a factor of over nineteen fold. In three other sectors (non-selective liberal arts, public masters, and public bachelors) the average for part-time faculty grew by 30.25%, 16.93%, and 11.19% whereas the average for full-time faculty dropped by 3.48%, 6.8%, and 6.63%.

That is a two different worlds story. It is a story of substantial, even dramatic increases in the flexibility of academic employment, from substantial baselines. And it is a story that might lead one to be skeptical about the alarm being sounded at the prospect of some adjunct faculty unionizing.

To sum up this section of the paper, the (tenure-track and full-time) faculty positions that afford the least "flexibility" to managers have declined, dramatically in most sectors, whereas those positions over which managers in academe have the greatest flexibility (part-time), which were at the beginning of the decade already substantial in number, have dramatically increased. At the same time that management has shaped an increasingly more flexible, part-time academic workforce, tuition continued to increase.

As Rhoades (1998a, p.131) suggested in analyzing the structure of academic employment in the 1990s, hiring more part-time faculty is a way of increasing managerial flexibility relative to the academic workforce.

There are more subtle ways of reorganizing the academic workforce, of reallocating and reducing faculty resources, than by retrenching faculty. There are more efficient and less politically problematic ways that have more dramatic

results. Hire more part-time faculty. They are cheaper. They make it easier to shift faculty resources from one unit to another, for they are easier to hire and to release [non-renew].

But if that strategy has yielded greater managerial influence over the academic workforce, it has not resulted in restricted or reduced tuition, which has continued to rise.

Historically, part-time faculty members have been less likely to be unionized. That is important because collective bargaining agreements can provide at least some (though relatively limited—see Rhoades, 1998a) level of due process constraint on managerial flexibility. It is also not unrelated to the fact that adjunct faculty have not experienced any real increase in wages during the time period in question.

Therein, from the standpoint of management, lies the double threat of the widespread organizing efforts of adjunct faculty to form unions, in private as well as public institutions. Adjunct faculty unions might increase the pay of faculty in part-time positions, and reduce the flexibility of administrators in managing that workforce.

One empirical problem with that claim, apart from the limited constraints on managerial discretion built into the collective bargaining agreements covering adjunct faculty, is that during the 2000s, the time period in question, there has been an increase in the numbers of adjunct faculty who are unionized (see Rhoades, 2014). But as with the increased numbers of part-time faculty, that increased unionization has not generated any spike in tuition. Rather, tuition increases continue apace, in a pattern independent of the part-time or unionization numbers.

Conclusions/Recommendations

The framing question and answer. A straightforward question has driven this paper's data gathering and analysis: "Have academic labor costs been a major driver of tuition increases in the 2000s?"

The answer is equally straightforward, and is unequivocal. No.

The empirical reality regarding what seems like a common sense relationship between tuition increases and faculty labor costs is counterintuitive. There is a disconnect between the trend lines in the two phenomena. It is a disconnect that has existed for well over a decade. And it is a disconnect that has persisted throughout tough financial times, to the other side of Great Recession.

Tuition and fees in American higher education have increased well above the consumer price index. That is well known, and has become a major public policy issue.

What is assumed by many policymakers and policy commentators is that faculty labor costs are significant drivers of those tuition increases. Thirteen tables, with much data have been presented and analyzed in this paper. The simplest and most telling piece of data, though, bearing on the question at hand is that from 2002-2013, in every sector of not-for-profit higher education, total instructional salaries and wages as a share of total education and general expenditures declined (see Table 9). As tuition went up, instructional salaries and wages went down as a share of institutional expenditures. And in every sector of public higher education, which has experienced the largest tuition increases, the decline in share was in double digits.

The framing logics, unsupported by the data. Policy discourse on academic labor costs has not caught up with the new realities of internal resource allocation and

cost structures in higher education. Much public discourse and prevailing public policies are based on faulty premises. The data systematically run counter to the three framing logics regarding the cost challenges that compromise college affordability.

One logic is that professors are framed as an expensive labor cost that must be contained in order to contain rising tuition. Faculty are too expensive, and that causes higher education to be too expensive. Yet from 2002-2013, as a share of total educational and general expenditures, the salary outlays for full-time faculty, who are the most "expensive" segment of faculty, have declined in every sector of non-profit higher education except non-selective liberal arts and private research/doctoral institutions (see Table 3), where the share increases were tiny (.48% and .06%). The declines were double digit in three sectors (public research/doctoral, public masters, and public bachelors) and 8.92% in public two-year institutions. Those numbers are consistent with the fact that the average number of tenure-track faculty per 1,000 FTE students declined in every sector of American higher education (see Figure 5), and that there was a decline in tenured/tenure-track share of full-time faculty in every sector except public research/doctoral (see Table 4), where the increase was but 2.06%.

A second logic framing public discourse is that higher education suffers from a "cost disease," a chronic condition of labor-intensive production that prevents substantial increases in productivity. Faculty are assumed to be the vast majority of college and universities' professional workforce and of its labor costs. The problem is stagnant productivity from a labor force that is resistant to technological change. That underlies the search for new models of delivering higher education curricula technologically, to reduce the per-unit costs of production by modernizing higher education.

Yet the assumptions embedded in this framing of the problem are unsupported by the data. In every sector of American higher education full-time faculty are a declining share of higher education's professional workforce (see Table 6). Moreover, in every private sector of higher education, as well as in public research/doctoral, the average number of full-time faculty per 1,000 FTE students in 2012 was less than the combined totals of executive/administrators and other professionals (see Table 7); in the three other public sectors of higher education, the averages were only slightly larger. In five sectors the increase in executive/managers was in double digits. In short, policymakers are unaware of the fact that full-time faculty are not the only and often not the majority of professional employees on campuses. If there is a cost disease, it lies not in the faculty workforce, but in the rapid growth and substantial size of other professional workforces.

A third logic frames the cost challenge in terms of the academic workforce's inflexibility, and the danger of increasing that inflexibility as adjunct faculty unionize. Such unionization is connected to the threat of increased labor costs and tuition. Yet again, however, the data belie the assumptions. Throughout the time period in question, in every sector of not-for-profit higher education except private research/doctoral, the full-time faculty share of the faculty workforce declined (see Table 12). In five sectors the decline was in double digits. Thus, the full-time segment of the faculty workforce, over which managers have the least flexibility, declined. And the segment over which managers have extensive flexibility grew, and did so quite dramatically (see Tables 11 & 13). The differential rates of growth are quite dramatic, on the order of fivefold, nineteen fold, and in a pattern of double digit growth in the average number of part-time faculty

per 1,000 FTE students at the same time there was significant decline in the average number of full-time faculty per 1,000 FTE students.

Thus, managerial flexibility, which was already considerable at the turn of this century, increased dramatically during the past decade. At the same time, tuition increased in constant dollars by 29.17% in private four-year institutions, 48.19% in public two-year institutions, and 57% in public four-year institutions. Far greater managerial flexibility failed to yield cost containment in tuition in any of the public or private sectors of higher education.

The prevailing assumptions about faculty labor costs, and calls for new business models for producing higher education to address the "new normal" in the policy arena are neither new nor accurate. One of the conclusions of a late 1990s study of academic labor rings true for the subsequent decade (Rhoades, 1998a, p.80):

The point is that faculty and their salaries are not as central and overriding a part of the institution's portfolio and expenditures as they once were. I emphasize this point in closing because academic managers, and others in and outside the academy, tend to believe that restructuring requires major reallocations and/or reductions in academic departments and personnel because faculty are the overwhelming source of personnel expenditures, which in turn account for an overwhelming share of institutional expenditures. Not true.

For all the talk of higher education requiring dramatic change in the form of a new business model, by the 1990s the industry had already been undergoing substantial restructuring of its cost structures internally. Many analysts and policy players have rightly emphasized the importance in public higher education of how declines in state

appropriations are linked to shifting the burden of bearing higher education's costs to students and their families. More than that, though, as our data show, that fundamental shift in internal resource allocation within colleges and universities away from core academic personnel and functions of college continued in the 2000s, into and through the Great Recession. But it has not curtailed tuition hikes, which have increased in all of higher education, even as investment in academic labor has decreased in relative terms.

Where is the problem? It would seem that there is a sort of malady plaguing higher education that is distinct from the unfounded premise of a faculty cost disease. It is a malady of misplaced, misaligned priorities within higher education, accompanying the shortsighted, misplaced, and counterproductive priorities of state governments in cutting higher education. The malady has to do not with chronically expensive, stagnant (in their productivity), and inflexible (in their employment conditions) academic labor, but rather in considerable part with dramatically increasing support professional and administrative labor costs, as well as other non-instructional and non-personnel costs.

Disproportionate salary increases for presidents and senior administrators is good copy for the press. It captures headlines, as in a recent InsideHigherEd headline and opening line, "Administrator Pay Up 2.4%" (Jaschik, 2015)—"The median base salary for senior leaders at colleges and universities has gone up 2/4% in 2014-2015, the same as the year before." Based on a recently released CUPA-HR report (2015), the article and report point to continued, steady growth in the median base salaries of professionals (not of professors, but executive/managers and other professionals).

Beyond the salaries of some high profile administrators (and coaches), however, there is a deeper problem embedded in the changing structures of employment and internal resource allocation in higher education. And there is a seeming paradox.

Much public attention has been focused on overpaid, under-worked, inflexible professors, on a cost disease that is said to impede academe's productivity. Many policy levers have been developed to monitor, technologically infuse, and make for a more flexible production process to reduce labor costs and contain "unsustainable" tuition increases (which though said to be unsustainable, continue to increase).

At the same time, in a policy environment of hypersensitivity about accountability and productivity of production workers (the faculty), institutions are in relative terms investing more institutional resources in non-academic labor personnel and activities.

Revenge of the managers: From lean and mean to fat and mean. The data on higher education may seem paradoxical, and counterproductive. But the data parallel what has happened in the broader economy. In the last quarter of the 20th century despite "financial critiques of inefficient corporate bureaucracies, and the resulting wave of downsizing, mergers, and computerization [that] subjected mangers to unprecedented layoffs... the proportion of managers and their average compensation continued to increase during this period." (Goldstein, 2012, p.268) How did this happen? How did a public critique of inefficiency translate into ever increasing ranks of non-production, midlevel managerial personnel?

The seeming paradox was explained by several managerial strategies that ironically translated a discourse about becoming "lean and mean" into practices that left the organizations what Gordon (1996) described as "fat and mean."

By favoring sticks over carrots, this low-road employment logic breeds managerial control strategies that demand extensive monitoring, thereby boosting the ranks of managers. ... In other words, strategies nominally oriented towards making firms lean and streamlined had the effect of making them fatter at the top. (Goldstein, 2012, p.277)

The labor control strategies include computerization of work processes, de-unionization, and greater focus on unit-cost production, among others. It is not hard to draw analogies to higher education policies here, at the state as well as the institutional level.

The study's conclusions, that, "The findings...present much more rigorous evidence for a causal relationship between labor cost-cutting strategies and managers' enhanced standing," (Goldstein, 2012, p.289), include an emphasis on the fact that the managerial increase is not just among top executives. The result is a greater managerial presence, a pattern identified in higher education amidst the growth of "academic capitalism" (Slaughter and Leslie, 1997; Slaughter and Rhoades, 2004), with the expansion of managerial capacity with increased numbers of managerial professionals.

It is time to move beyond the false premises that frame public discourse and policy in American higher education. Faculty labor costs are *not* a major driver of college tuition increases: In fact, there is a counterintuitive, counter-directional relationship between their trend lines.

In relative terms, the increasing labor costs are non-instructional, among executive/managers and other professionals who in many sectors account for close to or considerably more than the average number of full-time faculty. Certainly, there are many reasons for and drivers of this growth, not only within colleges and universities, but

also in the external pressures on them, from compliance to changing student populations, to the pursuit of self-generated revenues. But just as certainly we need to study these drivers, as well as to develop mechanisms for assessing the productivity of these professionals. Most importantly, if we want to more fully understand the cause of college tuition increases we need to shift our policy gaze from the fat and happy/lazy faculty, as they are too often portrayed in the public discourse, to the fat and mean managerial structures and practices of higher education organizations and policymakers.

Footnotes

1. Given the divergent, often countervailing trend lines in the data on tuition and faculty labor costs, and given the number of tables and graphs we construct to address the question at hand, we concentrate in this report on the descriptive patterns.

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