DELTA PROJECT
on Postsecondary Education Costs, Productivity, and Accountability

House Subcommittee on Higher Education and Workforce Training Hearing
Keeping College Within Reach
November 30, 2911

Remarks from Jane V. Wellman
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- The Delta Cost Project is an independent non-profit policy research organization whose mission is to improve public transparency about higher education finance including comparative data on the ways that institutions spend their resources. Founded in 2006, ours is the only national organization that examines data on revenues and spending for public as well as non-profit private higher education. The IPEDS data on for-profit institutions is not consistent over time, and we haven't yet organized it to be part of our analysis, so I won't be commenting on trends in that sector.

- In my comments today, I will be focusing on what the most recent spending data say about patterns in higher education – particularly changes in where the money comes from, where the money goes, the reasons for continued high rates of tuition increases, and what the data say about where attention should go if we want to reduce pressures on tuition increases.

- Because we look at expenditures as well as revenues, there is a lag in our data, as spending data take a little longer to post than revenues. The patterns I'll describe today rely on data through the 2009 academic year – the first year of the "Great Recession." We know that the revenue situation has continued to deteriorate since then, particularly in the public sector, and if we were able to get current data I'd imagine it would show an additional loss in public and gift revenues in the neighborhood of an additional 5% on average. But the broad patterns behind these numbers – the dynamics between revenues and spending, and the role of the market in cost structures – are pretty consistent, and I think good indicators of the main cost dynamics facing institutions and students in 2011.

Focus on the following 5 points:

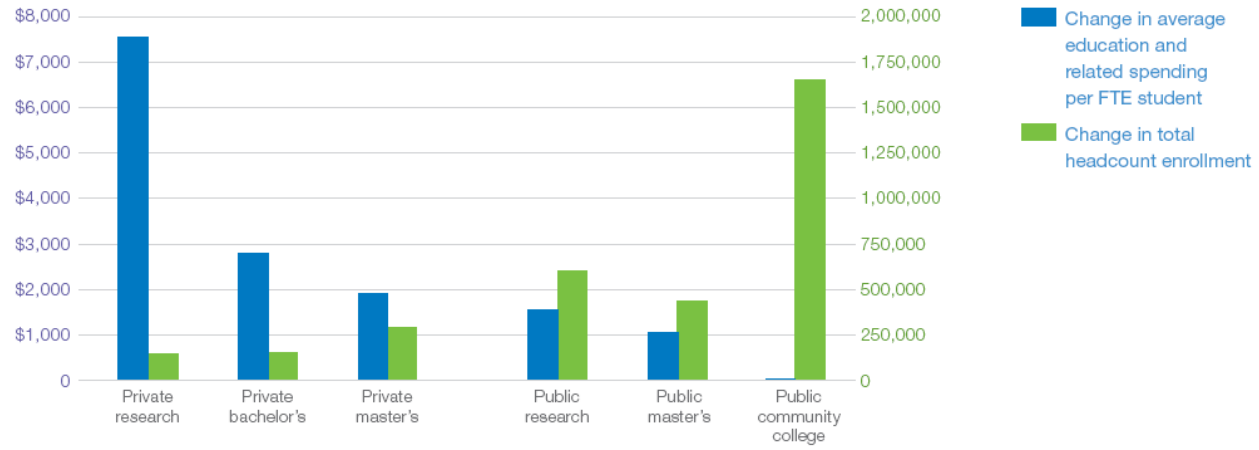
1) *Growing economic stratification between institutions*. One of the stories of the last two decades has been a growing gap between public and private institutions in terms of wealth, and in terms of enrollments. Among a relatively small number of elite private research universities, revenues from endowment earnings have grown far faster than anywhere else in higher education, against modest increases in enrollments. At the other end of the continuum, community colleges enrolled 1.6

million more students in 2009 than in 1999, with no increases in funding. (See figure 1).

Figure 1

New money versus new students—enrollment growth is concentrated in public institutions, which have had less access to new resources

Ten-year change in enrollment versus 10 year change in spending per FTE student, AY1999-2009 (in 2009 dollars)



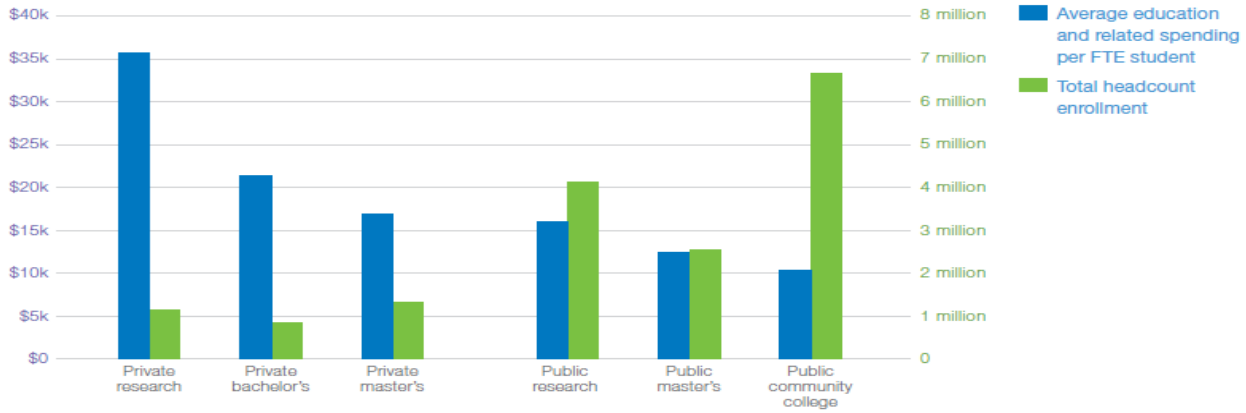
Source: Delta Cost Project IPEDS Database, 1987-2009; spending data from the 11-year matched set; enrollment data from the unmatched set.

The frequent media focus on the wealthiest and most selective institutions tends to skew public perceptions about higher education finance. It is true that the US has some of the very richest institutions in the world –but the large majority of students are being served in institutions about the same amount of spending per year as our K-12 schools.

Figure 2

Institutions enrolling the most students spend the least on their education

Enrollment versus spending per student, AY2009 (in 2009 dollars)



Technical note: Our measure of 'education and related' spending per student by combines spending for instruction, student services, and the educational share of overhead (academic and institutional support and the physical plant). We exclude sponsored research, auxiliary enterprises (hospitals and dormitories) and capital outlay. See "Trends in College Spending, 1999-2009," for more details, available at http://www.deltacostproject.org

2) The second theme is that *tuitions are continuing to rise – but much faster than spending or costs.* The reason is because of cost-shifting – tuitions are going up in part to replace revenues from state/local appropriations or because of declines in gifts or endowment earnings. For the majority of institutions, increases in tuition do not translate into comparable increases in spending. Cost shifting is most dramatic in the public sector, where revenues per student from state and local appropriations have been declining, but it is also evident among the majority of private institutions that are very tuition dependent, and don't have large endowments and rely on private gifts. In times of recession, such as 2009, institutions are both raising tuitions and cutting spending. The price/cost gap – the amount being charged to students versus what institutions are spending on them – has been a problem for years, and something that we think is unsustainable as we go forward. In 2009, among public institutions, tuition increases attempted to compensate for lost revenues from state and local budget reductions, but new revenues from tuition increases covered less than half of the reduction in state and local appropriations. (See figure 3.)

Looking at public research institutions, for example, average net tuition revenue increased by $369 per student between 2008 and 2009, but the loss in state and local appropriations per student was $751, slightly more than twice the amount generated in increased tuition revenues. (Net tuition revenue means that we are only looking at tuition revenue after tuition discounts, which are also going up.) Despite that, institutions were able to maintain education and related spending at roughly the same level as in prior years. To keep spending flat in the face of revenue losses, public institutions were clearly taking measures to reduce spending, as well as pulling from reserves or other revenue sources. We suspect that spending cuts will be larger in 2010 and 2011 when reserves are depleted and the ARRA money runs out.

Among public community colleges, revenues from state and local appropriations declined an average of $488 per student between 2008 and 2009, whereas tuition increases generated new net tuition revenues of only $113 per student. Spending declined overall by -$254/student – an absolute decline of around 2% overall.

The tuition/spending story is somewhat different in the private sector, particularly among the private research sector where some of the institutions with the biggest endowments are lodged. Education and related spending in private research universities increased considerably more than increases in tuition revenue ($907 in spending per student compared to $293 in tuition revenue per student), suggesting that they still had plenty of new revenue in endowments despite suffering heavy paper losses in that year. This was not the case, however, for students in private master's

and bachelor's institutions where tuition revenue increases were larger than spending increases.

Figure 3: 2008 – 2009: One-year change in *revenues* per student from tuition/state appropriations compared to changes in *spending*			
Sector	**One-year change in net tuition revenue per student**	**One-year change in state and local appropriations per student**	**One-year change in education and related spending per student**
Public Research	+$369	-$751	+$92
Public Masters'	+$225	-$590	+$26
Public Community Colleges	+$113	-$488	-$254
Private Research	+$293	NA	+$907
Private Masters'	+$536	NA	+$352
Private Bachelors'	+$381	NA	+$298

If one examines these figures over a ten-year period, one sees an even greater price/spending disconnect, with tuition increases more than replacing state/local appropriations in public institutions, allowing for fairly modest spending increases in the research and masters' institutions (between $100 and $150/student/year, or around 1% per year despite losses in state/local appropriations). Among private institutions, the research sector again is the one area where prices are going up at a slower rate than spending. In this sector, spending increases over the decade were around $700 student on average per year, around 2% per year. (See figure 4.)

Figure 4: Ten year change in *revenues* per student from tuition/state appropriations compared to changes in *spending*			
Sector	**Net tuition revenue per student**	**State and local approps revenue per student**	**education and related spending per student**
Public Research	+2650	-1502	+1566
Public Masters'	+1848	-955	+1058
Public Community Colleges	+811	-346	+38
Private Research	+3538	NA	+7575
Private Masters'	+2969	NA	+1962
Private Bachelors'	+2986	NA	+2804

3) *Spending patterns over time*. We look at spending by broad area, to see what the patterns are in how money gets spent. In 2009, analysis of spending patterns shows that public institutions were cutting spending in administration and plant maintenance, but protecting spending for instruction and student services. This is quite different than what we've seen in other recessions, when spending reductions were more typically across the board. The effect of this over time has been that instructional spending has eroded somewhat relative to increases in academic and

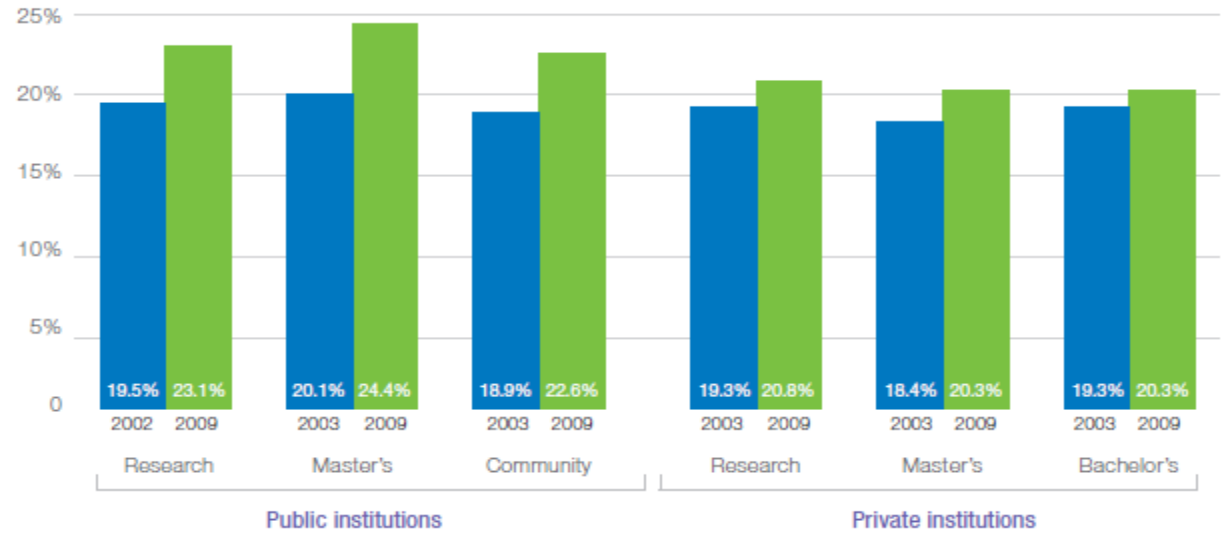
institutional support – because instructional spending is the single biggest area of spending, so cutting across-the-board means that cuts there are greater than in other areas. We think this means that institutions were being more strategic in their approaches to spending in 2009 – probably because they and everybody else knew that this recession was going to be longer and deeper than what they'd seen in the past. Whether they can sustain that in future years remains to be seen. In earlier recessions, institutions have been able to count on revenues returning after one or two years. When revenues returned, spending patterns typically bounced back to where they were before the recession. Most analysts do not predict state and local appropriation revenues to return to pre-recession levels in public institutions for the foreseeable future.

4) *Factors driving up spending.* Looking again at what is driving spending within institutions, the data show that the single biggest area of growth in spending has been for employee benefits. Spending for salaries has been growing less than one percent a year – in part because institutions have been cutting costs by turning to part-time faculty. But even as salary costs are being managed, benefit costs have been growing in the public sector an average of 5% per year. This effectively means that pretty much all of the new money coming in from tuition increases were going out the door to pay for the growing cost of health care. It also means that the single biggest area where cost controls can make a difference in taking pressure off of tuitions is in reductions to costs of health care. There are other ways for institutions to increase efficiencies, through pruning of the academic programs, consolidation of administrative services, and in better use of consortia or cooperatives for both programs and services. But none will yield the immediate savings both in the near and long term as from reductions in health care costs. (See Figure 5)

Figure 5: Changes in Salary/Benefit Cost per employee – 2002-2009

Public institutions	Salary outlay per employee	Benefit cost per full-time employee
Research	0.9%	5.2%
Master's	-0.6%	4.6%
Community colleges	0.7%	5.2%
Private institutions		
Research	-0.3%	1.6%
Master's	-0.8%	2.4%
Bachelor's	-0.5%	1.3%

Figure 6: Benefit share of total compensation costs, AY 2002-2009



Source: Delta Cost Project IPEDS Database, 1987-2008; 11-year matched set.

5) *Signs of increasing instructional productivity.* My last comment will be on a more positive note: The data in 2009 show some promising signs of increases in instructional productivity in public institutions – meaning a slight uptick in the production of degrees relative to student enrollments, as well as an overall decline in the average number of credit hours per graduate. Aggregate degree productivity is measured by comparing overall production of degrees against enrollments. It is not a measure of student cohort graduation rates, but a gross measure showing how enrollments are converted into degrees or certificates. All types of institutions saw increases in degree and certificate productivity between 1999 and 2009, with the greatest gains in public and private masters' institutions. Community colleges also saw gains in completions, in this case, primarily in a great increase in certificates rather than in more degrees.

   Public institutions also increased instructional productivity through reductions in credit hours per completion. Data on credit hour production are newly available beginning in 2002; our analysis of undergraduate credit hours per degree/credential show reductions in average credits/completion of between eight and ten credit hours over this period –translating into a 'savings' of nearly a half a semester's worth of credits. Instructional productivity also increased at the graduate level for both public and private institutions. While the trends suggest credits are being used more efficiently, this metric does not necessarily mean that the average number of credits per *graduate* is also declining. From these data, we do not know if the gains are occurring because of declines in attrition, or reductions in 'excess' credits beyond those required for the degree.

Figure 6: Degrees/Certificates produced per 100 FTE Students Enrolled – 1999-2009			
Sector		**Total Degrees per 100 FTE students**	**Total Certificates and Awards per 100 FTE students**
Public Research	**1999**	23.6	0.3
	2009	24.4	0.5
Public Master's	**1999**	22.3	0.3
	2009	23.3	0.6
Community Colleges	**1999**	14.7	8.0
	2009	15.0	10.6
Private Research	**1999**	30.5	0.4
	2009	31.5	0.9
Private Master's	**1999**	29.7	0.8
	2009	31.7	1.3
Private Bachelor's	**1999**	22.1	0.6
	2009	22.9	0.4

Figure 7: Credit Hours per Degree

	Undergraduate			**Graduate**		
	2002	**2009**	**2002-2009 Change**	**2002**	**2009**	**2002-2009 Change**
Public research	164	153	-10	77	70	-8
Public master's	169	160	-9	66	59	-7
Public community colleges	173	164	-9	---	---	---
Private research	141	140	-1	71	65	-6
Private master's	134	132	-2	62	58	-3
Private bachelor's	148	152	4	---	---	---

Note: Graduate data excludes first professional; data were winsorized to adjust for outliers.

Source: Delta Cost Project IPEDS Database, 1987-2009; 11-year matched set.