Spending, Subsidies, and Tuition: Why Are Prices Going Up? What Are Tuitions Going to Pay For?

A Delta Data Update 2000–2010
Spending, Subsidies, and Tuition: Why Are Prices Going Up? What Are Tuitions Going to Pay For?

A Delta Data Update, 2000–2010

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This is one in a series of data briefs developed by the Delta Cost Project at AIR using data from the IPEDS Analytics: Delta Cost Project Database 1987–2010, which was released on August 14, 2012, by the U.S. Department of Education, National Center for Education Statistics. The intent of these briefs is to update key tables and figures from Trends in College Spending: Where does the money come from? Where does it go? What does it buy?¹

This data brief focuses on the relationship between spending, subsidies, and tuition between 2000 and 2010, with particular attention paid to changes between 2009 and 2010. By examining the changes in education and related (E&R) spending as they relate to changes in tuitions and institutional subsidies, this brief seeks to address whether tuitions increase to cover additional institutional spending or to make up for declines in other revenues. Key metrics discussed include the following:

- Subsidy and tuition share of costs, the relative portion of E&R costs paid by students through tuition revenues versus those that are subsidized by the institution
- E&R spending changes compared to changes in tuitions to determine whether rising tuitions are primarily explained by increased spending or cost shifting

All the Delta measures are reported in 2010 constant dollars and adjusted for changes in enrollments by dividing dollar amounts per full-time equivalent (FTE) student enrollment. A table presenting FTE enrollment changes is included in the supplemental table section of this update.

Primary Findings on Spending, Subsidies, and Tuition, 2000–2010

In public and nonprofit private colleges and universities, revenues from student tuition and fees do not cover the full cost of educating students (i.e., E&R costs); the difference comes from a general institutional subsidy. In public institutions, the subsidy share of cost is largely underwritten by state and local appropriations; in private nonprofit institutions, it is underwritten by tax-exempt institutional resources, either earnings on endowments or private gifts. Figures 1 and 2 show the average dollar amount and percentage of E&R costs covered by net tuition revenues and institutional subsidies.

Figure 1 shows the following:

- **Institutional subsidies per student at public institutions declined in 2010, dropping to their lowest level in the past decade for most public institution types.** Across public four-year institutions, average subsidies per student declined by 7 to 9 percent ($518 to $659 per FTE student). Community colleges suffered the largest one-year declines, as average subsidies dropped by nearly $1,000 (about 14 percent) per student, in the face of continuing steep enrollment increases. Looking across the 2000 to 2010 period, subsidy levels reached a 10-year low at public research, master’s, and community colleges; among public bachelor’s institutions, subsidies in 2010 averaged close to 2005 levels.

• Over the 2000 to 2010 period, average subsidies per student declined by close to $2,000 in public research universities and community colleges, while subsidies in public master's and bachelor's institutions declined by approximately $1,700 and $1,400, respectively.

• Although subsidies in the private research sector saw a one-year decline between 2009 and 2010, over the entire decade the subsidy share of costs increased by almost 30 percent—the lone exception to the pattern of subsidy reductions elsewhere in higher education.

Figure 1
Institutional subsidies continued to drop in 2010, in BOTH public and private institutions.
Average education and related spending per FTE student, by net tuition and subsidies, AY 2000–2010  (in 2010 dollars)

Figure 2 shows the following:

- **Tuition revenues covered more of educational costs in 2010 than at any point in the last decade.** The proportion of costs covered by tuition increased in both public and private institutions between 2009 and 2010. The increase ranged between 3 and 4 percentage points in public colleges and universities and between 2 and 3 percentage points in private colleges and universities.

- In public research and master’s institutions, students covered over one half of the total E&R costs, and in public bachelor’s colleges, tuition share of E&R was close to one half.

- The tuition share of costs is always higher in private institutions because of the lack of state and local appropriations. The tuition share of E&R costs ranged from 73 percent in private bachelor’s colleges to 76 percent in private research institutions to 92 percent in private master’s institutions.

- Changes in the subsidy share of E&R spending were particularly dramatic in public colleges and universities between 2000 and 2010. The subsidy decline ranged from 13 percent in community colleges to 18 percent in public research universities.

- Subsidies also declined in private institutions over this 10-year period but not to the extent of public institutions. Declines ranged from 4 percent in private research universities to 8 percent in private bachelor’s institutions.
Tuition revenues continued to shoulder a larger share of costs.

Net tuition and subsidy shares of education and related costs, AY 2000–2010 (in 2010 dollars)

Figure 3 compares shifts in net tuition, state and local appropriations, and E&R spending between 2009 and 2010. This analysis provides insights into whether tuition increases are compensating for declines in state appropriations and/or increases in E&R spending.

- **Increases in net tuition in 2010 resulted from cost shifting, not from increased spending.** Among public institutions, increases in net tuition revenue per student between 2009 and 2010 were considerably less than the declines in state and local appropriations in this same time period. Tuition increases per student made up over 60 percent of the cuts in state and local appropriations in public research and master’s colleges, about 30 percent in public bachelor’s colleges, and only 14 percent in community colleges. In addition, all public institutions cut E&R spending per student between 2009 and 2010. These cuts were also less than the declines in state and local appropriations.

- Unlike the period between 2008 and 2009, private institutions reduced E&R spending between 2009 and 2010. Tuition increases in private research and bachelor’s institutions were smaller than spending cuts, but in private master’s institutions, tuition increases were larger than the decline in E&R spending. With the exception of the private master’s institutions, students were paying more in both public and private colleges and universities in 2010, but these dollars did not translate into new spending.

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**Figure 3**

**Tuitons increased primarily to replace institutional subsidies—not to enable new spending.**

Changes in net tuition, state and local appropriations, and education and related spending per FTE student, AY 2000–2010 (in 2010 dollars)

## Supplemental Tables

### Figure S1
FTE enrollment, AY 2000-2010

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2005</th>
<th>2009</th>
<th>2010</th>
<th>10-year change</th>
<th>1-year change</th>
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<tbody>
<tr>
<td>Public research</td>
<td>2,996,782</td>
<td>3,346,624</td>
<td>3,561,280</td>
<td>3,669,834</td>
<td>22.5%</td>
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<td>Public master's</td>
<td>1,722,723</td>
<td>1,950,242</td>
<td>2,092,926</td>
<td>2,163,384</td>
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<td>Public bachelor's</td>
<td>237,245</td>
<td>274,466</td>
<td>290,398</td>
<td>307,902</td>
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<tr>
<td>Public community colleges</td>
<td>2,843,154</td>
<td>3,496,802</td>
<td>3,801,306</td>
<td>4,251,990</td>
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<td>Private research</td>
<td>837,277</td>
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<td>977,558</td>
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<td>Private master's</td>
<td>790,952</td>
<td>942,520</td>
<td>1,027,568</td>
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<td>Private bachelor's</td>
<td>595,317</td>
<td>664,245</td>
<td>695,177</td>
<td>716,384</td>
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</table>

About the Delta Cost Project
The Delta Cost Project at American Institutes for Research provides data and tools to help higher education administrators and policymakers improve college affordability by controlling institutional costs and increasing productivity. The work is animated by the belief that college costs can be contained without sacrificing access or educational quality through better use of data to inform strategic decision making. For more information about the Delta Cost Project, visit www.deltacostproject.org.

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