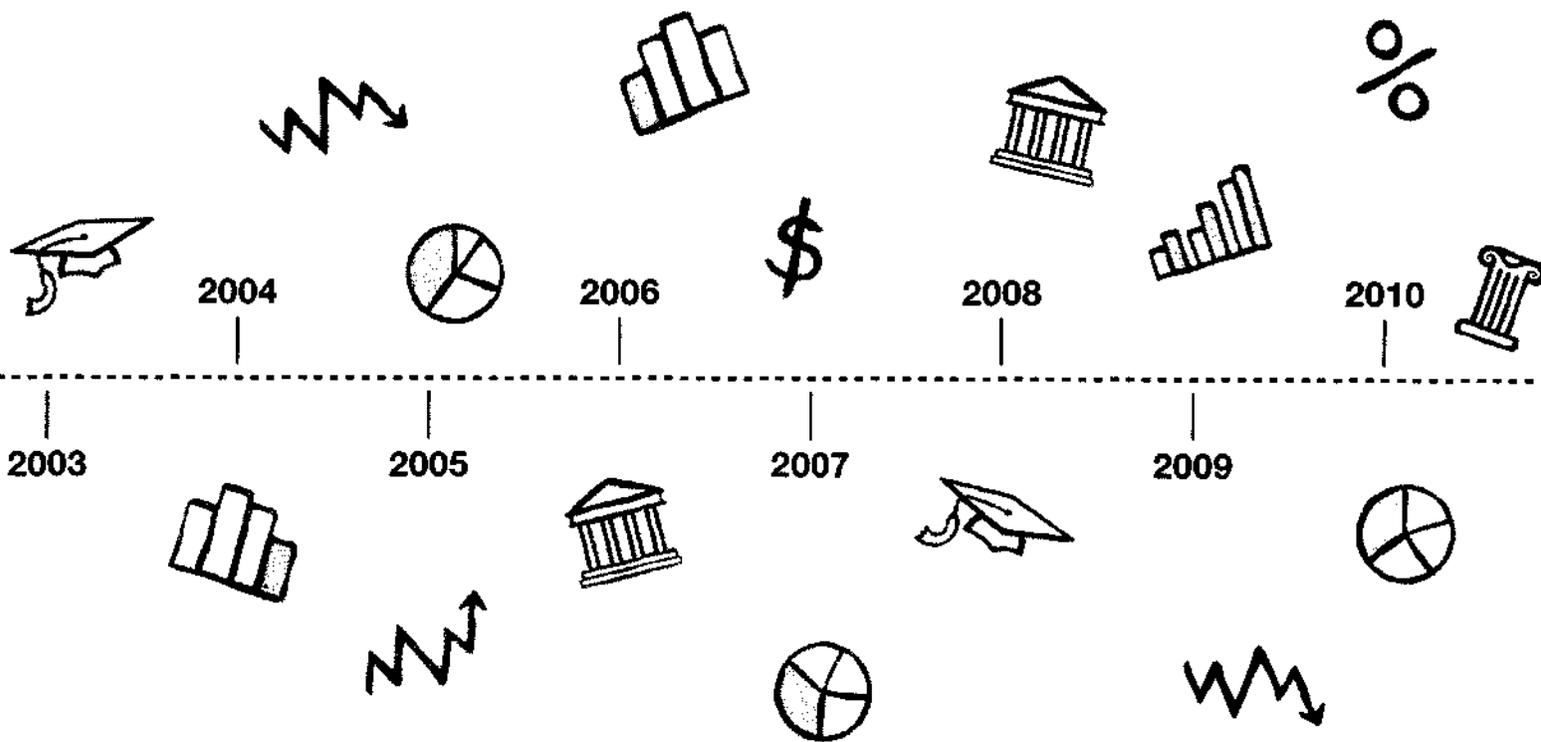


Financial Forecasts for the Next Decade

by Ronald G. Ehrenberg

American higher education institutions can look back on the last five years of the 20th century with fondness. The longest economic expansion in modern times filled the coffers of state governments, and in many states appropriations to public institutions per full-time equivalent student increased in real terms. Private institutions saw their endowments grow at unprecedented rates, growth that was fueled by both the sustained rise in

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stock market prices on endowment values and the increased annual giving that the rise in stock market prices facilitated. The wealthiest private academic institutions used some of the vast increases in their endowment wealth to substantially increase the generosity of their financial aid programs. Williams College went even further and announced that it would not increase its tuition and fees for the 2000-2001 academic year.

Fueled by interest in biomedical research, federal funding for the direct costs of research also started to grow again in real terms. By the turn of the

century, the president and Congress had expressed interest in substantially increasing research funding for the physical sciences as well. Concern about “keeping college affordable” led to increases in the maximum Pell grant benefit and to the adoption of tax credits for college education. Fears that the National Commission on the Cost of Higher Education’s final report would call for price controls on the academic sector or other punitive actions proved unfounded. All in all, higher educational administrators felt fairly positive about their external environments.

However, as any administrator knows, when on the surface things appear to be going very well, one should look a bit deeper and temper one's optimism. In an important paper written for the National Center for Public Policy and Higher Education, Harold Hovey pointed out that even if economic growth continued, the outlook for state funding of public higher education might not be as rosy as it had been in the recent past.¹

In addition, the inflation rate crept up from under 2 percent in 1998 to over 2 percent in 1999. While still low by historical standards, the Federal Reserve System began to raise interest rates and some people began to worry that this might slow down the economic expansion. The volatility of the stock market increased. Trustees and administrators at wealthy private institutions, who had approved large increases in spending out of their endowments during the late 1990s, began to worry about the implications of a declining stock market for their endowments. In sum, the outlook for both public and private higher education seemed a bit less certain as people looked forward than it did when they looked backward.

State Spending for Higher Education in the Next Decade

According to Hovey's provocative paper, projections are that a rapidly increasing college-age population will push up enrollments at public higher education institutions at a faster rate than the rate of growth of the working-age population. To maintain cur-

rent per-student expenditure levels, and to provide for salary increases for faculty and staff at public institutions that equal the percentage rate of growth of average earnings in the rest of the economy, state governments would have to increase their appropriations to these institutions by more than the percentage increase in total personal income. The reason for this is that total personal income

growth depends largely on average earnings growth in the economy and on the rate of growth of the working-age population.

However, unless new state taxes are enacted, which Hovey believes unlikely in the

present political climate, state tax revenues

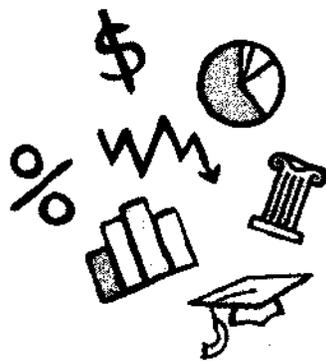
will not grow at the same rate as the growth of total personal income. This is because a large fraction of state tax revenues come from sales tax revenues, which tend to increase at a slower rate than the growth of total personal income. As a result, if states try to increase their overall expenditures by the rate of growth of total personal income, structural deficits in state budgets will result. Thus, states will be hard-pressed to achieve growth rates in appropriations to public higher education that even equal the rate of growth in total personal income.

One can turn to other parts of state budgets to search for expenditure items whose budget shares might be cut to make room for increased higher education expenditures. However, Hovey is justifiably pessimistic that such reallocations will occur. The share of state funds spent on ele-

mentary and secondary education is likely to grow as states focus on higher standards and pursue reductions in class size initiatives. It is apparent that salaries for elementary and secondary school teachers will also have to increase substantially, thereby further increasing expenditures on elementary and secondary education. Higher teacher salaries will be necessary to attract a sufficient number of high-quality individuals into the profession to replace a large number of retiring teachers and to fill new positions created by smaller class sizes. Higher salaries also will be needed to retain existing teachers. The growth of the aged population, rising health care costs for low-income workers (which are borne by states under the Medicaid program), and increasing criminal justice and prison system costs all will negatively impact funding prospects for state public higher education during the next decade.

There are additional reasons for worry as we look forward. The relatively high growth rates of state funding for the publics during the last five years of the 20th century followed a period of substantial decline in the real level of state spending for public higher education. Between 1988 and 1994, state support per full-time equivalent student in public institutions declined by an average of 10 percent nationwide. Institutions made up for some of this decline by raising their tuition levels, but they could not make up for the entire decline this way. Faculty and staff salary increases were limited at the publics and did not keep up with salary increases at private institutions.

In 1978-79, the average full professor at a public doctorate-granting U.S. university earned



about 91 percent of what the typical professor at a private doctorate-granting institution earned. By the early 1990s, this had fallen to less than 80 percent.² Even with the spurt of funding for the publics in the late 1990s, the average 1998-99 salaries of full professors at public doctorate-granting universities had rebounded to only 80 percent of their private doctorate-granting institution counterparts' average salaries. This decline in relative salaries has made it more difficult for the publics to hire and retain top faculty. The prospect of a decade in which state appropriations do not keep up with personal income growth may spell even more trouble down the road.

Likely Responses of Public Institutions

How will public institutions respond to these economic forces over the next decade? They obviously will need to continue to diversify their revenue sources. Hovey's projections assume that the share of institutional funding that comes from tuition revenue will remain constant. More likely,

same time, public institutions will also have to offer more merit-based aid to students without financial need to ensure that they will not lose the best middle- and upper-income students to private competitors. These student aid increases will reduce the benefit to the rest of their operating budgets from the higher tuition levels.

Annual fund-raising campaigns and the search for endowments will continue to grow in importance at public institutions. Some of the large flagship campuses of state institutions have long been involved in development activities. Within the last few years, nine of them have been involved in billion dollar campaigns.³ Many other public institutions face a much harder road. Without longstanding major successful NCAA Division I sports programs that tie alumni to the institutions, and without a tradition of alumni giving (after all, alumni at many public institutions historically have believed that the states fully finance the institutions), they face an even tougher task.

public institutions. However, try they will. In the process, they will draw fire about attracting some funds that otherwise might have gone to smaller private institutions.⁴ Fund raising is not a zero sum game, but as more institutions increasingly become involved in the quest for funds, the amount they raise is unlikely to be all net additions to total higher education giving.

More and more public institutions are also moving their intercollegiate athletic programs to the NCAA Division I level in hopes of attracting enrollments and more alumni and community attachment (and, thus, more future giving). They are doing this in spite of the fact that most Division I sports programs lose money on their current operations and that there is only very ambiguous evidence that such action can positively impact enrollments or donations.⁵

Public land-grant institutions have long been involved in disseminating the knowledge they produce through agricultural and cooperative extension services. Hence, they have a long history of involvement in distance learning. For the most part, they have viewed distance education as a public service, not as a revenue-producing activity. However, the growth of the Internet opens up possibilities for the sale of individual courses to other institutions, to students from other colleges, and to an institution's own undergraduate students. It also facilitates the provision of continuing education courses, a variety of graduate professional degree programs, and executive education courses. A few public institutions have moved aggressively to establish private, for-profit subsidiaries to generate revenue for their core activities. Most publics, however, lag far behind their private counterparts in this arena.

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if institutions can overcome resistance from governors and state legislators, we will see tuition increases at rates equal to or greater than the rate of personal income growth.

With higher tuition levels, institutions increasingly will have to offer their own need-based financial aid to ensure that they remain accessible to students from low-income families. At the

Unlike the major privates, who attract many students from wealthy families, many of the publics attract first-generation college attendees who come from families of much more modest means. Far fewer graduates of the publics are likely to attain great wealth than their private institution counterparts. This makes the task of raising large sums of money more difficult for the

Likely Responses of State Systems

Projected increases in the number of college-age students threaten to overwhelm many state public higher education systems during the next decade. Finding funds to meet the capital and operating costs of these increased enrollments will not be easy. Some states have responded by encouraging the use of distance learning to reduce physical plant demands. We will see more on-line courses offered to prospective students as a way to decrease their times to degree and reduce campus crowding. To expand access, avoid unnecessary duplication, and hold down costs, many state systems will share specialized courses across units via the Internet and two-way telecommunications.

It is much more expensive for a state to provide a year of undergraduate education at a public research university than it is at a public institution specializing in the provision of bachelor's degrees. Similarly, it is much more expensive to provide a student four years of education at a four-year institution than it is for the student to spend the first two years of his or her college career at a two-year institution. Hence, if a state wanted to meet its increased demand for undergraduate education at the lowest possible cost, one might expect to see increasing usage of two-year institutions to provide the first two years of many students' college education. Similarly, one might envision more growth among public four-year colleges than growth of four-year institutions that also engage in graduate education.

But the fraction of first-time enrolled freshmen at public institutions that attend two-year institutions has declined in recent decades, not increased. Nationally, the share of first-time

freshmen in public institutions enrolled in two-year colleges fell from about 63 percent in fall 1976 to 57 percent in fall 1996. If we restrict our attention to full-time students, the comparable numbers were 46 and 42 percent, respectively. In California, the state probably most successful at using two-year colleges as feeder schools, the share of full-time, first-year freshmen in public

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institutions attending two-year colleges fell from over 70 percent in fall 1976 to 60 percent in fall 1996.⁶ Still, while there are distinct advantages to a student's attending the same institution for his or her entire college career, cost considerations may require a reversal of these trends.

However, simply expanding access to public two-year institutions will not be an efficient way of assuring a four-year college education for qualified students. State two- and four-year institutions must work together much more closely to coordinate curriculum, develop more articulation agreements, and share courses.

The Woes of the Privates

Private institutions likely will face their own financial pressures in the next decade. The long-term economic expansion, relatively stable price levels, increased financing for federal financial aid programs, and federal tax credits for college costs have taken some of the heat off of them for continually raising tuition by more than inflation. The wealthier institu-

tions' coffers have filled as the sustained run-up in stock market prices has increased their endowments and facilitated their fundraising efforts. Higher endowments have permitted them to substantially increase annual payouts from endowments. Those heavily involved in research have benefited from the increased federal support for research, but the indirect cost

rates they have received actually declined during most of the 1990s.⁷ Campus-based financial aid has covered an increasing share of tuition at many institutions, and these institutions worry a lot about the implications of this for their financial futures.

If the stock market levels off or—perish the thought—actually suffers a large loss and then enters into a period of level prices during the next decade, the private institutions' ability to increase spending out of endowment funds will be drastically limited, as will their ability to increase fund raising. If they begin to raise their rates of tuition growth relative to the rate of inflation, they will draw increased public attention. As the use of merit aid increases, the commitments of the selective privates to need-based financial aid may weaken. However, if this commitment actually wanes, this too will weaken public support. So, like their public counterparts, the privates also will need to expand their revenue base and become less undergraduate tuition-driven.

Unlike the publics, selective private institutions have restricted their size and tried to maintain or raise academic quality. This is unlikely to change. Hence, to increase revenue, they will turn to other means. Those located in urban areas with large adult populations already have expanded their evening professional degree, continuing education, and executive education programs. More and more, the web will be used to develop distance learning opportunities of the type discussed above. Through these initiatives, and by reaching out to populations beyond their on-campus students, the privates will become more like the publics. However, their motivation will not be one of service, upon which traditional extension programs are based. Rather, their motivation will be to generate the revenues necessary to support their core academic programs.

Another source of increased revenue at the research universities, both public and private, will be the increased commercialization of faculty research findings. Such revenue will be required to help institutions finance their increasingly expensive research infrastructures, and perhaps to help support the other missions of the university. Of course, there are real dangers involved if universities begin to judge the success of their research expenditures largely by the number of patents and the royalties generated by their faculty members' research.

Both privates and publics will be hit by a flood of retirements as the faculty baby boomers begin to reach retirement age. While these primarily white male retirements will present tremendous opportunities to reconstruct faculties along more diverse racial, ethnic, and gender lines, the retirement of tenured faculty members also will facilitate the substitution of

nontenure-track, part-time, and adjunct faculty for tenure-track faculty. All academics bemoan such substitutions, but cost pressures may continue to make them happen.

Some private institutions very prudently establish "reserve" or "rainy day" accounts to help stabilize their finances during tight financial times. For example, in years of high enrollment, excess tuition revenues can be sequestered in a reserve account to provide a buffer for the institution in years when enrollment is lower than expected. In years of high enrollment, however, such funds are often used to balance tight current-year budgets. Put another way, administrators often find it is politically easier to dip into reserves than to take cost-cutting actions. If it does become harder for private institutions to continually increase their revenues in the decade ahead, prudent privates will place more emphasis on cutting costs and will limit use of their reserves to their intended purposes.

Conclusion

Harold Hovey pointed out that the outlook for state funding of public higher education institutions during the first decade of the 21st century might not be as rosy as it has been during the last five years. The pictures I have painted of the financial futures for American public and private higher education echo his concerns. If sustained economic growth continues, academic institutions' financial prospects will be somewhat brighter. However, it is clear that the well-being of colleges and universities nationwide depends upon their diversifying their sources of revenues. Through their efforts to do so, the publics will end up looking more like the privates and the privates end up looking more like the publics. ■

¹ Harold A. Hovey, *State Spending for Higher Education in the Next Decade: The Battle to Sustain Current Support* (Washington, DC: National Center for Public Policy and Higher Education, 1999).

² Ronald G. Ehrenberg, *Tuition Fever: Why College Costs So Much* (Cambridge, MA: Harvard University Press, 2000 [forthcoming]), chapter two provides a fuller discussion of this point. Linda Bell, "Academic Salaries Since the Early 1970s," *Academe* 85 (March/April 1999), pp. 12-20, presents similar comparative data for a broader set of institutions.

³ See John L. Pulley "Public Universities' Ambitious Campaigns Vex Many Small Private Institutions," *Chronicle of Higher Education*, December 3, 1999, p. A39. The public institutions with \$1 billion campaigns were the University of Minnesota, UCLA, UC-Berkeley, University of Michigan (Ann Arbor), University of Illinois (system), Ohio State University, University of Virginia, Pennsylvania State University (system), and the University of Texas (Austin).

⁴ *Ibid.*, p. A39.

⁵ See Andrew Zimbalist, *Unpaid Professional, Commercialism, and Conflict in Big-Time College Sports* (Princeton, NJ: Princeton University Press, 1999), chapter seven, and Ronald G. Ehrenberg, *Tuition Fever*, chapter 17.

⁶ The numbers for all students come from the *Digest of Education Statistics, 1998* (Washington, DC: National Center for Education Statistics, 1998), table 181. Those for full-time equivalent students come from the National Science Foundation's CASPAR system IPEDS files.

⁷ See Ronald Ehrenberg, *Tuition Fever*, chapter six.