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Financial Prospects for American Higher Education in the First Decade of the Twenty-First Century

Abstract
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My objective in this paper is to speculate about the financial futures of both public and private higher education, using Hovey's paper as a base. After outlining his argument about the hard times ahead for public higher education, I will discuss the responses that campus and system administrators may well undertake. I will then turn to the financial pressure that private higher education institutions will face and the likely responses of these institutions. As will come as no surprise to most readers, I conclude that ten years from now the privates will look more like the publics and the publics will look more like the privates.

Keywords
public higher education, private higher education, endowments, financial aid, tuition

Comments
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FINANCIAL PROSPECTS FOR AMERICAN HIGHER EDUCATION IN THE FIRST DECADE OF THE TWENTY-FIRST CENTURY

by

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(Presented at the ACE Annual Meeting, March 20, 2000)

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I. Introduction

American institutions of higher education can look back on the last five years of the twentieth century with fondness. The longest economic expansion in modern times filled the coffers of state governments and state appropriations to public institutions per full time equivalent student increased in real terms in many states. Private higher educational institutions saw their endowments grow at unprecedented rates due to the impact of the sustained rise in stock market prices on endowment values and to 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 started to grow again in real terms. By the turn of the century, the president and congress had also expressed interest in substantially increasing research funding for the physical sciences. 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 College'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 the external environment that their institutions faced.

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 two percent in 1998 to over two 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 the wealthy private institution, who had approved large increases in spending out of their endowments during the late 1990s, began to worry about what the implication of a declining stock market would be for the spending that their endowments would produce. In sum, the future for both public and private higher education seemed a bit less certain as people looked forward than it did when they looked backward.

My objective in this paper is to speculate about the financial futures of both public and private higher education, using Hovey's paper as a base. After outlining his argument about the hard times ahead for public higher education, I will discuss the responses that campus and system administrators may well undertake. I will then turn to the financial pressure that private higher education institutions will face and the likely responses of these institutions. As will come as no surprise to most readers, I conclude that ten years from now the privates will look more like the publics and the publics will look more like the privates.

II. State Spending for Higher Education in the Next Decade

In an important and provocative paper, Harold Hovey made the following observations: Projections are that a rapidly rising college age population will require

[1] Harold Hovey (1999)

enrollments at public institutions of higher education to increase at a faster rate than the rate of growth of the working age population. To maintain current per student expenditure levels and provide for salary increases for faculty and staff at public higher educational 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 public higher educational 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 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 as the growth of total personal income. This is because a large fraction of state tax revenues come from sales tax revenue, 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 arise. 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 elementary and secondary education is likely to grow as states focus on higher standards and pursue reductions in class size initiatives. Hovey did not mention, but it is apparent to many observers, that salaries for elementary and secondary

school teachers will also have to increase substantially, thereby increasing expenditures on elementary and secondary education still further. Higher teacher salaries will be necessary to attract a sufficient number of high quality individuals into the profession to replace the large number of teachers who will be retiring and to fill the new positions created by smaller class sizes. Higher salaries will also be needed to retain existing teachers in the profession. The growth of the aged population, rising health care costs for low-income workers, which are borne by states under the Medicaid program, and the increasing costs of the criminal justice and prison systems all reinforce the view that one should not be that optimistic about the funding prospects for state public higher education during the next decade.

One should also not be so optimistic about the position that public higher education institutions find themselves in as they start the twenty-first century. The relatively high growth rates of state funding for the publics during the last five years of the twentieth century came only after 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 enrolled in public institutions declined, on average, by 10 percent nationwide. The institutions tried to make up for some of this decline by raising their tuition levels, however they could not make up for the entire decline this way. Funds available for faculty and staff salary increases were limited and salary increases at public institutions of higher education did not keep up with salary increases at private institutions.

As a result, salaries of faculty at public institutions of higher education declined relative to salaries of faculty at private institutions. In 1978-79, the average full professor

at a public doctorate granting university in the United States 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, in 1998-99 the average salaries of full professors at the public doctorate granting universities had rebounded to only 80 percent of their private doctorate granting institution counterparts' average salaries. This decline in relative salaries at the publics has made it more difficult for them to hire and retain top faculty. The prospect of a decade in which state appropriations do not keep up with personal income growth surely is not encouraging to administrators at public academic institutions.

III Likely Responses of Public Institutions

How will public institutions respond to these economic forces over the next decade? They will obviously have to continue to diversify their revenue sources. Hovey's projections assume that the share of funding of these institutions that comes from tuition revenue will remain constant. More likely, if they can overcome resistance from governors and state legislators, we will see a decade in which their tuition will increase at rates equal to or greater than the rate of personal income growth.

With higher tuition levels, to assure that they remain accessible to students from low-income families, the institutions will increasingly have to offer their own need-based financial aid. To assure that they will not lose the best middle and upper-income students to private competitors, as their price rises the institutions will also have to increasingly offer merit-aid to students without financial need. The increase in their student aid

[2] See Ronald G. Ehrenberg (2000) , chapter 2 for a fuller discussion of this point. Linda Bell (1999) presents similar comparative data for a broader set of institutions.

budgets 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 become increasingly important to the public institutions. Some of the large flagship campuses on state institutions have long been involved in development activities and 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 a much more difficult task.

Unlike the major privates, who attract many students who come from families with great wealth, many of the publics attract first-generation college attendees who come from families of much more modest means. The fraction of graduates of the publics that attain great wealth is likely to be much smaller than the fraction of graduates of the privates who attain great wealth. This makes the task of raising large sums of money more difficult for the public institutions However, try they will and in the process concern will be expressed that they will be attracting some funds that otherwise would have gone to smaller private institutions[4]. Fund raising is not a zero sum game but as new institutions increasingly become involved in the quest for funds, the amount that they raise is unlikely to be all net additions to total giving to educational institutions.

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[3] See John Pulley (1999). 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 of Virginia, Pennsylvania State (system) and the University of Texas(Austin)
[4] John Pulley(1999)

More and more public institutions, the SUNY university centers are an example, are also moving their intercollegiate athletic programs to the NCAA Division I level in the hope that this will help them attract students and lead to more alumni and community attachment and thus more future giving. This in spite of the clear evidence that most Division I sports programs lose money on their current operations and very ambiguous evidence about whether they have positive impacts on attracting students and donations.[5]

Land grant public institutions have long been involved in disseminating the knowledge that they produce through agricultural and cooperative extension services. Hence public institutions have long been involved 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 World Wide Web opens up possibilities for the sale of individual courses to other institutions, to students from other colleges and to an institution's own enrolled undergraduate students. It also facilitates the provision of continuing education courses to alumni, graduate professional degree programs in a variety of disciplines, and executive education short-courses. A few public institutions have moved aggressively to establish private-for-profit subsidiaries to generate revenue for their core activities[6]. Most publics, however, lag far behind.

IV. Likely Responses of State Systems

Projected increase in many states during the next decade in the number of college age students threatens to overwhelm public higher education systems. Finding funds to meet the capital and operating costs of increased enrollments will not be easy. Some states have responded by encouraging the use of distance learning for undergraduate

[5] See Andrew Zimbalist (1999), chapter 7 and Ronald G. Ehrenberg (2000), chapter 17.
[6] Dan Carnevale (1999)

education to reduce demands on their facilities. We will see more courses offered to prospective students on line as a way of decreasing their times to degree and reducing crowding on public campuses. The sharing of specialized courses across units of the same system is also taking place in some states via the Web and two-way telecommunications, to expand access to offerings, avoid unnecessary duplication, and hold down costs.

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 bachelors' degrees. Similarly, it is much more expensive to provide a student 4-years of education at a 4-year institution than it is for the student to spend the first two years of his or her college career at a 2-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 an increased usage of 2-year institutions to provide the first two years of many students' college education. Similarly, one might envision the growth of public 4-year colleges rather than the growth of 4-year institutions that also engage in graduate education.

Such trends will fly in the face of faculty members' and administrators' aspirations at many of the 4-year public institutions. The fraction of first-time enrolled freshman students in public institutions that attend 2-year institutions has declined in recent decades, not increased. Nationally the share of first-time freshmen in public institutions that enrolled in 2-year colleges fell from about 63 percent in the fall of 1976 to 57 percent in the fall of 1996. If we restrict our attention to full-time students, the comparable numbers were 46 and 42 percent. In California, the state probably the most well-known for using 2-year colleges as feeder schools, the share of full-time first year

freshman in public institutions attending 2-year colleges fell from over 70 percent in the fall of 1976 to 60 percent in the fall of 1996.[7] While there are distinct advantages to a student's attending the same institution for his or her whole college career, cost considerations may require a reversal of this trend.

Simply expanding positions at public 2-year institutions will not be an efficient way of assuring a 4-year college education for any qualified students whom wants one. The 2-year and 4-year institutions in a state have to work much more closely together to coordinate curriculum, develop more articulation agreements and share courses. It will be more important in the decade ahead for a state's public community college system to be more closely linked to its public 4-year college and university systems.[8]

V. The Woes of the Privates

Private institutions will likely face their own financial pressures in the next decade. The long-term economic expansion, relative stable price level, 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 institutions' coffers have filled as the sustained run up in stock market prices has increased their endowments and facilitated their searches for contributions. The higher endowments have permitted them to substantially increase the annual payouts from their endowments Those heavily involved in research have benefited from the increased federal support for research, but the indirect cost rates that they have received actually declined during most of the 1990s.[9] Financial aid has become an increasing share

[7] The numbers for all students come from the National Center for Education Statistics (1998), table 181. Those for full-time equivalent students come from the CASPAR systems IPEDS files.
[8] David Breneman has previously made this point with respect to public higher education in California
[9] See Ehrenberg (2000), chapter 6.

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, their ability to increase spending out of endowment funds will be drastically limited. So too will their ability to continually increase their fund raising. If they begin to raise their rates of tuition growth relative to the rate of inflation, public attention will be quickly redirected at their pricing policies. 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 their public support. So they too also need to expand their revenue base and become less undergraduate tuition driven.

Unlike the publics, which have often viewed expanding their size and serving more undergraduate students as part of their mission, the selective privates have restricted their size and tried to maintain or raise their undergraduate students' 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 have already begun to grow their evening professional degree, their continuing education and their executive education programs. More and more the Web will be used to develop distance learning opportunities of the type discussed above. By doing so, and reaching out to larger populations than their on-campus students, the privates will become more like the publics. However, their motivation will not be the one of service, upon which extension programs are traditionally based. Rather their motivation will be to generate revenues 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 their faculty members' research findings. Research institutions differ widely in how much they recapture in licensing royalties per dollar of annual research funding that their faculty members generate.[10] Such revenue will be required to help them 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.

The privates and their public counterparts will both be hit by a flood of retirements as the baby boom generation of faculty begins to reach retirement ages. While these primarily white male retirements will present them with tremendous opportunities to diversify their faculties along 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 that has been going at many institutions.[11] All academics bemoan such substitutions but cost pressures may continue to make them happen.

Some institutions very prudently establish "reserve" or "rainy day" accounts to help stabilize their finances during tight financial times. For example, in years when over enrollments occurs, the excess tuition revenue that an institution receives is sequestered

[10] For example, if we restrict our attention to the 8 Ivy League institutions, in fiscal year 1998 Columbia's licensing income was 23.6% of its total volume of research expenditures placing it at the top of the group on this measure. Yale was at 11.1% and Harvard at 2.3%. The other 5 institutions were under 2% on this measure. See Goldie Blumenstyk (1999) and the table that accompanies her article.

[11] Estimates are that in 1970 only 22% of professors were working part-time. By 1997, National Center for Education Statistics data suggest that the percentage of part-time faculty had risen to 42.5%. Part-time

in a reserve account to provide a buffer for the institution in years when enrollment is lower than expected. In years of over enrollment, however, such funds are often seen as candidates to balance current year budgets if budgets are tight for other reasons. Put another way, administrators often find that politically it is easier to dip into reserves than it is to take actions to cut costs. If it does become harder for private institutions to continually increase their revenues in the decade ahead, prudent private institutions will place more emphasis on cost-cutting and will restrict the use of their reserve balances to their intended purposes.

VI. Concluding Remarks

Harold Hovey (1999) pointed out that the outlook for state funding of public higher education institutions during the first decade of the twenty-first 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 both American public and private higher education during the next decade echo his concerns. If sustained economic growth continues, academic institutions' financial prospects will be much brighter. However, it is clear that the well being of these institutions depends upon their diversifying their sources of revenues. As I have shown, in their efforts to do so, the publics will increasingly look more like the privates and the privates will increasingly look more like the publics.

My remarks have not addressed all of the financial challenges facing American higher education. For example, I have not discussed the increasing challenge from for-profit proprietary degree granting institutions, which Gordon Winston has discussed

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faculty employment was most prevalent in two-year colleges, where 65% of faculty were part-time. At four-year institutions the comparable number was about 33%. See Courtney Leatherman (2000).

elsewhere.[12] Similarly, I have not discussed how the arms race of spending that the selective privates are engaged in to compete for top students and faculty continues to rapidly ratchet up their cost structures.[13] However, consideration of issues such as these would not alter my major conclusion: Institutions must diversify their revenue sources to be successful in the decade ahead.

[12] Gordon Winston (1999)
[13] See Ehrenberg (2000) for a detailed discussion of this problem.

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