This essay discusses the financial problems faced by higher education institutions in the United States and advances possible solutions to these difficulties. Colleges and universities in the 1990s are confronted with internal desires to expand services and programs, an absence of productivity gains, increasing costs for information and technology, and decreasing state and federal financial support. These constraints have created a period of austerity which has lead to sharp hikes in tuition at public universities, enrollment caps, and class and program cancellations. Policy issues that need to be addressed include: (1) who should receive higher education; (2) who should pay for higher education; and (3) what role should state and federal support play.

Institutional solutions focus on making do with less, doing the same with less, changing the educational delivery system, and sharpening and differentiating institutional missions. State options include high tuition, high student aid policies for state institutions, increased budgetary efficiency, and decentralization. Federal options include student loan reform, national service programs, and commitment to data collection, while philanthropic options include support for institutional studies, leadership and policy studies, and constructive criticism of institutional and government policies.

(MDM)
Higher Education:
On a Collision Course with New Realities

David W. Breneman
Harvard University

December 1993
DAVID W. BRENEeman

David W. Breneman is Visiting Professor at the Harvard Graduate School of Education, where he teaches graduate courses on the economics and financing of higher education, on liberal arts colleges and on the college presidency. As a Visiting Fellow at The Brookings Institution he conducted research for a book, Liberal Arts Colleges: Thriving, Surviving, or Endangered?, to be published by Brookings in 1994. From 1983 to 1989, he served as president of Kalamazoo College, a liberal arts college in Michigan. Prior to that, he was a Senior Fellow at Brookings from 1975 to 1983, specializing in the economics of higher education and public policy toward education.


From 1972 to 1975, he was Staff Director of the National Board on Graduate Education at the National Academy of Sciences, where he wrote on policy issues confronting graduate education. He also served as Executive Editor of Change, The Magazine of Higher Learning.

Dr. Breneman received his B.A. in Philosophy from the University of Colorado, his Ph.D. in Economics from the University of California at Berkeley, and taught at Amherst College before moving to Washington in 1972.
Higher Education: On a Collision Course with New Realities

by

David W. Breneman
Harvard University

Introduction ........................................................................................................... 1

Financial Problems Facing Higher Education .............................................. 2

The New Austerity: How Long Must We Suffer? ................................. 5

Overarching Policy Issues ............................................................................. 8

Possible Responses to the New Austerity ................................................... 11

Institutional Options ....................................................................................... 11

State Options .................................................................................................... 16

Federal Options ................................................................................................. 21

Philanthropic Options ..................................................................................... 23

Concluding Comments ...................................................................................... 24
Introduction

Americans of all ages are upset, perplexed, and disquieted by an economy that has become increasingly sluggish and unpredictable. The old verities — progress, growth, rising living standards, full employment, good jobs — seem threatened at every turn. Corporate giants, such as IBM, Boeing, General Motors, and Sears Roebuck, lose billions of dollars and lay off thousands of employees; foreign competition looms as a threat to people's livelihoods, and job-security declines for virtually everyone; high school graduates entering the labor market face little but dead-end jobs; growing numbers of impoverished, inner-city youngsters lack hope and turn to crime. Federal and state governments seem unable to cope with these and other challenges facing the nation. The list of economic problems and related social ills seems endless.

Higher education could hardly be immune to this general distress and uncertainty. Families see tuitions rise more rapidly than incomes, and worry about meeting the cost; students see enrollments capped, class sections eliminated, and time-to-degree stretching to five or six years; faculty see salaries lag, research support diminish, and class sizes increase; young Ph.D's see positions left vacant, dashing their hopes for academic careers; college administrators wrestle with sharp cuts in state support, unbalanced budgets, and frightening projections of future deficits. Critics of higher education, sensing the increased vulnerability of the enterprise, intensify their efforts and the shrillness of their attacks. Meanwhile, public policy at the state and federal levels remains adrift, and college and university administrators, forced to focus on short-term crisis management, have little energy left to shape a long-term vision and strategy for their institutions. While there is no lack of description and analysis of the financial problems facing higher education, much less has been written about possible solutions, a central purpose of this essay.
Financial Problems Facing Higher Education

A senior administrator at a leading private university recently confided that, based on reasonable assumptions about future revenue and expenditure growth, his university projects a cumulative deficit of between $500 million and $1.1 billion dollars ten years hence. The types of cost-cutting that universities have pursued in the past merely touch the margins of a potential deficit of this size, and he is frankly at a loss how to begin the campus conversation about what to do. He and I, both in our early 50’s and with long careers in higher education, have never dealt with projections this grim, and although his university may face a more severe situation than most, our backgrounds and experiences are typical of those who must wrestle with these unprecedented financial problems. Current leaders in higher education came of age during the decades of largely unbroken growth in enrollments and resources, when presidents and deans measured success in terms of program growth and development. If, as many believe, that era is ending, new skills and administrative capacities will be required to develop policies and undertake changes of the type required. Higher education has not previously experienced downsizing, restructuring, and cost-cutting on anything like the scale that may prove necessary. The collegial nature of most colleges and universities, emphasizing consultation and shared decision-making, seems poorly adapted to the sorts of wrenching change that lie ahead. But how has this financial situation come about? What are the sources of current and projected problems? How have colleges and universities responded thus far?

Higher education (which includes undergraduate education, graduate education, and research) is a labor-intensive activity, with highly decentralized decision-making, conducted in a non-profit setting, and directed by faculty and staff who constantly seek to enhance the quality, scope, and coverage of their activities.¹ As such, there are constant pressures from within to expand activities, enter new arenas of inquiry, broaden the coverage of a field, undertake new investigations, recruit more diverse students, 

serve new constituencies, and improve the quality of the institution. Thus, one explanation for steadily rising costs is simply the presence of internally generated ideas and projects, always in excess of available resources, but providing constant pressure for more resources.

A second reason often cited is the absence of productivity gains in higher education, with rising wages in the overall economy leading to a steady increase in unit costs of education.\(^2\) Higher education has been sharply criticized on the productivity issue in recent years, both in the popular press and in professional circles. Recent hearings before the House of Representatives Select Committee on Children, Youth, and Families, chaired by Representative Pat Schroeder, provides an example of the type of criticism that must be addressed by those in the university world. Among other criticisms, the report castigates faculty for spending more time on research than on teaching, and administrators for adding staff and creating "administrative bloat."\(^3\) It is no longer possible politically to dismiss such reports. Higher education needs to take the initiative in responding to these criticisms by demonstrating that it is possible to reduce the costs of instruction and management of the university.

A third explanation of rising costs points to the particular goods and services purchased by higher education, including library books, journals, scientific equipment and supplies, and other educational inputs that tend to rise in cost more rapidly than the general level of inflation. To address these measurement problems, a separate index of higher education prices has been created, and this Higher Education Price Index is commonly used for cost calculations.\(^4\)

\(^2\) Economists William Baumol and William Bowen have discussed this "cost disease" — see, for example, Baumol and Bowen, Performing Arts: The Economic Dilemma, Twentieth Century Fund, 1966; and William G. Bowen, The Economics of the Major Private Universities, Carnegie Commission on Higher Education, 1968.


Howard Bowen, an eminent economist and university president, having studied the behavior of colleges and universities closely, proposed a “revenue theory of costs” as a fourth explanation for the rising costs of higher learning. His simple conclusion was that colleges and universities raise all the money they can, and spend it all on valued activities. The amount of revenue available, therefore, is the only limit on costs, given the constraint of a balanced budget. Bowen’s theory seems to explain the financial distress facing many colleges and universities today. In the public sector, appropriations for higher education have declined sharply in most states in recent years, while the weak economy has reduced net tuition revenue (tuition minus institutionally funded student aid) below levels budgeted by many private colleges and universities. In the short run, revenues declined (or failed to increase as expected), while cost pressures remained, resulting in financial stress. (Table 1 contains financial data bearing on the discussion in this section.)

The initial response to budget shortfalls was a sharp increase in public sector tuition, unaccompanied in most states by increases in need-based financial aid, thereby reducing access to higher education for low-income students. However, increases were not large enough to offset the loss of state support, however, so spending cuts were still necessary. In the early phases of retrenchment, budget cuts tend to be spread evenly across departments, as institutions seek to maintain planned levels of activity in all areas. Presidents and faculties assume (or hope) that the reductions are temporary, caused by a weak economy and falling state revenues; when the economy rebounds, financial support is assumed to get back on track. As of this writing, few colleges or universities are acting on the assumption that revenues will be permanently depressed, choosing instead to gamble that the shortfalls are cyclical and short-run in nature.

---


the revenue loss proves to be long-term, however, this short-run policy of spreading
the pain evenly may prove to be destructive and wasteful, merely postponing the
necessary — and inevitable — rethinking of the structure and mission of colleges and
universities in a more austere world. A further cost of delay is that overarching public
objectives, such as access to undergraduac programs for all qualified students, may
not be met when institutions, uncertain about long-run prospects, are unwilling to
confront the implications of a new reality.

The most critical — and difficult — issue facing college and university leaders at this
time is the need to make an explicit judgment regarding future revenues, public and
private, likely to be available for support of higher education. This judgment has
profound meaning for the behavior of colleges and universities, yet must be reached
in a context of uncertainty. At one extreme, one might conclude that today's difficul-
ties are merely temporary, caused by a weak economy, and that funding will return
soon to the earlier growth path. That optimistic view must be subjected to hard-
headed analysis, to see whether it is based on more than wishful thinking. An alterna-
tive view, espoused in this paper, is that higher education is moving into a new era of
permanently diminished financial support, and that it is vital that college and univer-
sity leaders, trustees, state and federal policy officials, corporate and foundation offi-
cials, opinion leaders and informed citizens engage in discussion, planning, and ac-
tion consistent with a new reality. The psychological process of denial is powerful
and inviting, but succumbing to that temptation will not serve the country well. We
turn now to arguments suggesting that higher education is entering a new era of
limited resources.

The New Austerity: How Long Must We Suffer?

It is noteworthy when Robert Atwell, President of the American Council on Education
and the leading national spokesman for higher education, writes that, "....higher edu-
cation is in its most dire financial condition since World War II ...." and "i do not think
things will get better until sometime after the year 2010..."8. It is equally noteworthy
when economist Harold Shapiro, president of Princeton University, writes in a recent
issue of Academe devoted to the fiscal crisis:

Indeed, my own view is that in sum we may be facing a long-run situation where the overall rate of growth in revenues to higher education will be somewhat lower than would be necessary to maintain the quality, scope, and method of production of the current system. On the one hand, I believe that the nation’s economy will grow enough to allow higher education to consume a higher proportion of the nation’s GNP. On the other hand, given the certain emergence of effective new institutional actors, the overall resource loop of existing institutions will not be sufficient to allow for a continuation of the status quo."

Shapiro goes on to evaluate the prospect for each major revenue source in the loop (tuition and fees, federal and state support, gifts and endowment income, corporate support, and other income), and finds little reason to think that any source will increase significantly in real terms in the foreseeable future.

These two essays are significant because the views expressed are increasingly shared by a number of close observers of the economics and financing of higher education. Although no one can prove these views correct (only time will tell; and the track-record of past forecasts is not impressive), it will be helpful to lay out the elements of this evolving perspective, for it undergirds the changes proposed later in this paper. In doing so, I am specifying elements of a belief system, albeit one grounded in extensions of current realities.

The first element is the belief that higher education is entering a fundamentally new era, sharply different from the breathtaking growth in enrollments and resources that typified the last four decades. While annual changes were not smooth or steady in the post-W.W. II era, the overall pattern was one of explosive growth, as higher education underwent a remarkably rapid transformation from an elite to a mass phenomenon. That era is ending now, as enrollment prospects in most states stabilize, and public and private resources become increasingly scarce.

The wellsprings of this remarkable period of expansion were two-fold — demographic trends and a strong economy — which made possible a sharp increase in the share of educational expense underwritten by state and federal governments. Both of these engines of growth are diminished now. With the exception of a handful of
states, population pressure no longer fuels expansion, and a sluggish economy and rising federal deficit limit the capacity of state or federal governments to absorb more of the cost of higher education. Indeed, the latter fact may be of overriding importance, for even in such states as California, where relevant population growth continues, the ability of the state to pay for it is in doubt. The immediate response has been enrollment caps, reduced access, and a shifting burden of educational expense from the state to those families that can afford it. Table 2 provides some examples of this trend.

A second element in the belief system is that federal and state budgetary problems are not simply short-run and cyclical, caused by the recent recession, but rather are long-run and structural in nature, likely to continue even when the economy resumes "normal" growth. As far ahead as anyone can see, there appears to be little discretionary revenue available for increased public spending on higher education. In large measure, this situation is attributable to the unsound fiscal policies of the 1980's, which sharply increased the federal deficit, coupled with increased responsibilities shifted to state governments for spending on health care, schools, highways, prisons, and welfare. As a consequence, at the state level, higher education has increasingly become a residual claimant for shrinking discretionary dollars, a situation unlikely to change in the foreseeable future. While the political power of the phrase "No New Taxes" may be waning, along with the political paralysis that it induced, no reasonable observer thinks that the federal budget deficit will be eliminated in this decade, nor are most state budgets likely to experience discretionary surpluses for higher education.

Without elaboration, let me simply state that additional elements in the belief system under discussion include equally bearish views regarding the expansion of private revenue sources, whether in the form of sharply increased tuitions or growth in endowments and annual gifts. The one exception is the belief that tuition in the public sector could be substantially increased without curtailing access if a portion of the new tuition revenue were recycled as need-based student aid. In short, one revenue

10 In 1993, for the first time, states spent more on Medicaid than on higher education. David Shribman, "Medicaid: Bane of the States," The Boston Globe, October 8, 1993, p. 3.
source that could grow substantially is public sector tuition, for many students enrolled in public colleges and universities come from families wealthy enough to pay a greater share of the education bill. While this policy is broadly supported by most economists and others who have studied the matter carefully, until now it has had little political marketability. We may be at a point where economic policy arguments coincide with a practical need for increased tuition revenue, resulting in both more efficient and more equitable financing of higher education. (This proposal is discussed further in the section on state policy options.)

The above themes capture the beliefs about the future that many of us have in mind when we think and write about public policy for higher education in the 1990's and beyond. Rarely are such fundamental judgments articulated fully, and it is one of the merits of the Atwell and Shapiro articles that each author is so explicit about his views. Although events may prove these judgements wrong, we cannot know that now — and yet college and university administrators must decide where they stand on these fundamental issues. If one agrees with this general view, then one would not simply hunker down and spread budget cuts evenly across all units, in the forlorn hope that a resumption of economic growth will allow the college to get back on its prior budget track. Instead, options at the institutional level become sharper and more dramatic, and the public policy issues take on enormous importance. The next section discusses these issues as a prelude to specific suggestions for action at the institutional, state, federal, and philanthropic levels.

Overarching Policy Issues
The views about the future described above may convince some readers but not others, which is understandable given the necessarily speculative nature of such forecasts. The possibility that such discussion could result in self-fulfilling prophecy is a further concern: attempts to look ahead involve the construction of a plausible social reality, which may in turn influence decisions in directions consistent with the forecast. College presidents will, no doubt, continue to try to raise as much money as possible, but if the above forecast is accurate, they will be unable to solve budget problems on the revenue side alone. Therefore, it seems wise to note the policy
issues that must be addressed if one assumes that current levels of austerity will continue — or worsen — in years ahead.

(1) **Who should receive higher education?** For several decades, this nation has supported a broad and inclusive vision of access to higher education for all who seem likely to benefit, or who wish to try it. Education has been seen as the most effective vehicle our society offers for upward mobility, economic opportunity, and social improvement. (Table 3 contains recent data on differences in earnings between high school and college graduates.) State governments built and support the campuses required by this vision, and the federal government provides much of the financial aid that has made access for low-income students a reality. Private colleges and universities also contribute significantly to the access objective, enrolling over 20 percent of all students, and enhancing the institutional diversity of the system.

As noted above, the short-run response to cuts in support has been sharp hikes in public tuition, enrollment caps, and class and program cancellations. Access is being reduced through a combination of price rationing and enrollment limitation.\(^\text{11}\) If the resource outlook is as unpromising as the forecast, the issue of access must be reexamined. Many colleges and universities, left to their own devices, will simply scale back enrollments in order to live within reduced means, striving to maintain the quality of education and research. Under these circumstances, outside intervention in some form may be necessary to preserve access. In order to free resources for undergraduate education, state officials may have to pressure some universities to forgo activities, such as graduate education and research, that are more strongly valued internally than by society at large. Differences in institutional and social valuation are not forced into the open when resources are growing, but they will be central to the debate — and increased social tension — that will accompany a new era of reduced funding.

\(^{11}\) See Gary Orfield, op.cit., for evidence on this point.
(2) Who should pay for higher education? A prolonged time of financial scarcity can be expected to fuel more active debate over how the costs of education are shared among students, families and taxpayers. Unless otherwise prevented by state policy, public universities are likely to press for steadily rising tuitions as a partial offset to reduced state support. As costs are shifted from taxpayers at large to those enrolling, intergenerational strains will increase, as some families insist that students accept more debt. Public universities and colleges may cease to be viewed by many citizens as public at all, and the process of privatization may feed on itself. As states provide less support, the rationale for state control or oversight will diminish, and the strongest universities and colleges may seek independent status. Unless need based financial aid is increased sharply, access in this world will shrink dramatically. Intervention of the type discussed under (1) above may prove difficult, for declining state support undercuts the legitimacy of state control. Because issues of governance are so closely connected with patterns of finance, current understandings and relationships will need to be renegotiated.

(3) What roles for state and federal support? State governments have traditionally provided operating support for public colleges and universities, while the federal government has supported research and student aid. Hard economic times and the spiraling federal deficit, however, have raised complex questions about the future of fiscal federalism in all fields, including education. The extremes of opinion are reflected in the sharply divergent views presented in two recent books published by The Brookings Institution. Michael McPherson and Morton Schapiro, arguing from considerations of equity and efficiency in the financing of higher education, urge the federal government to assume full responsibility for access. Under their proposal, federal Pell Grants would be sharply increased in value, allowing public tuitions to be raised closer to full cost, thereby reducing the burden of institutional support on state budgets. Alice Rivlin, emphasizing the need to reduce the federal deficit, argues that financial responsibility for education and related activities be shifted back to the states, 

allowing the federal government to align its commitments more closely to its capacities. These two proposals, which bracket the range of options regarding future federal and state roles, point to a debate that must be joined.

Virtually all institutions of higher learning will be affected by the new austerity, and administrators, faculty and trustees will be forced to devote as much time to the expenditure side of the ledger as to the revenue side in seeking solutions to financial stress. A central assumption of this essay is that the financing problems cannot be solved by increased revenues alone. Although the financial circumstances of each college and university will vary, no institution will be able to escape the necessity of seeking cost savings. In some instances, colleges may face severe retrenchment, including a reshaping of basic missions. Higher education is indeed entering a new era, in which the old assumptions that have guided action for several decades must be rethought.

Possible Responses to the New Austerity

The balance of this paper is devoted to a brief discussion of options for action at the institutional, state, federal and philanthropic levels. The purpose of this section is to encourage discussion and consideration of a plausible range of responses to the new austerity. Each campus will have to develop its own response, given the diversity of American higher education; there is no single solution.

INSTITUTIONAL OPTIONS: As noted earlier, it is assumed that college and university presidents will continue aggressively to seek additional revenue from both new and traditional sources. It is also assumed that, for most institutions, these efforts will be unsuccessful in generating a rate of revenue growth consistent with historic rates of cost increase. As a consequence, increased attention must be paid to the expense side of the ledger. As institutions focus on reducing costs, rearranging priorities, and changing the mix of activities, approaches can be grouped under four broad headings: (1) Do less with less; (2) Do the same with less; (3) Change the educational

1 Alice Rivlin, Reviving the American Dream (Washington: The Brookings Institution, 1992.)
delivery system; and (4) Sharpen and differentiate missions. As noted earlier, no single answer will cover all cases; each college or university must craft its own approach to the new austerity.

Do Less With Less: This option may make sense for states that face continuing declines in high school graduates, or for individual campuses that anticipate falling enrollments. To the extent that enrollments decline in proportion to the drop in high school graduates and to the reduction in state support, real resources per student (and, presumably, educational quality) are maintained without reducing access. The state of Wisconsin has followed this policy for several years, under the rubric of “enrollment management.” Such a policy eliminates the need to alter basic educational and administrative structures, but it is inherently limited to situations where the potential college-going population is dropping. When the number of high school graduates begins to grow again, as it will in most states by the mid-1990’s, the opportunity that this option provides to evade hard choices will end. For states that have not experienced a drop in high school graduates (and this includes most states in the west), this option amounts to reducing access by lowering the proportion of high school graduates that can be enrolled. Opportunities for older, part-time students are also likely to suffer under this option, which tends to focus on current high school graduates as the population of interest.

Do the Same With Less: This is the short-run response that most institutions have followed. It makes sense only if the drop in resources is temporary, tied to the economic cycle. This option leads to across-the-board budget cuts, as administrators and faculty strive to maintain existing programs and functions. Essentially, the institution absorbs whatever organizational slack, or flexibility, it may have had, which eventually reduces morale, responsiveness, and quality of performance. Because this option avoids the necessity of making hard choices, it is understandable why it is almost always the first step taken when budgets must be cut. It is also an approach that
initially seems most fair, as the pain is spread evenly throughout the organization. It hardly suffices as a responsible option for a world of long-run diminished resources, however, and presidents must have the strong support of trustees when they take on the much harder task of selective retrenchment, deciding which programs to strengthen or maintain, and which to phase out.

One dilemma in particular should be noted here. Faculty and staff may feel misled if they go along with one or more across-the-board cuts, only to experience a second phase of even deeper cuts. Having believed that the first round of cuts would be sufficient, they feel betrayed and therefore less willing to help with the harder tasks of retrenchment and restructuring. Clear and honest communication is essential to minimize this problem, but it is likely to pose serious difficulties, particularly in universities with unionized faculty.

**Change the Educational Delivery System:** This is a broad and sweeping option, that seeks to enhance the efficiency and productivity of both educational and administrative functions. Higher education does not have much of a track record in this regard, for non-profit organizations do not seek to minimize costs, but rather to enhance quality and scope of service. Indeed, concern for the intangible, but vital, issue of academic quality accounts for much of the difficulty in changing higher education in any way other than by adding resources. There is an ingrained and deeply-rooted tendency to believe that any cut in resources necessarily implies a cut in quality, and administrators will have to find ways to challenge that assumption. Preaching the merits of efficiency is not likely to be effective, but presenting a convincing case to faculty and staff that resources are truly limited for the foreseeable future is an essential first step.

The topic of increased productivity in higher education usually focuses on allocation of faculty time, but the concept should also include learner productivity as well. Can students be helped to progress more rapidly, to earn degrees in less time, to avoid prolonged periods of down time? It is interesting that the idea of a three year

---

17 See Johnstone, *Working Papers in a Time of Fiscal Crisis*, op. cit., for discussion of this and other approaches to increased productivity.
baccalaureate degree is under discussion once again, a proposal consistent with the demands of a new era. Year-round operation of the academic plant, another hoary idea, is also likely to surface again. Ways should be found to accelerate the progress of older students, who study part-time in degree programs that stretch out for years; more rapid completion would increase the investment value of their education. Factors that are causing undergraduates to enroll for five or six years in bachelor’s degree programs should also be explored and corrected. Learner productivity, in short, is a useful concept to guide the search for improvements in the educational delivery system.

Change in the allocation of faculty time toward more socially valued activities represents another approach to enhanced productivity. If, for example, increased priority is to be given to undergraduate teaching relative to graduate education and research, then incentive systems must be changed to reflect the new reality and encourage reallocation of effort. Faculty members enjoy considerable autonomy in the use of their time, and are unlikely to respond well to heavy-handed approaches to change; a judicious mix of new incentives, explanation, persuasion, bribery, and fear of consequences will be necessary. A high degree of faculty trust in the values and judgment of top administrators will be essential for successful leadership during this troubled and uncertain time. As noted earlier, no single solution to the financial problem will work for all schools; what may work at Bowdoin College, for example, is unlikely to work at the University of Massachusetts-Amherst. But each institution must cope with the growing concerns of legislators and other supporters over the rising costs of higher education.

Greater control of the curriculum will also be necessary. The freedom faculty have enjoyed to offer the courses each professor wants to teach, leading to an ever-expanding course catalogue, will have to be curtailed. A more cohesive and focused curriculum with fewer electives should produce a more cost-effective academic program, with no loss in educational quality or outcome. Such changes, however, strike at the heart of faculty autonomy, and the wise administrator will seek procedures that im-

pose a budget constraint, while preserving for faculty the power to decide which courses to keep and which to eliminate.

Academic departments could also be given output goals to achieve collectively, thereby encouraging greater division of labor among faculty. If a department was expected to produce specific amounts of undergraduate instruction, graduate instruction, and research, tasks could be divided among the faculty according to each professor’s comparative skills. Such a change would require new evaluation procedures, in which differences in faculty contributions to departmental objectives are acknowledged and rewarded. The new evaluation system would no longer operate on the assumption that each faculty member performs all functions at all times, and would fit well with the changing skills and interests that faculty experience over the life cycle. Consistent with this division of labor, those faculty members who are skilled and interested in developing educational software might be given released time to develop such programs, thereby increasing the use of computer technology in the educational program.

Sharpen and differentiate missions: Although the United States has a rich and diverse set of colleges and universities, program offerings are remarkably similar. With fewer resources, institutions should be encouraged to streamline offerings, taking into account what is available elsewhere in the region. The “comprehensive college or university” may be an educational luxury that can no longer be supported in a meaningful way. Greater campus specialization would allow universities to concentrate limited resources on fewer programs of higher quality. Incentive funding might be the most effective way to achieve this objective, rather than by decree from the system office or coordinating board. Program information gathered at the system level could be helpful and influential in suggesting to each campus logical ways to shape a more specialized identity. One of the benefits of fiscal stress could be the

17 Donald Langenberg, President of the University of Maryland system, has advocated this idea.

urgency given to shaping a sharply-focused vision of how the state's system of higher education should evolve.

The challenge of institutional reform is to find ways to focus and mobilize energies of a disparate group of faculty and staff — who have differing educational values and perceptions about the university — into a sufficiently cohesive unit so that real change can occur. The highly decentralized and collegial process of much university decision-making argues for methods that preserve as much local autonomy as possible, within the context of a guiding vision and clearly defined budget constraints. The challenge to institutional leadership in a time of prolonged retrenchment is enormous, requiring skills that seem to be in short supply. In the absence of such leadership, however, institutional quality and educational capacity are certain to erode.

**STATE OPTIONS:** If one accepts the view that the state share of support for public higher education will continue to decline, then a variety of options might be considered for more efficient use of limited state dollars. The option that has been most discussed in the literature would shift state support away from institutions and into need-based student aid.\(^{19}\) Faced with reduced state support, public universities would have to raise tuition, but access for low-income students could be ensured (at least in principle) through increased student financial aid. This policy, generally referred to as "high-tuition, high-aid," is discussed below, including two forms in which it might be implemented. Carried to its logical conclusion, this approach amounts to privatization of state colleges and universities. Less dramatic state options are also discussed, under the general rubric of "increased budgetary efficiency."

**High-Tuition, High-Aid:** The selling point of this proposal is its potential to maintain enrollment levels and access for low-income students at a lower cost to the state taxpayer. In essence, tuition would rise closer to the average cost of instruction, thereby reducing the subsidy that is currently received by every student who enrolls,

\(^{19}\) See, for example, many of the articles in David W. Breneman, Larry L. Leslie, and Richard E. Anderson, *Finance in Higher Education* (Ginn Press, Needham Heights, MA, 1993.)
regardless of family income. Subsidies would be directed to students from low-income families. Under this policy, a larger share of the cost of higher education would be borne by high-income families, and a lower share by the state taxpayer. Many economists believe that this form of financing would be both more efficient and more equitable than current patterns of support.

One of the criticisms of this proposal has been that it would turn into a high-tuition, low-aid policy in practice, if states fail to redirect some of the savings into increased financial aid. The problem arises because most states have separate financial aid agencies, and a decision to reduce institutional support may not be accompanied by an increase in the financial aid appropriation. Most public colleges and universities have strong lobbying efforts supporting their requests for institutional support, while financial aid agencies are rarely as effective politically. The following example illustrates the two steps required when a separate appropriation must be made for the financial aid agency: Assume the state cuts direct operating support by $10 million, causing the university to increase tuition by enough to replace that amount. Assume that $3 million will be required to meet the increased need of low-income students prompted by the higher tuition. If the state makes that $3 million appropriation, it saves taxpayers $7 million in outlays for higher education, without reducing access. But if the $3 million is not appropriated, state outlays fall by the full $10 million, while low-income students are squeezed out of college. The fear that financial aid will not be raised accounts for much of the opposition to this policy.

An alternative way to accomplish the $7 million savings would be to cut the state appropriation by only that amount, while tuition goes up by enough to bring in $10 million. A separate financial aid appropriation would not be necessary in this case, for the university would have the revenue to meet increased student need. University and state officials would have to reach agreement on the terms of this transaction,

---

20 See Patrick M. Callan, “The California Higher Education Policy Vacuum,” Report 93-2, California Higher Education Policy Center, San Jose, CA, 1963, for a critical discussion of the way the state of California is backing into this policy.

21 Provided that the university keeps its own tuition revenue, which is not the case in all states, e.g., Massachusetts.
but allowing the university to capture its own financial aid might overcome a major objection to the high-tuition, high-aid strategy. In this version, public institutions would be operating very much as private colleges and universities do, recycling a portion of the tuition increase back in the form of selective price discounts.

If state budgets remain under stress, it is all but certain that public colleges and universities will continue to see appropriations cut, leading to sharply rising tuition. Public higher education is one state activity where the potential exists for significantly higher user fees, and it seems reasonable to expect state legislators to act on that fact. Thus, continuing state budget problems are likely to push higher education toward ever higher tuition, and administrators can either fight the change, or work with it by advocating increased support for student aid. If they follow the latter course, public college and university leaders will be joined by their peers from private higher education, who also have a stake in expanding state student aid. With leaders from both sectors working together on behalf of a common policy, prospects for success will be greatly increased.

Another variation on the theme of tuition setting should be noted briefly. One common state policy has been to set public tuition at some percentage of average educational costs, e.g., tuition set to cover one-third of costs. Some analysts have argued that such a policy provides a perverse incentive to raise costs, and have argued instead that tuition could better be indexed to some measure of family income. John Slaughter, president of Occidental College, expressed this view succinctly:

> It is important that tuition rates not be linked to the cost of instruction, because such a practice provides no incentive to keep those costs as low as possible. It would be better to relate tuition rates to an external factor, such as median family income in California. For example, tuition at community colleges, CSU and UC could be linked at progressively higher rates, respectively, to a percentage of the previous year's median family income. Grants to eligible students attending private colleges could be tied by formula to the state subsidy for students attending public universities.


Quoted in Callan, op. cit., p. 3.
Increased Budgetary Efficiency: Although direct state support may continue to decline as a share of public higher education budgets, it will remain a significant source of revenue for most public institutions. Therefore, certain well-known budgetary inefficiencies are worth reviewing, because diminished state support puts a premium on achieving maximum value from the use of public funds. The items noted below flow from a perspective in which public colleges and universities are viewed as state-assisted independent institutions, as opposed to true state agencies. That phrase is an increasingly accurate description of the financial reality of many public universities, but not of the regulatory environment in which they operate. Under this new perspective, the focus would be on outcomes and on contractual agreements with the state, rather than on the accounting and regulatory control of inputs. Greater efficiency in the use of public funds could be achieved if state governments were to adopt the following procedures:

(1) Develop contractual relationships with public universities by negotiating specific outcomes for a given budget, as is now done with private institutions. For example, a university might agree to provide a certain number of undergraduate spaces and instruction of a specified quality in exchange for a specified amount of state support.

(2) Allow administrators to move funds among line-item categories, e.g., to shift funds from salaries to travel, or from supplies to faculty development, and so forth.

(3) Allow carryover of funds between budget years, encouraging institutions to save and not rush to spend before the fiscal year ends. Do not impose a 100% tax rate on savings by cutting next year’s budget by a dollar for every dollar saved.

(4) Allow institutions to collect and retain tuition revenue without redirecting it back through state accounts.
(5) Explore the creation of counter-cyclical reserve funds that could mitigate the sharp increases in tuition required by unexpected drops in state revenue.

(6) Explore the use of incentive funding as opposed to enrollment driven formulas. This option could be linked to the notion of “unbundling” of educational services, so that extra money is provided for specific state priorities, such as undergraduate education, and less for lower priorities, such as research.24

None of these ideas is new, and all have been endorsed as hallmarks of good public management. Much of this freedom from external control and regulation is found in private higher education, which accounts for the greater flexibility in resource use found in that sector. When accountability is focused on regulation and control of inputs, administrators are forced into inefficient use of public funds. If state policymakers were to view public colleges and universities as quasi-independent institutions, subject to accountability through contractual agreements that focus on outcomes rather than inputs, the potential exists for efficiency gains. The tight fiscal environment in which most states find themselves, and which seems to stretch ahead for years, puts a premium on capturing all potential gains of the type discussed above.

Examine the Value of System-Wide Offices: During the years of rapid growth, most states and public university systems created system-wide offices to coordinate planning and budget requests. In an era of diminished growth, such offices may have outgrown their usefulness, and may now cost more than they are worth. The many highly paid vice presidents and vice chancellors of state systems may have little to contribute to operating efficiency or educational value in today’s world, and elimination of such positions would yield substantial savings. A careful review of the costs and benefits of system-wide offices is clearly warranted.

24 D. Bruce Johnstone and Arthur Hauptman contributed to these ideas.
FEDERAL OPTIONS: The rising federal deficit severely constrains options that would require the federal government to allocate substantial new sums to higher education. Instead, realistic options would seem to revolve around ways to make more effective use of existing dollars, while also providing greater stability in existing student aid programs. What follows are several options consistent with this non-expansive view of the federal role.

Loan Reform: In the case of the federally guaranteed student loan programs, it may be possible, through direct government loans to students, to reduce taxpayer costs and increase the effective value of loans in financial aid packages. Congress and the administration compromised on a Clinton campaign proposal to replace private sector funds and participants in the federal loan programs with public capital and public administrators. The direct loan program will grow over the next several years to a majority of national student loan volume, while Congress and the Advisory Committee on Student Aid will evaluate program results.

A second feature of the new loan program calls for loan repayments to be made, at the student's option, on an income-contingent basis. In effect, students would repay a fixed percentage of income until the loan has been repaid or until the remaining balance is forgiven. In this way, the administration hopes to encourage some college graduates to undertake low-paying, community-service jobs that might be impossible to accept if the student faced fixed repayments unrelated to income. It is also hoped that more flexible repayment options will lower default rates. Income-contingent provisions should make loan repayment more manageable, thereby allowing students to incur greater debt for higher education. Whether intended or not, the effect will be to shift more of the cost of higher education from the general population to the student, a quiet but continuing revolution in educational finance.

National Service: This initiative from the Clinton administration responds to a widely felt desire to encourage young people to give of themselves in service to community. The program includes both direct stipend support and loan forgive-

15 See McPherson and Schapiro, Making College Affordable op. cit., for one such option.
ness to help support one or two years of public service. Students can participate after graduating from high school, during the college years or after graduation from college. The virtue of this program, however, lies in the civic values that it encourages rather than in its contribution to education finance. Pell grants and student loans will remain vastly more important sources of financial aid.  

A New Federalism: As noted earlier, a wide range of views currently exists on the governmental distribution of responsibility for support of higher education. Some would have Washington take full responsibility for ensuring access to low-income students, while others would shift such responsibilities back to the states. When public funds are relatively plentiful, some ambiguity in the arena of fiscal federalism is tolerable, but the costs of such ambiguity rise as resources become tighter. A recent report by the National Commission on Responsibilities for Financing Postsecondary Education, Making College Affordable Again, provides a thoughtful review of these issues, and would be a good starting place for this important discussion.

Research and Graduate Education: Apart from undergraduate student aid, the federal government is also the major source of support for university-based research. The issues involved in this area of federal activity are numerous and complex, and clearly fall beyond the scope of this paper. The topic is noted here to remind the reader that a wide array of federal agencies are engaged in contracting with universities for the performance of basic and applied research, providing support for pre- and post-doctoral students, for scientific equipment, and for indirect cost recovery. The university system as we know it could not exist without this federal support.

Data Collection: An essential function that the federal government provides for higher education is to collect and make available statistical information on institutions.

---

26 The initial budget request for this program was $3.4 billion for 100,000 "volunteers," or $34,000 per volunteer, more than the cost of a year in the nation's most expensive colleges. The final appropriation was reduced to approximately $15,000 per volunteer.

and students for research and policy purposes. Whether it be the Integrated Postsecondary Education Data System (IPEDS), which collects data on enrollments, degrees, finance, and educational personnel, or the numerous longitudinal surveys of student progress, informed policy decisions clearly depend on the steady flow of high quality information provided by federal agencies. The ability to discuss and evaluate changes of the sort presented in this paper would be hindered significantly if Washington were to reduce its commitment to this central data gathering function.

PHILANTHROPIC OPTIONS: Direct grants by foundations enable colleges and universities to undertake new programs that enhance the quality of education and research. Such gifts, however, can hardly be expected to offset the reduced growth of the dominant revenue streams. The options that follow describe specific activities linked to the theme of this paper that foundations might support to encourage rethinking and restructuring on campus.

Support for Institutional Studies: Colleges that understand their financial prospects and want to respond in an intelligent way might be helped with modest planning support to improve internal review and decision making. Such funds might be used to commission special studies of new educational markets, or of ways to change personnel policies, or to phase out programs in a fashion that minimizes damage to the institution and those affected by the change. Any campus in which the leadership shows a willingness to explore and implement serious change could be assisted with discretionary funds of the sort that foundations best provide. A widely publicized program of grants for this purpose could even play a role in creating a supportive environment for the types of change that must be considered.

Leadership and Policy Studies: In California, officials at The Irvine Foundation were concerned that fundamental policy issues affecting higher education in the state were not being openly debated and discussed. To encourage that conversation, the foundation recently funded a new organization, the California Higher Education Policy Center, with a mandate to raise the level of debate about the future of California higher education. The Center is free-standing and will have a five year life, during which time it will undertake policy studies, work with focus groups and generally supply a steady flow of ideas and analyses to enrich the public discourse. The Andrew
W. Mellon Foundation and the Brown Foundation have jointly funded the Brown Center at The Brookings Institution, dedicated to policy research in both elementary/secondary and higher education. The Carnegie Commission and Carnegie Council on Policy Studies provided valuable research in the 1970's to help shape the future of higher education, a role that the Carnegie Foundation for the Advancement of Teaching maintains in a more limited form today. The Ford Foundation supported significant research on ways to improve university administration during the 1960's and early 1970's. The Pew Charitable Trusts support the Pew Higher Education Research Program, devoted to thoughtful analyses of institutional management. Each of these examples points to action that foundations have undertaken to support creation of new ideas and new approaches to educational policy and leadership. Given the size of U.S. higher education, however, remarkably little is spent on research about the enterprise itself, and foundation support for such work should yield significant payoffs.

Serve as a Friendly Critic: As the educational system evolves, it will always benefit from well-intentioned criticism of the sort that foundations are in a position to provide. Through support for studies, reports, and conferences, foundations can highlight problems and issues that are not being addressed by higher education, helping to influence the direction of change. Much of the recent criticism of higher education is vituperative and shrill, evoking defensive reactions on the part of faculty and administrators, rather than constructive change. More may be accomplished by a steady flow of friendly criticism that holds higher education to its expressed ideals.

Concluding Comments
The vast, decentralized "system" of U.S. higher education has served this nation well throughout its history, and there will be no letup in the demands that society places upon colleges and universities. Our institutions serve as avenues for upward mobility, as engines of economic growth through the creation, transmission, and application of new knowledge, and as conservators of our common, if diverse, culture. After decades of remarkable expansion in size, scope, and resources, the outlook now is for much slower growth. Whereas college and university leaders have traditionally looked to new or growing revenue sources to balance budgets, the focus in the foreseeable
future must be on cost reduction. The magnitude of the task appears to be much
greater than most administrators have heretofore experienced, and successful responses
call for large measures of creativity, ingenuity and personal courage. It is vital to the
well-being of our nation that leaders of higher education, and those responsible for
public policy toward education, meet this challenge.
Table 1: Indicators of Fiscal Austerity

1) State appropriations for higher education in 1992/93 declined by one percent from the 1991/92 level, the first drop in overall state support ever recorded. (Source: Chronicle of Higher Education, October 21, 1992, p. A21).

2) In inflation-adjusted dollars, 36 states are providing less support now than two years ago. The largest drops in support between 1992/93 and 1991/92 are: (Source: ibid.)

<table>
<thead>
<tr>
<th>State</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virginia</td>
<td>-13 percent;</td>
</tr>
<tr>
<td>California</td>
<td>-12 percent;</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>-10 percent;</td>
</tr>
<tr>
<td>Florida</td>
<td>-9 percent;</td>
</tr>
<tr>
<td>Ohio</td>
<td>-7 percent;</td>
</tr>
<tr>
<td>Alaska</td>
<td>-7 percent;</td>
</tr>
<tr>
<td>Connecticut</td>
<td>-7 percent;</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>-7 percent.</td>
</tr>
</tbody>
</table>


4) Public tuitions increased by an average of 13 percent and 10 percent in the last two years. (Source: College Board)

5) Twelve states have reduced state student aid appropriations between FY 1991 and 1992, even as public tuition has increased sharply. The states are:

<table>
<thead>
<tr>
<th>Tuition</th>
<th>Student Aid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Massachusetts</td>
<td>+26.0 %</td>
</tr>
<tr>
<td>California</td>
<td>+35.0 %</td>
</tr>
<tr>
<td>Alabama</td>
<td>+ 7.0 %</td>
</tr>
<tr>
<td>Arizona</td>
<td>+ 3.2 %</td>
</tr>
<tr>
<td>Connecticut</td>
<td>+17.0 %</td>
</tr>
<tr>
<td>Georgia</td>
<td>+ 4.0 %</td>
</tr>
<tr>
<td>Iowa</td>
<td>+ 8.5 %</td>
</tr>
<tr>
<td>Missouri</td>
<td>+22.4 %</td>
</tr>
<tr>
<td>North Carolina</td>
<td>+14.7 %</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>+20.3 %</td>
</tr>
<tr>
<td>South Carolina</td>
<td>+ 5.0 %</td>
</tr>
<tr>
<td>Tennessee</td>
<td>+ 4.6 %</td>
</tr>
</tbody>
</table>

(Source: Tom Mortenson, “Postsecondary Education Opportunity” Iowa City, Iowa, No. 8, December 1992, pp. 11-12.)
Table 2: Examples of Reductions in Educational Opportunity

1) Joye Mercer, "Two-Year Colleges in California Hit by Biggest-Ever Enrollment Decline." "California community colleges are seeing unprecedented enrollment declines this spring, apparently because of higher tuition and fees caused by the state's budget cuts." (Source: Chronicle of Higher Education, March 10, 1993, p. A32.)

2) D. Bruce Johnstone, "Budget Options for SUNY in the Face of Additional Major Cuts in General Fund Appropriations."

   Option #1: "Hold the Course — downsize all campuses, presumably only temporarily, maintaining as much enrollment and current program configuration as is possible;"
   Option #2: "Downsize permanently both the faculty and staff and the enrollments of the State-operated and funded campuses;"
   Option #3: "Downsize permanently by closing a campus or two or three;"
   Option #4: "Downsize permanently the faculty and staff of the State-operated and funded campuses, but maintain enrollments through significantly larger teaching loads and less faculty/student interaction, fewer administrative services for either faculty or students, less maintenance, significantly diminished expectations of scholarly activity from the faculty, etc."
   Option #5: "Make up for lost General Fund support with much higher tuitions for those who can afford to pay."

The above options were presented by Chancellor Johnstone of SUNY in 1991 following the sixth budget cut in the past four years. "Since the start of the 1988-89 fiscal year, the SUNY State-operated and funded campuses have absorbed nearly $49 million in one-time cuts and $143 million (inflation adjusted) in permanent cuts, after the addition of more than $100 million in tuition revenue increases." (Source: Johnstone, Working Papers in a Time of Fiscal Crisis, op.cit., pp. 23-34.)


4) Kit Lively, "The Board of Trustees of the financially strapped University of Maine System has voted to cut enrollments and programs at the flagship campus in Orono." (Source: Chronicle of Higher Education, June 16, 1993, p. A29.)
Table 3: 1990 Median Annual Income of Workers 25 Years and Older, by Educational Level

<table>
<thead>
<tr>
<th></th>
<th>Completed</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High School</td>
<td>College</td>
</tr>
<tr>
<td><strong>Full-time Workers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>$26,653</td>
<td>$39,238</td>
</tr>
<tr>
<td>Women</td>
<td>$18,319</td>
<td>$28,017</td>
</tr>
<tr>
<td><strong>Full &amp; Part-Time Workers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>$22,378</td>
<td>$35,079</td>
</tr>
<tr>
<td>Women</td>
<td>$12,412</td>
<td>$21,763</td>
</tr>
</tbody>
</table>

Source: NCES Digest of Education Statistics, 1992