Fiscal Prospects for Higher Education: 1999

by William Zumeta

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During the economic downturn of the early 1990s, states sought to balance their budgets with deep appropriations cuts in higher education and other state-supported agencies. But higher education bore the brunt of the cuts for two reasons. First, the costs of "caseload-driven" functions associated with the low-income population balloon in recessions, and legal mandates force states to respond.[1] Higher education, averaging 12 percent of state general fund spending,[2] is regarded as discretionary, and its appropriations can be reallocated to mandated functions. Second, policymakers consider higher education uniquely able to tap alternative funding sources—tuition, federal and other grants, and private gifts.[3] States provided no "catch-up" appropriations to higher education at the outset of the economic recovery. Only in FY 1997 and '98 did a majority of states substantially increase appropriations.

What impact would a future downward economic turn have on higher education? State largesse to higher education would not long survive, and academe would face the familiar fiscal squeeze. But there are additional factors now at play that would make appropriation cuts even more ominous: The ability of most public colleges and universities to impose steep tuition increases is largely exhausted. And students in ever-greater numbers and of more ethnic groups are seeking access to higher education.

Prospects for appropriations in FY1999 look favorable, even with the continued fiscal conservatism in most state capitals. But the U.S. economy, despite robust performance in 1998, shows the first serious signs of trouble. Heading the list of the signs are the potential effects of economic problems in Asian countries, Latin America, and Russia. State leaders are already exploring methods of teaching many more students without large capital investments. And there are increasing calls for greater efficiency and accountability in using state and tuition dollars. Clearly, "the times, they are a changin'."

"Fiscal Prospects for Higher Education: 1999" updates the reader on recent positive fiscal developments affecting higher education and discusses longer-term problems and imbalances on the supply side. The chapter reviews the national economy, discusses regional patterns and variations, and examines trends in state revenues and appropriations. It

examines tuition trends in the context of public financial and political support and the relationship of student aid to tuition and enrollments. And the chapter assesses the outlook for higher education in an era of heavy enrollment demands and constrained resources.

THE ECONOMY

The U.S. economy was outperforming economies in all other developed countries as of summer 1998.[4] After growing by a healthy 3.8 percent in 1997—measured by real, or inflation-adjusted growth in the Gross Domestic Product (GDP)—the economy expanded at a supercharged 5.4 percent annual rate in the first quarter of 1998.[5] The second quarter growth figures were lower, but analysts considered some slowdown necessary to avoid an unsustainable, inflationary boom.[6] Inflation remained at a very low 1.5 percent, despite the lengthy economic expansion.[7] Most economists had long posited an inverse link between unemployment and inflation, but the 4.3 percent unemployment rate was a low not seen in nearly 30 years.[8] Employment growth averaged 270,000 net new jobs a month; some economic analysts identified labor supply constraints as the major check on even-faster economic growth.[9] Real hourly earnings of workers were up a healthy 2.5 percent between May 1997 and May 1998—the largest 12-month gain since 1976.[10]

Did sustained strong growth, low unemployment, and low inflation signal a structural change in the economy? Most economists believe the unusual combination resulted from temporary factors. The strong dollar and a 40 percent decline in petroleum prices between May 1997 and May 1998, for example, held inflation in check.[11]

These economists also saw some clouds on the economic horizon. The Federal Reserve Bank expressed concern about "wage-push" inflation as the economy pushed the limits of the labor supply. The Fed, observers worried, might increase interest rates and contract the money supply, thereby slowing economic growth along with inflation.[12] The respected Standard & Poor's DRI forecasting group rated the probability of a recession produced in this way by 2000 at 25 percent.[13]

Some observers also expressed concern over the apparent overvaluation of stocks in an unprecedented bull market. Equities on U.S. markets doubled in value between 1995 and mid-1998, defying warnings that the run up could not continue. Price/earnings multiples and ratios of stock earnings to bond yields were at all-time highs. These increases, some analysts worried, might lead to an unsustainable "asset bubble"—an overvaluation of assets such as occurred in Japan in the late 1980s, just before the Nikkei stock index lost more than half its value.[14] A sharp, sustained decline in U.S. stocks could undermine investor and consumer confidence, thereby seriously damaging economic growth. By late summer, such worries no longer seemed hypothetical.

Finally, observers asked if the recessions in Asia—deeper than most analysts originally thought—would affect the United States. When Japan's huge economy slipped into recession, its politicians seemed to lack the will to quickly end it. The problems in its banking system and political structure made financial turmoil a real possibility. The depreciation of Asian currencies relative to the dollar—and a possible second round of devaluations, perhaps involving China—meant cheapened Asian exports. This low-priced competition threatened the ability of Latin American economies to compete, as well as the competitiveness of U.S. exports and even of products manufactured for domestic consumption. The Asian economic crisis also threatened U.S. investor confidence, perhaps leading to a sharp falloff in the stock market with its attendant effects. Russia's economic and political problems created further uncertainty. The Federal Reserve might or might not ward off a recession, under these circumstances. Standard & Poor's DRI rated the probability of a recession in 1999 precipitated by the Asian economic crisis at 20 percent.[15]

In mid-1998, the consensus foresaw continued economic expansion, though at a more moderate pace.[16] But macroeconomists, by the nature of the phenomena they study and the available analytical tools, fear the worst, and can develop plausible negative scenarios even in the best of times. Many economists express more than usual uncertainty, since Asian political decision-making and U.S. stock market psychology are painfully difficult to forecast.

REGIONAL PATTERNS AND VARIATIONS [17]

The strong employment growth reported in all nine of DRI's U.S. regions in the first quarter of 1998 ranged from a 2.5 percent annual rate in the Middle Atlantic states to 4.5 percent in the West South Central and Pacific Northwest regions. Gains for the two-year period ending with this quarter ranged from 1.8 percent annually in the Middle Atlantic states to 3.5 percent in the West South Central and Pacific Southwest regions. DRI expected markedly slower economic and employment growth in all regions beginning in 1999.

The familiar pattern of regional variations featured the continued economic leadership of western and southeastern states (Figure 1). These states housed vibrant high-technology and business services industries and reported population in-migration that stimulates services, construction, retailing and other industries. But the decline in the Asian trade and consolidations in the aircraft and financial services industries will hurt these states. The annual job growth rates for the western states will fall from the 3.5 percent range for 1996 and 1997 to the 1.5-2.0 percent range for 1998 and 1999.

The South Atlantic region, with a job growth rate forecast of 1.7 percent for 1998 and 1999, will closely follow the West. The East and Midwest groups were expected to show yearly job gains of just 0.7 to 1.0 percent. High business costs and an inability to attract or hold onto population hampered the eastern states. Many midwestern states ran out of workers: Several states had unemployment rates in the very low 2.0-2.5 percent range and very high labor force participation rates, but little in-migration. Also, states in the East North Central region lost auto manufacturing jobs to contractors that assemble specific components, primarily in the East South Central states. Five of the 10 slowest-growers—the District of Columbia, New York, Ohio, Pennsylvania, and West Virginia—were in or adjacent to the Middle Atlantic region. The remaining five were Alabama, Hawaii, Mississippi, Montana, and North Dakota.

FISCAL CONDITIONS IN THE STATES

The best indicator of the health of state treasuries was the aggregate of states' fiscal year-end balances as a percentage of general fund expenditures.[18] These balances dipped far below the 5 percent of expenditures considered healthy by Wall Street analysts during the recession of the early 1990s. But the balances climbed strongly to an estimated 9 percent, or $28.6 billion, by the end of FY 1998—a level not seen since 1980 (Figure 2). Conservative budgeting resulted in growing "savings accounts." A projected decline of aggregate balances to 7.2 percent at the end of FY 1999 may be a low estimate. Thus states had few immediate fiscal worries.

Of 46 reporting states, 32 and 17 expected FY 1998 year-end balances above 5 and 10 percent, respectively. Ten states, mainly in the northeast, estimated only modest FY 1998 year-end balances of 2.0 to 4.9 percent (Figure 3). Preliminary reports showed four states—Alabama, Arkansas, Louisiana, and Montana—with FY 1998 year-end balances of less than 2 percent; three of these states approached zero.

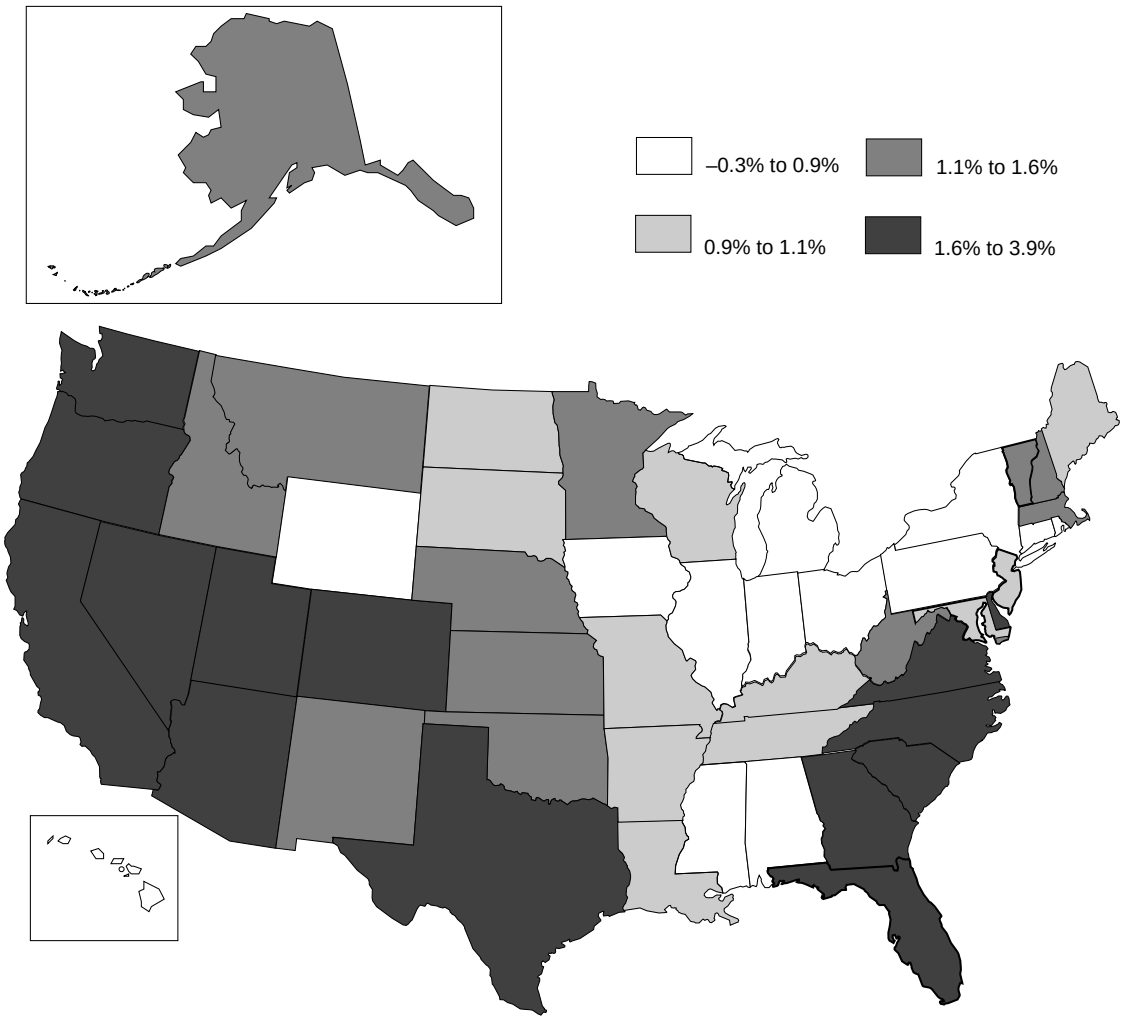
The National Conference of State Legislatures reported these major uses of "excess" FY 1998 revenues:

- 23 states made deposits to their "rainy day" or reserve funds.
- 19 states cut taxes (some temporarily).
- 16 states funded capital projects including some in education.
- 16 states gave one-time funding to specific programs, including some in education.
- four states paid down their debt obligations.
- others funded special projects in areas like affordable housing, mental health, and care for the aging.[19]

Continuing a trend, state revenue collections exceeded the estimates used to build FY 1998 budgets by an aggregate 1.8 percent.[20] But states forecasted only a modest 4.0 percent aggregate revenue growth in FY 1999, in part because multiple tax reductions cut into the revenue base.[21] Figure 4 compares the recent state tax cuts to the experience of the early 1990s when tight budgets led to tax increases.[22] As in past years, most 1998 cuts were in personal income taxes. Corporate income and sales and use tax cuts were next, trailing far behind.

FIGURE 1

EMPLOYMENT GROWTH PROJECTIONS
ANNUAL PERCENT CHANGE, 1997-2003



SOURCE: Johnson et al., 1998, 51.

The majority of states budgeted for FY 1999 general fund appropriations growth to exceed revenue gains (in aggregate, 5.3 percent and 4.0 percent, respectively).[23] The healthy "savings" cushion in most states, plus conservatism in revenue projections, made the resulting projected decline in year-end balances of little concern. The expected aggregate spending increase was in the range of annual budget growth rates during the 1990s, but less than the 6.1 percent estimated FY 1998 gain.

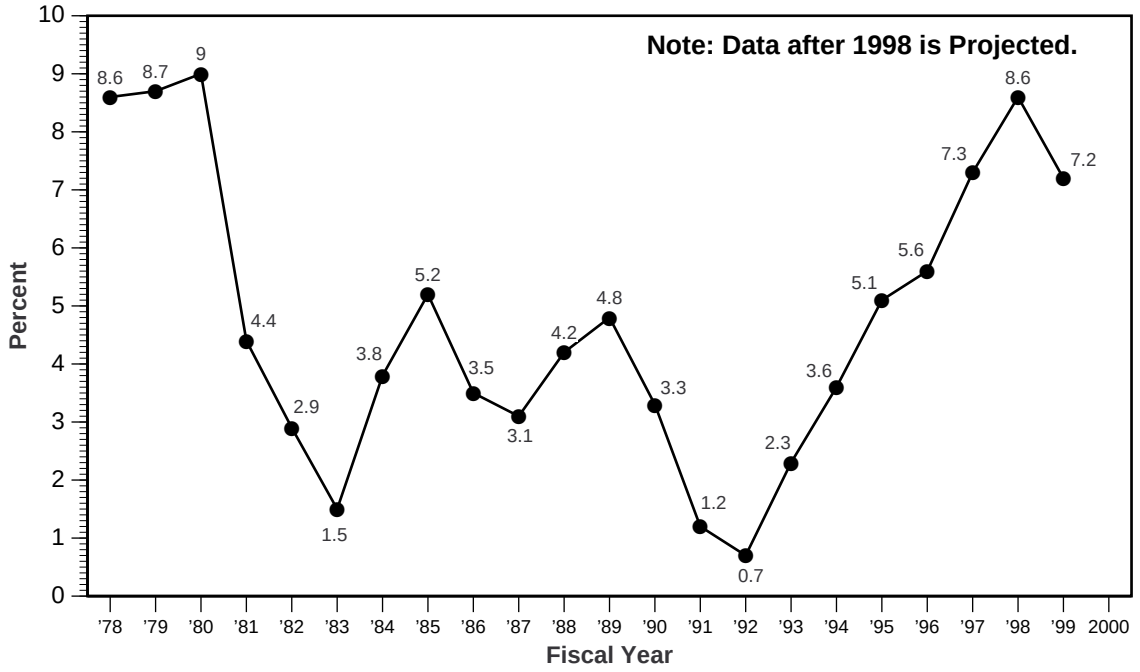
Table 1 shows estimated percentage changes in expenditures by state for FY 1998 compared to FY 1997.[24] Louisiana, Massachusetts, and Nevada, the three states showing declines in 1998, were expected to recoup the lost ground in 1999.[25] Surprisingly, seven of eight states with FY 1998 spending gains of less than 3 percent were in the western regions.[26]

EXPENDITURES BY MAJOR FUNCTION

Higher education faced strong competition for state general fund dollars from legally

FIGURE 2

STATE YEAR-END BALANCES
AS A PERCENTAGE OF GENERAL FUND EXPENDITURES, FY 1978-1999



SOURCE: National Conferences of State Legislatures, 1998, 5.

mandated or politically popular caseload-driven functions. During the recent recession and sluggish recovery, state support for these functions, except welfare, greatly outpaced support for higher education, which experienced three years of absolute decreases.[27] Medicaid surpassed higher education as the second-largest expenditure item in state general fund budgets, in aggregate. But the strong economy, with its plentiful jobs and low inflation rates, now helped to hold down crime rates and the welfare and Medicaid rolls and to moderate health care cost inflation.[28] The federal government and the states moved to managed care to control Medicaid costs and moved welfare clients into jobs to reduce public assistance.[29] Pressure from these programs, which are sensitive to the economic cycle, slackened.

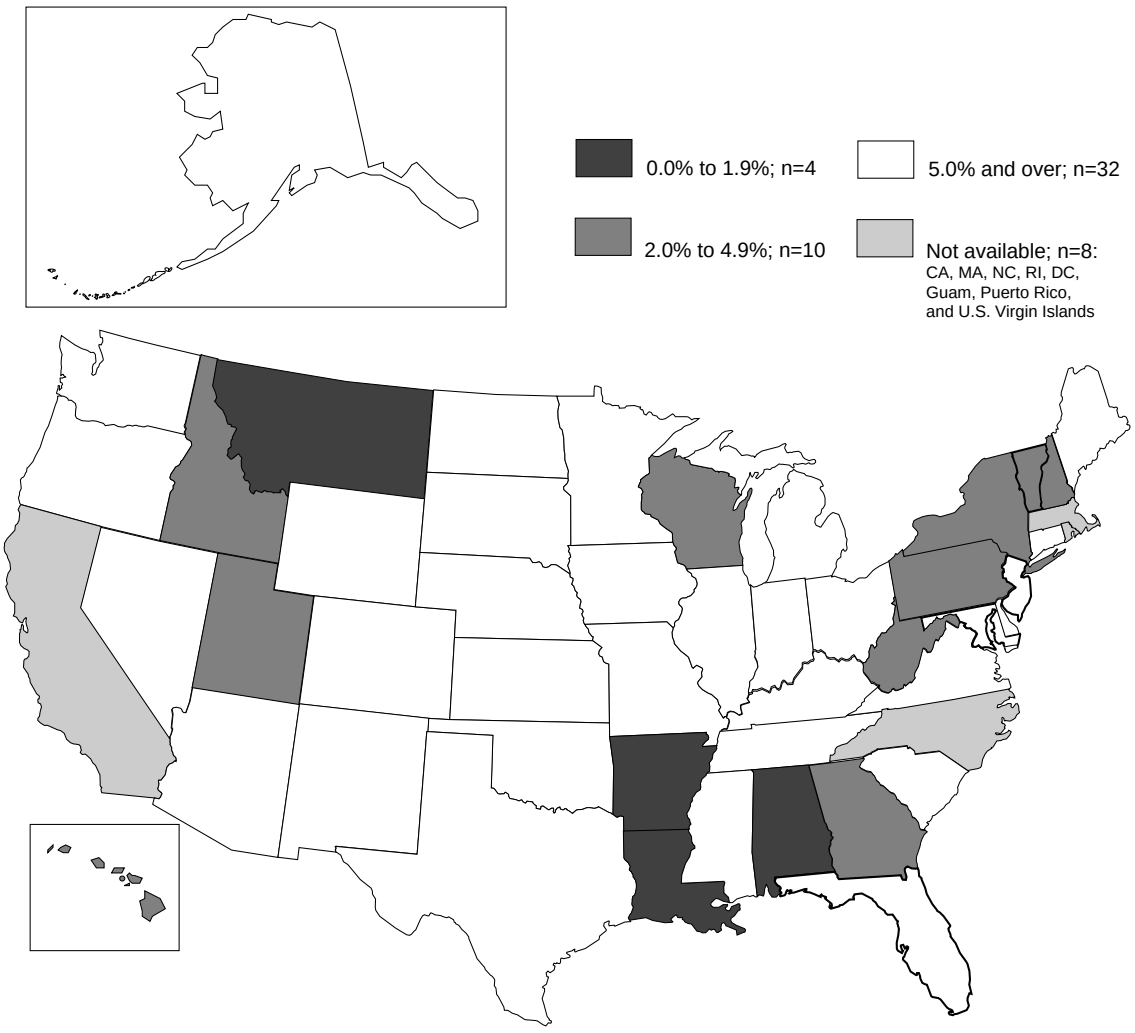
K-12 education accounted for 32 percent of the FY 1999 national total of state general fund budgets—still the largest component.[30] Enrollment pressures, investments in education reform, local property tax relief, and court-imposed support for poor school districts resulted in more rapid growth in K-12 education allocations than in total state spending during this decade. State FY 1998 percentage funding growth for K-12 education outstripped growth in all other areas; it will be first or second again in 1999.[31]

Prosperity and state fiscal well-being finally benefited higher education only after states reduced pressures from other large functions, secured healthy treasury balances, and cut taxes, sometimes several times. Some analysts asked if recent gains represented significant reinvestment.[32] But the increases—well above the inflation rate—arrested the long-term decline in the proportion of state general funds allocated to higher education, and permitted some response to access demand pressures.

Table 2 shows the planned growth in FY 1999 spending on the major state functions. Higher education's share will grow just a bit

FIGURE 3

STATE YEAR-END BALANCES
AS A PERCENTAGE OF GENERAL FUND EXPENDITURES, FY 1998



SOURCE: National Conferences of State Legislatures, 1998, 5.

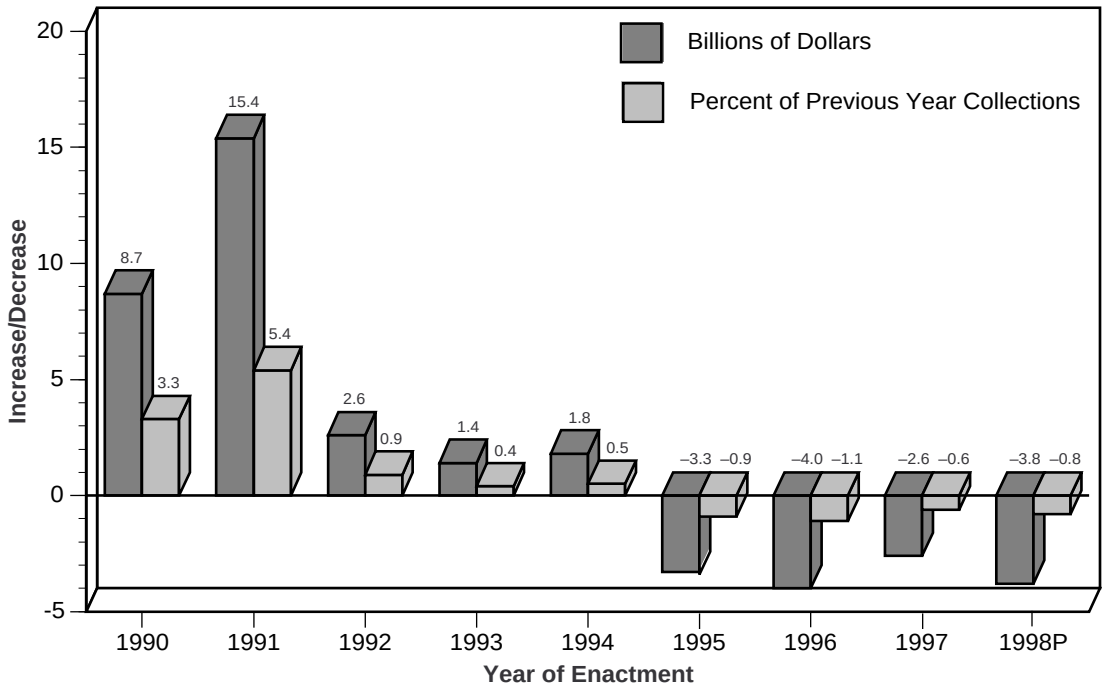
more than the share of K-12 education, and almost 1 percentage point more than total general fund spending. The economy will determine if this is the high-water mark for state funding of higher education in this cycle. If so, the peak is well below such points in earlier periods of prosperity. Welfare, Medicaid rolls, and rates of crime and punishment will go up when the down side of the economic cycle begins. Demographics will exacerbate the demands made by Medicaid and corrections. The Medicaid population is aging—so its health care expenses per enrollee are rising[33]—and the numbers of people in crime-prone age ranges will soon climb again.[34] Higher education, again, will likely compete unsuccessfully for diminished state revenues.

PATTERNS IN STATE SUPPORT

Higher education's share of state wealth—measured by personal income—fell for about

FIGURE 4

NET STATE TAX CHANGES, BY YEAR OF ENACTMENT



SOURCE: National Conference of State Legislatures, 1998, 8.

20 years (Figure 5). The decline, measured by academe's state-appropriated share of each $1,000 of personal income, was 31.8 percent over this period. Higher education's share of state general-fund spending declined from 13.7 percent to 12.3 percent between FY 1986 and FY 1996.[35] The modest improvements in FY 1998 state support arrested the decline;[36] FY 1999 will likely resemble 1998.[37]

The most complete analysis of the data on state appropriations to higher education, based on reports from state budget actions, ranks two-year changes in appropriations to reduce the effects of single-year fluctuations (Table 3).[38] The 11.5 percent increase between FY 1996 and FY 1998 was the fifth consecutive increase in the two-year gain. But the two-year gains reported in the late 1980s and in 1990 exceeded the 1998 gain. Table 3 divides the states into four quartiles in terms of growth in higher education support. Western and southern states—with their strong economies—

TABLE 1

PERCENTAGE CHANGE IN STATE EXPENDITURES
(FY98 Estimated Compared to FY97 Actual)

Region/State	Fiscal 1998 (Estimated)
New England	
Connecticut	2.3%
Maine	3.5
Massachusetts	–3.0
New Hampshire	9.4
Rhode Island	6.0
Vermont*	8.4
Middle Atlantic	
Delaware	10.0
Maryland	5.8
New Jersey	5.0
New York	7.0

TABLE 1 (CONTINUED)

PERCENTAGE CHANGE IN STATE EXPENDITURES
(FY98 Estimated Compared to FY97 Actual)

Region/State	Fiscal 1998 (Estimated)
Pennsylvania	4.4
Great Lakes	
Illinois	7.5
Indiana	6.6
Michigan	3.5
Ohio	7.4
Wisconsin	4.9
Plains	
Iowa*	5.8
Kansas	8.5
Minnesota	6.1
Missouri	0.9
Nebraska	5.8
North Dakota	4.2
South Dakota	10.4
Southeast	
Alabama	4.1
Arkansas	3.0
Florida	10.8
Georgia	8.0
Kentucky	7.4
Louisiana	–4.5
Mississippi	7.2
North Carolina	10.5
South Carolina	9.2
Tennessee	7.5
Virginia	7.8
West Virginia	7.4
Southwest	
Arizona	7.7
New Mexico	2.3
Oklahoma	8.2
Texas	9.8
Rocky Mountain	
Colorado	7.4
Idaho	4.2
Montana	2.4
Utah	0.5
Wyoming	1.4

TABLE 1 (CONTINUED)

PERCENTAGE CHANGE IN STATE EXPENDITURES
(FY98 Estimated Compared to FY97 Actual)

Region/State	Fiscal 1998 (Estimated)
Far West	
Alaska	NA
California	8.0
Hawaii	1.9
Nevada	–6.5
Oregon	6.9
Washington	2.9
Territories	
Puerto Rico	7.3
AVERAGE	6.1%

SOURCE: National Governors Association and National Association of State Budget Officers, 1998, 35.

** No report.*

TABLE 2

SUMMARY OF CHANGES IN GENERAL FUND APPROPRIATIONS FOR FY 1999
(Compared to FY98 Spending)

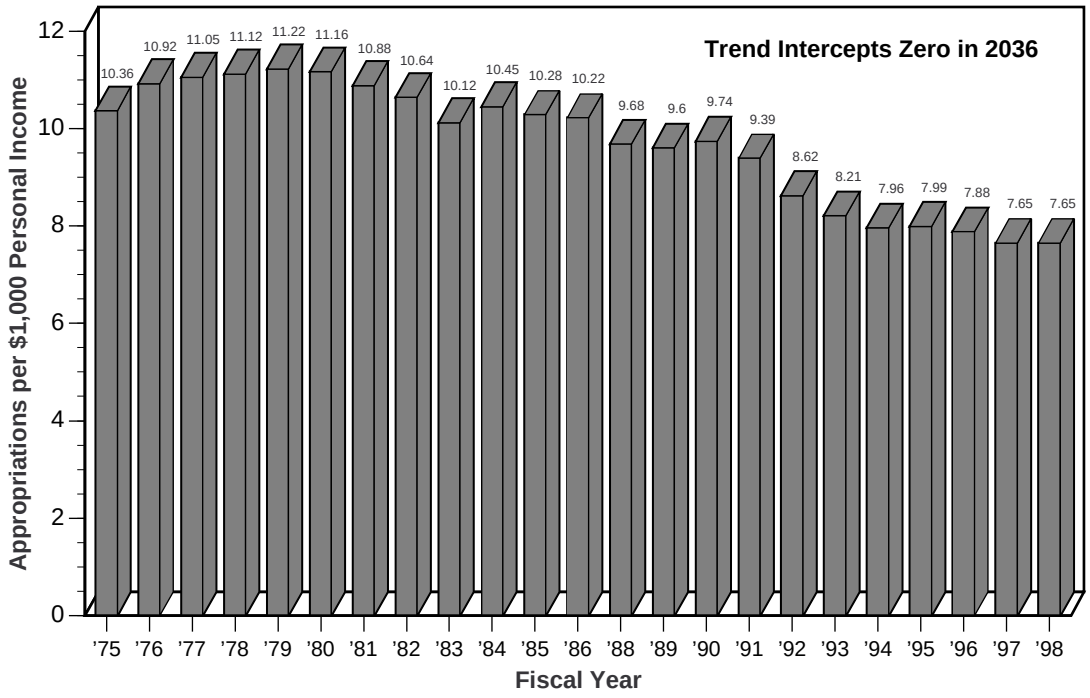
	General Fund	Total State Funds
K-12 Education	6.0%	5.6%
Higher Education	6.2	5.7
Corrections	4.9	4.9
Medicaid	4.5	3.8
All Appropriations	5.3	—

SOURCE: National Conference of State Legislatures, 1998, 6.

dominated the top two quartiles. These two quartiles showed funding growth at least twice the approximately 5 percent two-year inflation rate. Five states had two-year gains of more than 20 percent; four more had gains above 15 percent. The lower two quartiles included more northeastern and midwestern states. The third quartile showed modest funding growth.

FIGURE 5

APPROPRIATIONS OF STATE TAX FUNDS FOR OPERATING EXPENSES OF HIGHER EDUCATION PER $1,000 OF PERSONAL INCOME, FY 1975 TO FY 1998



SOURCE: Mortenson, 1997, 1.

Only the lowest quartile received appropriations gains below the inflation rate. Hawaii and Alaska suffered 3 percent decreases in two-year higher education appropriations; Tennessee and New Jersey had no gain.

The report has tracked state appropriations to community colleges and to student aid over several years. These appropriations previously showed a substantially faster growth rate than all state appropriations to higher education, but the report noted only small differences for the period between FY 1996 and FY 1998. Total state funding for higher education grew 11.5 percent, appropriations to community colleges gained 12.6 percent. Community colleges received a larger increase than all of higher education in 21 of the 44 states where data reporting permitted direct comparisons; a smaller increase in 15 states, and a proportionate increase in the remaining eight states. The two-year appropriations gain averaged 13.2 percent in the 34 states where state budgets identified student aid. Just half of the 34 states provided greater percentage increases for student aid than for higher education overall, a reduction in the advantage for student aid.[39] These modest shifts may reflect efforts to equalize perceived imbalances in support within higher education.

Press reports on actions by state legislatures in 1998—mostly applying to FY 1999—indicated that community colleges continued to do well and that many states provided substantially larger-than-usual capital budgets for higher education.[40] Capital spending attracts disproportionate support in good times, but is often starved when budgets are tight. Current capital spending for higher education included long-deferred projects, basic infrastructure projects, deferred major maintenance and building renovations, new technology, and added capacity for anticipated enrollment growth.[41] But some observers called for even more maintenance and renovation funding.

TABLE 3

PERCENTAGES OF TWO-YEAR CHANGES IN APPRORIATIONS OF STATE TAX FUNDS
(FY98 over FY96)

State	2-Year (Percent)
Nevada	30
California	24
Florida	23
Louisiana	22
Oklahoma	21
Massachusetts	18
Virginia	18
Oregon	17
Missouri	16
North Carolina	14
Georgia	14
Illinois	13
Arizona	13
Utah	12
Colorado	12
Ohio	12
Arkansas	12
Indiana	12
North Dakota	12
Minnesota	11
Washington	11
Mississippi	10
Iowa	10
South Carolina	9
Texas	9
Connecticut	9
Rhode Island	9
Michigan	9
Delaware	8
Nebraska	8
West Virginia	8
Kansas	7
Maryland	7
New Hampshire	7
Idaho	7
Kentucky	6
Pennsylvania	5
Wyoming	4
New Mexico	4
Vermont	4
Maine	4
Montana	3
Wisconsin	3
South Dakota	3
Alabama	2
New York	1
Tennessee	0
New Jersey	0
Hawaii	–3
Alaska	–3

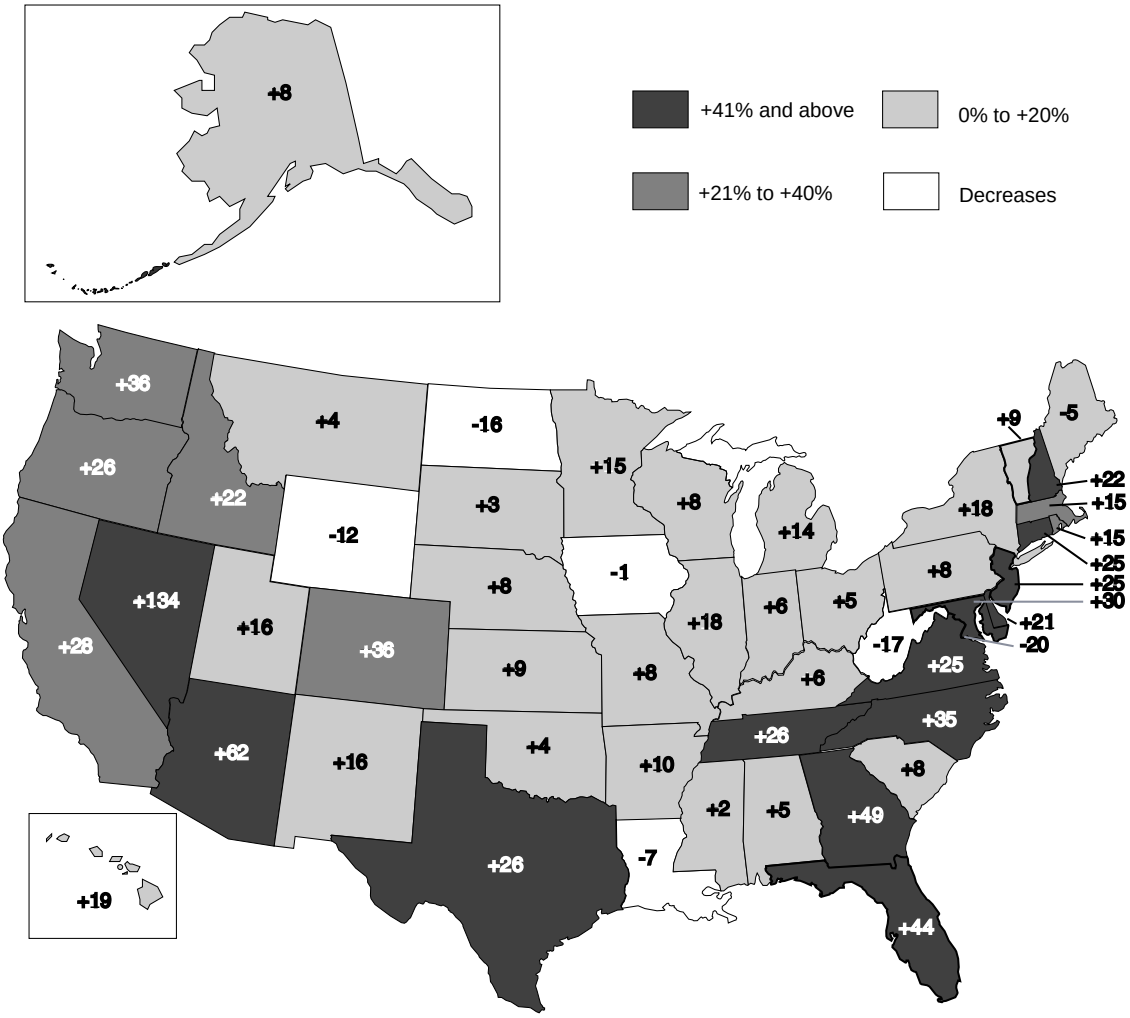
SOURCE: Hines, 1998, 13.

"Many states," warned Thomas A. Kube, executive director of the Council of Educational Facility Planners International, "have let college buildings deteriorate so much that, unless the facilities are fixed soon, they are going to go beyond the point of no return."[42]

Increased funding requests reflect a growing, demographically-driven demand for access to higher education. In many states, the number of high-school graduates is rapidly increasing (Figure 6). This number will more than double by 2011-12 in Nevada, jump by more than 60 percent in Arizona, increase by nearly half in populous Georgia and Florida, and grow by more than 20 percent in 15 more states.[43] Projections show decreased numbers of high school graduates in only four states and the District of Columbia. Large increases will be distributed across the country; the largest concentrations of states with big gains will be in the far west and along the Atlantic seaboard. The national gain, relative to the 1995-96 level, will be 26 percent in 2007-08, the peak year.

FIGURE 6

PROJECTED CHANGE IN THE NUMBER OF HIGH SCHOOL GRADUATES, 1996 TO 2012



SOURCE: Chronicle of Higher Education, *March 27, 1998, A48. Data are from Western Interstate Commission on Higher Education and The College Board, 1998.*

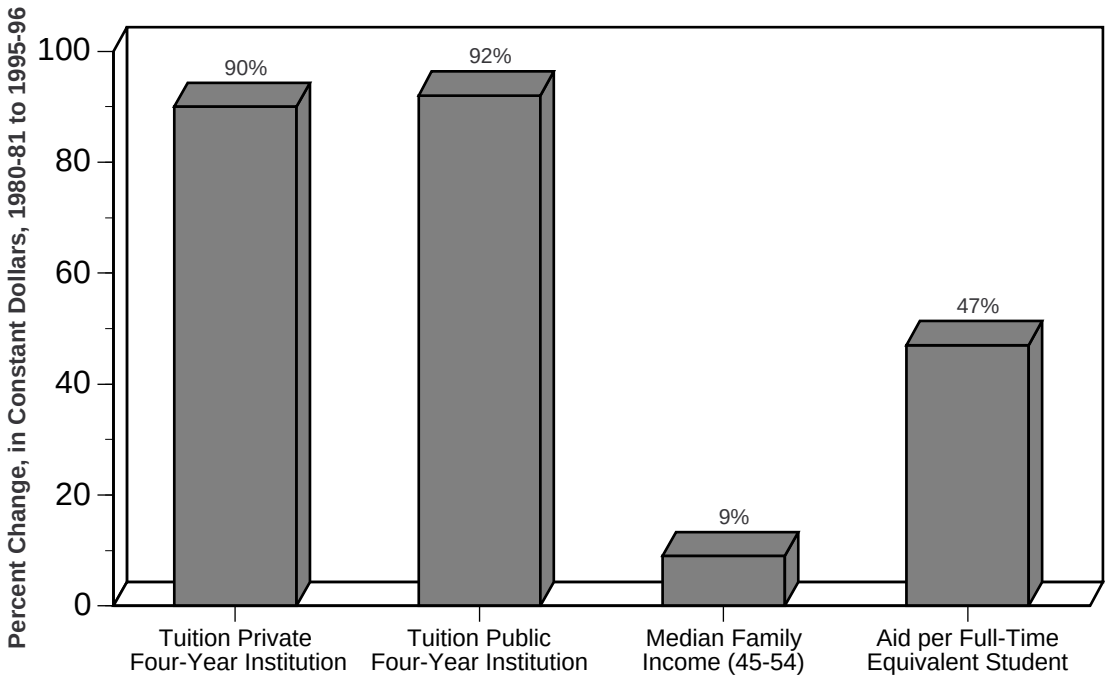
Most observers also expect that virtually all states will see more demand from working adults and their employers. The strong economic returns to individuals from participating in higher education stimulates higher participation rates.[44] Higher education pays off in economic well-being for states as well.[45]

TUITION AND FEE TRENDS

First, some context: Average tuition rates in public and independent colleges and universities grew at rates far above general inflation for many years (Figure 7). A college education is therefore substantially more expensive relative to family incomes, which grew little in real terms. The price increases in public institutions mainly resulted from substituting tuition for stagnant or declining state appropriations. But this explanation has not prevented protests from students and their parents. State and federal legislators heard the

FIGURE 7

FIFTEEN-YEAR CHANGES IN TUITION, FAMILY INCOME, AND STUDENT AID (INFLATION-ADJUSTED)



SOURCE: The College Board, 1997b, 5.

message: Bring tuition increases under control. A commission, appointed by the U.S. Congress to study cost and tuition control *did not* recommend tying price controls to institutional eligibility for enrolling federally-aided students. But legislators remained concerned about the issue.[46]

Several states pressed their public colleges and universities to moderate tuition increases, or to freeze or reduce tuition.[47] By using increased appropriations as incentives, states assured less acrimonious, more successful negotiations than in the past. After 1994, when the major effects of the recession ended in most states, tuition increases slackened from levels reached during the recession. Table 4 shows year-to-year increases in average tuition charges at two- and four-year institutions, and in the public and independent sectors. The latest increases, though smaller, were still well above the currently-low rates of general price inflation. But average tuition gains in the last few years resembled gains in average family incomes, which recently grew well above inflation and faster than at any time in the past two decades.

Another national data set breaks down the year-to-year changes in public college tuition and fees by state and sector within public higher education.[48] The 3.6 percent average 1997-98 tuition increase for resident community college students represented the continuation of a steady decline in the annual growth rate, dating back several years. Only Hawaii and Wyoming reported double-digit increases in 1997-98; four states actually cut community college tuition—Louisiana by 10 percent. Three more held the line, and four states reported increases of less than 1 percent.

The category "state colleges and universities" showed a 5.4 percent average resident undergraduate 1997-98 tuition and fee gain; the figure resembled percentages reported in recent years. Idaho, Illinois, New Hampshire, North

TABLE 4

AVERAGE ANNUAL INCREASE IN TUITION (WEIGHTED) AND FEES AT COLLEGES, 1987-88 TO 1997-98*

	Two-Year Colleges		Four-Year Colleges	
Years	Public	Independent	Public	Independent
1987-88	5%	6%	6%	8%
1988-89	4	7	5	9
1989-90	5	7	7	9
1990-91	5	8	7	8
1991-92	13	6	12	7
1992-93	10	6	10	7
1993-94	10	7	8	6
1994-95	4	5	6	6
1995-96	6	4	6	6
1996-97	5	5	6	5
1997-98	2	4	5	5
Dollar Figures				
1997-98	$1,501	$6,855	$3,111	$13,664

SOURCE: The College Board, 1995; 1996; 1997a.

** Data in this table are weighted by enrollment, and represent cost increases for students who attend a certain type of college. Restricting the sample to institutions with two consecutive years' worth of data controls for year-to-year swings in the composition of the sample, but does not control for shifts in the sample's composition over longer periods of time.*

Dakota, Oklahoma, Tennessee, and Texas reported double-digit percentage increases; North Dakota's 13.8 percent increase led the nation. Colleges and universities in Massachusetts slightly reduced average tuition and fees; Minnesota and New Mexico reported no change. Research universities showed a 4.6 percent average increase in 1997-98; increases had ranged from 5.5 to 6.5 percent over the previous few years. Resident undergraduate tuition and fee increases at research universities increased more than 10 percent in only three states, but two of these, Hawaii and Tennessee, exceeded 20 percent. Massachusetts reduced fees by 1.5 percent, and California's research universities did not change resident fee rates.

Moderated tuition hikes blunted the political pressure for government controls. But price growth remains steady and large enough compared to consumer price inflation to create continuing political problems. Steady price increases also create access barriers for low and moderate income students, given current trends in student financial aid. Smoldering public and legislator concerns could flame up if institutions again turn to tuition in a big way any time soon to replace lags in state support.

STUDENT AID

Financial aid helps to keep higher education accessible to students of modest means when tuition growth regularly exceeds price inflation and family income gains. Real tuition climbed inexorably over the last 15 years, but student aid grew less than half as much (Figure 7). Worse, an ever-growing portion of aid is available as repayable loans that are far less favorable to access for low-income students than grants. The share of all aid represented by grants declined from about 55 percent in 1980-81 to below 40 percent in 1996-97; the loan share grew from 41 percent to nearly 59 percent over this same period.[49] Student loan volumes skyrocketed after the 1992 amendments to the federal Higher Education Act made more loan money available.[50]

Federal aid, including loans, represented 72 percent of all student aid available in 1996-97. Preliminary 1996-97 data for federal and state student aid showed continuations in the previous trends.[51] Federal loan dollar volumes—Perkins loans, Ford Direct Loans and guaranteed, or "Family Education Loans"—grew by more than 9 percent ($2.64 billion) over the previous year. But Pell Grants, the basic federal need-based grant program for students of modest means, grew by only 3.4 percent, and remained more than half a billion dollars below the peak support level reached in 1992-93. The long slide in "Pell grant coverage" relative to average tuition costs continued.[52] But Pell grant support should increase in the next few years; the Clinton administration pushed through Congress significant increases in maximum awards and total budgets beginning in 1997-98. The other two sizable federal grant programs, Supplemental Educational Opportunity Grants and College Work-Study, continued to receive level funding, that is, no increase for inflation. Congress cut the federal contribution to the State Student Incentive Grant (SSIG) program by nearly half to $35 million.

The Taxpayer Relief Act of 1997 included Clinton-supported tax credits for higher education tuition for individuals with income under specified amounts. These modest credits applied to up to $1,500 in annual expenditures for the first two years of college and half of annual expenditures up to $1,000 for two more years.[53] These provisions may boost middle-class enrollments in community colleges and lower-cost public four-year institutions where capacity is available, though their impact was as yet unanalyzed. But they will do nothing for families whose low incomes mean little tax liability. The programs may even sap support from need-based student aid, since they will have an estimated $30+ billion budget impact over five years.[54]

Significant growth in state and private grant aid to students has helped to offset stagnant federal support for grants. States provided $3.19 billion in student aid grants in 1996-97, preliminary figures indicate, a 6.3 percent increase over 1995-96, and a 62 percent increase over five years. State grant programs varied greatly in size and characteristics, but in 1996-97 they amounted in aggregate to well over half the size of the $5.66 billion Pell grant program. Gains in the core need-based aid programs for undergraduates were a more sluggish 4.1 percent. The decline in federal funding for SSIG, state grant analysts worried, would hurt state interest in this program.[55] The bulk of state grant aid is still need-based, but merit-based aid, programs designed to keep resident students in state, and programs targeted to students in particular fields grew more rapidly in recent years.[56]

"Institutional and other grants" grew by about $1 billion (10.5 percent) to nearly $10.6 billion in 1996-97, and by 67 percent over the past five years. Independent colleges and universities, trying to remain competitive as federal aid stagnates and tuition climbs, are spending more of their budgets on student aid. Since most funding for this aid comes from tuition revenue, colleges are pressed to raise prices still more.[57]

STUDENT ENROLLMENTS: THE BOTTOM LINE

Higher education enrollments decreased from 14.5 million to 14.1 million between fall 1992 and fall 1997.[58] The precarious financing of institutions and students, demographic changes, and changes in student enrollment patterns contributed to this decline.[59] This undesirable trend needs close monitoring. Demographic and economic imperatives make it unthinkable that America would allow higher education enrollments to languish now in the name of short-term budget savings. The social and economic price we ultimately pay will be great.

ACCOUNTABILITY MANDATES

States have increasingly tied the budgetary morsels devoted to higher education to "performance standards."[60] These specific, usually quantitative, indicators were designed to insure that public colleges and universities adhered to state priorities, progressed toward achieving state goals—not necessarily the same as institutional goals—and used their resources "efficiently." Ironically, noted some observers, states imposed more stringent conditions on their funding at a time when there was still rather little of it. Complaints about academic inefficiency and inattention to state priorities, contended these observers, were smokescreens intended to excuse chronic underfunding. Critics also complained about the cost of these new state mandates, such as for data-collection.[61] But accountability mandates were not unique to higher education. States also expected K-12 education, welfare-to-work, and managed health care to achieve "outcome" goals while carefully controlling costs.

Politics accelerated a trend initiated by fiscal pressures. Taxpayers and voters pushed for limits on public spending regardless of the economy's revenue-generating capacity; more and more elected officials shared these attitudes. Business pushed state government to "reform" higher education—now seen by business leaders as key to long-run economic vitality. Business representatives on state higher education boards, blue-ribbon commissions, and institutional boards urged belt-tightening, refocusing on customer service, and reengineering—steps they felt the private sector took earlier in the decade.[62] Government circles gave the message a sympathetic hearing. "Reinventing government" became the watchword.[63] Public higher education—a large state-funded entity—could not argue for exemption

from an economy-wide trend that seemed to fit the times.

The accountability push goes back to the emergence of interest in formal assessment of students and to the reporting of more efficiency- and outcome-oriented data in the mid-1980s.[64] These interests continue, but the emphasis has shifted from reporting data to comparing achievements with targets and to linking these results to state funding. "Half of the states now link some of their spending on public colleges to the campuses' performance," noted a 1998 survey of state officials responsible for higher education finance, "and all but a handful appear likely to do so within the next five years."[65] "Coordinating boards and state officials," the report added, "are increasingly accepting the concept that results should somehow count when allocating resources to public colleges and universities." The use of budget-linked accountability in higher education, the report concluded, reflects a shift in how states develop their higher education budgets "from what states should do for their campuses toward what campuses should do for their states."[66]

The report distinguished between "performance budgeting," where state policymakers take the measured performance of institutions into account along with subjective factors in establishing appropriations, and "performance funding," where a formula more tightly links the dollars to institutional performance. Some states use both methods (Figure 8). The performance funding states, noted the report, link less than 5 percent of their higher education appropriations to measured performance. Still, this level normally represents a much larger proportion of annual funding increases, and it may tend to creep up over time. South Carolina, for example, enacted legislation designed to determine its entire higher education budget according to 37 performance indicators by 2000.[67]

The report's authors have identified over 60 specific indicators used in performance-funding states.[68] Some indicators are outcome-oriented: the success of an institution in teaching its students or placing its professional program graduates in appropriate jobs, for example.[69] But many other indicators are efficiency-oriented or preferred-process measures that state budget and policy officials have long urged on higher education. These measures include: average time-to-degree, student persistence and graduation rates, numbers of community college to four-year institution transfers, faculty instructional workload measures, program duplication indicators, counts of the use of instructional technology in courses, and counts of inter-institutional cooperative efforts.[70]

Dangers exist in linking substantial resources to these measures, whatever their merit. Troublesome budget instability may result. So may goal displacement—an excessive shift in focus to what is measurable at the expense of important goals that are not—inefficient micromanagement of priorities and programs, and even threats to academic freedom.[71] The selected measures in most states gave short shrift to the research mission and to efforts to diversify the student body.[72] Using systemwide performance goals—for student academic performance or graduation time, for example—is insensitive to the types of students an institution admits and to the resources available to the institution and the students.[73] There are serious obstacles to applying the simple performance measures favored by the political process to complex higher education institutions and systems and to making these measures work in the public interest. But this is a difficult story to tell in the current climate.

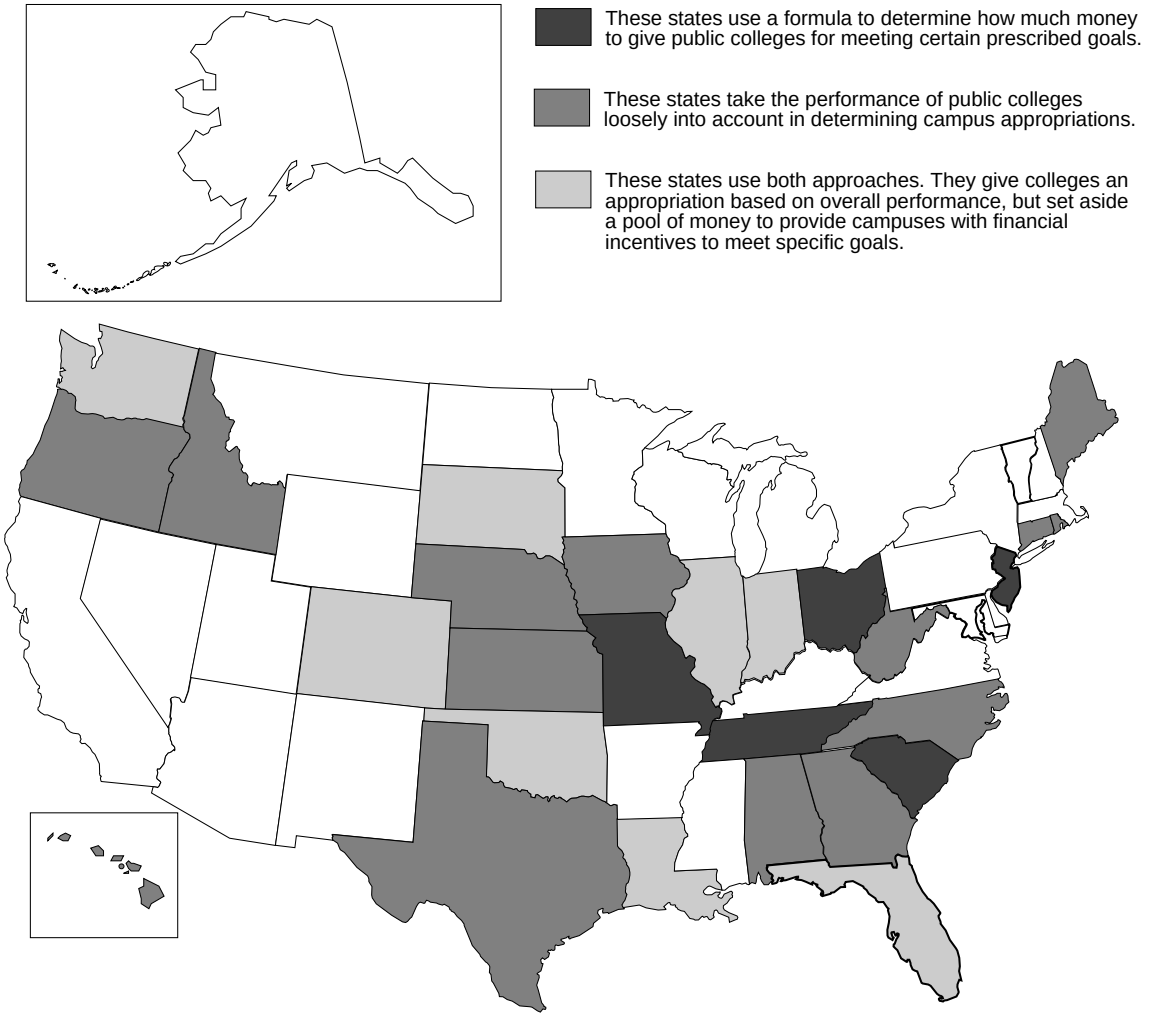
LOCAL "LEARNING CENTERS" AND DISTANCE LEARNING

States may resist traditional levels of funding for the spaces needed to serve the increasing numbers of students reaching college age and adults seeking access to higher education. Instead, the states are likely to adopt several measures requiring relatively low expenditures per additional student:

- crowding existing campuses to save costs of building new campuses, a strategy that requires some investments to accommodate more students.
- using mandates and incentives to fill existing campuses in evenings and on weekends.
- developing distance-learning-based courses for students who will infrequently, if ever, come to campus. Colleges will likely hire additional part-time and nontenure-track

FIGURE 8

PERFORMANCE-BASED FINANCING IN THE STATES



SOURCE: Chronicle of Higher Education*, July 24, 1998, A26. Data are from the Public Higher Education Program of the Rockefeller Institutute of Government, State University of New York.*

faculty, and use incentives—initially, at least—to obtain the participation of current faculty. Eventually, they will expect most faculty members to participate.

- opening limited service campuses in new geographic areas. These sites will use existing facilities—community colleges, schools, and other public facilities—and distance learning, and will target programs and courses to fields with demonstrated demand. The relatively few full-time, permanent faculty members hired may have very limited scholarly opportunities.
- expanding enrollments at independent nonprofit colleges and universities, when laws permit, that demonstrate capacity and interest, using contracts and student-aid-based incentives.[74]
- permitting more market penetration by out-of-state, often independent for-profit, purveyors of courses, certificates, and degrees,

using distance learning. This approach raises complex issues of accreditation, quality control, and regulation.

The capacity of new technologies to reach more people is a mixed blessing. Increased access to postsecondary learning is a benefit. But these technologies augur a sea change in the quality and character of available learning opportunities and raise difficult regulatory, resource allocation, and fairness issues.

CONCLUSION

The new millennium will be different, interesting, and challenging for higher education. Many new demands, accompanied by few new resources, will grind away at faculty and staff. Higher education must seek to alter the way its budgetary claims are treated.[75] Else, the grinding may be audible when the next recession hits and the criminal justice, welfare, and indigent health care sectors increase their claims on a shrunken state revenue base.

The time to prepare for this fast-approaching challenge is now.

NOTES

[1] Medicaid is a federal-state partnership program; states must by law provide their share of funds to support the health care of each *entitled* individual meeting the program's eligibility guidelines. In criminal justice, many states adopted determinate, strict sentencing guidelines requiring incarceration of more law-breakers for longer periods of time. Also, the courts enforce specific, formula-type standards for safe and humane conditions on state prisons and state-aided local jails. Since 1996, welfare is no longer a federally-mandated individual entitlement to which states must contribute. But states face spending requirements and stringent performance standards under the current law. Most important, states bear full responsibility for the cost of future caseload increases—a real concern in the next recession.

[2] National Conference of State Legislatures, 1998, 7.

[3] Of course, some types of institutions—especially large, selective research universities—can more readily tap these alternative sources.

[4] Wyss, 1998, 1.

[5] Johnson et al, 1998, 34; Standard & Poor's DRI, 1998b, 7.

[6] One inevitable drag on the economy: the unsustainable first-quarter surge in inventories; production rates had to come down to allow inventories to decrease (Wyss, 1998).

[7] Standard & Poor's DRI, 1998a, iii.

[8] Wyss, 1998, 1.

[9] Standard & Poor's DRI, 1998b, 6.

[10] Ibid.

[11] Glassman, 1998b.

[12] Glassman, 1998a.

[13] Standard & Poor's DRI, 1998b, 7.

[14] Glassman, 1998b.

[15] Standard & Poor's DRI, 1998b, 7.

[16] For representative views, see Wyss, 1998, and Glassman's analysis of the *Wall Street Journal's* annual survey of economists (1998a). The many economic uncertainties, noted Glassman, resulted in much more variation in the forecasts than usual. Real GDP growth, forecasted DRI, would slow from 3.8 percent in 1997 to 3.2 percent in 1998, and to just 1.8 percent in 1999 (Johnson et. al., 1998, 34).

[17] The data and assessments in this section are drawn from Johnson et. al., 1998, except where noted. DRI's regional groupings: New England—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Middle Atlantic—New Jersey, New York, Pennsylvania; South Atlantic—Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia; East North Central—Illinois, Indiana, Michigan, Ohio, Wisconsin; East South Central—Alabama, Kentucky, Mississippi, Tennessee; West North Central—Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; West South Central—Arkansas, Louisiana, Oklahoma, Texas; Pacific Northwest—Alaska, Idaho, Montana, Oregon, Washington, Wyoming; Pacific Southwest—Arizona, California, Colorado, Hawaii, Nevada, New Mexico, Utah.

[18] These treasury balances included "rainy day" funds and general fund end-of-year balances. The 1998 and 1999 figures are estimates for 46 reporting states that completed FY 1998 and whose legislatures completed action on the FY 1999 budget as of early summer 1998 (National Conference of State Legislatures, 1998).

[19] Ibid., 3. This report did not break out allocations to higher education, probably because they were not a high priority.

[20] National Governors Association and National Association of State Budget Officers, 1998, 1,4. Revenues fell short of estimates only in Hawaii. More than 20 states made midyear budget cuts during FY 1990-FY 1993.

[21] National Conference of State Legislatures 1998, 3. Many states may also be continuing the recent pattern of reporting very conservative revenue forecasts.

[22] Figures are reported by year of enactment. Thus, most 1998 actions apply to FY 1999. The 1998 figures are limited to 45 reporting states, hence the "P" (for preliminary) designation next to this year in Figure 4.

[23] Ibid., 3.

[24] FY 1999 state-by-state figures for budgeted expenditures were not available.

[25] National Governors Association and National Association of State Budget Officers, 35.

[26] The exception: Connecticut.

[27] Mortenson, 1998a, 17.

[28] Schmidt, 1998b.

[29] National Governors Association and National Association of State Budget Officers, 1998, 10-14.

[30] National Conference of State Legislatures, 1998, 7.

[31] Schmidt, 1998b.

[32] "The very best you could say about fiscal-1998 appropriations was that the hemorrhaging stopped," said Thomas G. Mortenson, of the Center for the Study of Opportunity in Higher Education and a long-time independent analyst of its fiscal trends, "while the planned increases in 1999 will do little to repair the damage done to public-college budgets during the recent recession" (quoted in Schmidt, 1998b).

[33] In part for this reason, the Congressional Budget Office projected a 7.4 percent average annual increase in Medicaid spending between 1997 and 2008 (National Governors Association and National Association of State Budget Officers, 1998, 1).

[34] Gest and Pope, 1996.

[35] Schmidt, 1998b. The National Conference of State Legislatures collected the data.

[36] The long-term declining trend similarly leveled off in 1988-1990, the last time the economy was strong (Figure 5).

[37] Data on regional and state patterns and allocations to the sectors within higher education were available only through FY 1998. The figures are appropriations, not actual expenditures, since it takes several months after the close of the fiscal year to obtain an accurate tally of expenditures.

[38] Hines, 1998.

[39] Ibid., 12.

[40] Schmidt, 1998a; b.

[41] Ibid., 1998a.

[42] Ibid.

[43] Western Interstate Commission on Higher Education and the College Board (1998).

[44] See Mortenson, 1998b; d.

[45] The correlation between the proportion of the over-25 baccalaureate degree-holding population in a state and its 1997 per capita income was about .75 (Mortenson, 1998c). This association, which has increased since 1991, is not necessarily a causal link, but the strength of the association and the direction of movement are consistent with the increased importance widely attributed to education in the modern economy. See, for example, Marshall and Tucker, 1992; Judy and D'Amico, 1997.

[46] Owen, 1998.

[47] Healy and Schmidt, 1997; Schmidt, 1998c. Independent institutions are also trying to limit price increases (Reisberg, 1998a).

[48] Washington State Higher Education Coordinating Board, 1998. This agency annually surveys large samples of institutions in three sectors to gather comparative data for tuition-setting in Washington institutions. The data reported in this paragraph and the next are from this source.

[49] The College Board, 1997b, 12. The 1996-97 figures are preliminary. The College Board estimated the proportion of all aid represented by work stipends to be just 1.4 percent in 1996-97, a proportion in steady decline for at least a decade.

[50] Ibid., 4.

[51] Data in this paragraph come from The College Board, 1997b.

[52] "At its peak, in the late 1970s, the maximum Pell Grant covered three-quarters of the average cost of attending a public four-year college and one-third the cost of a private four-year institution," noted the College Board. "Today, the maximum Pell Grant covers only one-third the average cost of attending a public four-year college and one-seventh the cost of a private four-year college" (1997b, 5).

[53] Lederman, 1997.

[54] Ibid.

[55] National Association of State Student Grant and Aid Programs, 1998.

[56] Schmidt, 1998d.

[57] Reisberg, 1998b.

[58] National Center for Education Statistics, 1998, 16-17. These federal statistics are based on enrollment reports from the institutions.

[59] The long-term decline in the traditional, 18-24 year-old, college-age cohort that began after 1981 finally bottomed out only in 1997 (Frances, 1998).

Census Bureau sample surveys of college enrollment (among the respondent's household members), Frances noted, have begun to diverge from institution-based enrollment reports in the past few years. The Census Bureau, for example, now estimates higher enrollments than does the National Center for Education Statistics, perhaps because significant numbers of students enroll in institutions that do not report to NCES, and because the Census Bureau survey may pick up enrollments in distance learning and other flexible delivery modes that do not enter fully into the standard fall enrollment counts of colleges and universities compiled by NCES.

[60] Schmidt, 1998c.

[61] Hartle, 1998.

[62] Healy, 1996; 1997; Schmidt, 1997a; b.

[63] Osborne and Gaebler, 1992; Osborne and Plastrik, 1998.

[64] Ruppert, 1995.

[65] Burke and Serban, 1998, quoted in Schmidt, 1998c.

[66] Ibid.

[67] Schmidt, 1997b.

[68] Burke, 1997.

[69] Even these indicators raise difficult questions: how to conduct formal and fair standardized assessments of student learning in disparate courses, and which job placements are appropriate for which graduates.

[70] Burke, 1997.

[71] For a fuller discussion, see Zumeta, forthcoming.

[72] Burke, 1997.

[73] Budget incentives to insure shorter graduation times or lower dropout rates (without added resources), for example, press institutions to tighten admission standards and to screen out students who will have to work many hours to pay their bills. These policies work against diversity goals and are unfair to students from modest economic circumstances.

[74] Zumeta, 1996b.

[75] For one approach to this issue, see Zumeta, 1996a.

REFERENCES

Burke, J. C., *Performance-Funding Indicators: Concerns, Values, and Models for Two-and Four-Year Colleges and Universities.* Albany, N.Y.: State University of New York, Rockefeller Institute of Government, Public Higher Education Program, 1997.

Burke, J. C. and A. M. Serban, *Current Status and Future Prospects for Performance Funding and Performance Budgeting for Public Higher Education: The Second Survey.* Albany, N.Y.: State University of New York, Rockefeller Institute of Government, Public Higher Education Program, 1998.

The College Board, "1995-96 Increase in College Costs Averages Six Percent, Upward Trend in Student Borrowing Continues." Press release, September 29, 1995, Table 4.

——— "1996-97 Increase in College Costs Averages Five Percent, Student Financial Aid at Record High." Press release, September 25, 1996, Exhibit 1.

———, "1997-98 Increases in College Tuition and Fees Average Five Percent; Student Financial Aid at Record High." Press release, September 24, 1997a, Exhibit 1.

———, *Trends in Student Aid: 1987 to 1997.* Washington, D.C.: Author, September 1997b.

Frances, C., "Higher Education: Enrollment Trends and Staffing Needs." *TIAA-CREF Research Dialogues* 55 (March 1998).

Gest, T., and V. Pope. "Crime Time Bomb." *U.S. News & World Report* (25 March 1996): 28-32, 36.

Glassman, J. K. "An Unfathomable Economy." *U.S. News & World Report* (3 August 1998a): 48.

———, "Who Needs the Fed?" *U.S. News & World Report* (1 June 1998b): 46.

Hartle, T. W. "Complex Government Rules Increase the Cost of Tuition." *The Chronicle of Higher Education* (6 March 1998): A60.

Healy, P. "The Republican Contract with Public Colleges." *The Chronicle of Higher Education* (26 January 1996): A26-A28.

———. "Virginia Board Members Urged to Become Activists." *The Chronicle of Higher Education* (21 March 1997): A35-A36.

———, and Schmidt, P. "At Public Colleges, the Tuition Debate is a Mix of Philosophy and Practicality." *The Chronicle of Higher Education* (30 May 1997): A17-A18.

Hines, E.R. *State Higher Education Appropriations 1997-98.* Denver, Colo.: State Higher Education Executive Officers, February 1998.

Johnson, S., P. Ellis, K. Husbands, L. Jaramillo, and D. Stiff. "Restructuring in the Automotive, Electricity, and Financial Services Industries: Implications for U.S. Regional Economies." In Standard & Poor's DRI, *Review of the U.S. Economy,* Lexington, Mass.: McGraw-Hill, July 1998: 33-53.

Judy, R. W., and C. D'Amico. *Workforce 2020: Work and Workers in the 21st Century*. Indianapolis, Ind.: Hudson Institute, 1997.

Lederman, D. "Budget Deal Gives Students and Colleges the Biggest Infusion of U.S. Aid in Decades." *The Chronicle of Higher Education* (8 August 1997): A27-A28.

Marshall, R., and M. Tucker. *Thinking for a Living: Education and the Wealth of Nations.* New York: Basic Books, 1992.

Mortenson, T. "Annual Changes in Major Expenditure Categories from State General Funds, FY 1990 to FY 1998." *Postsecondary Education OPPORTUNITY* 68 (February 1998a): 17.

———. "Appropriations of State Tax Funds for Operating Expenses of Higher Education per $1000 of Personal Income, FY 1975 to FY 1998." *Postsecondary Education OPPORTUNITY* 65 (November 1997), 1.

———. "College Continuation Rates for 1997 High School Graduates." *Postsecondary Education OPPORTUNITY* 71 (May 1998b): 1-8.

———. "Educational Attainment in the States: Status and Importance to State Economic Welfare." *Postsecondary Education OPPORTUNITY* 72 (June 1998c): 7-14.

———. "The Private Investment Value of Higher Education, 1967 to 1996." *Postsecondary Education OPPORTUNITY* 69 (March 1998d): 9-16.

National Association of State Student Grant and Aid Programs. *28th Annual Survey Report 1996-97 Academic Year.* Albany, N.Y.: New York State Higher Education Services Corporation, March 1998.

National Center for Education Statistics. *Mini-Digest of Education Statistics, 1997.* NCES 98-020. Washington, D.C.: Author, February, 1998.

National Conference of State Legislatures, Fiscal Affairs Program. *State Budget and Tax Actions 1998: Preliminary Report*. Denver, Colo.: Author, July 1998.

National Governors Association and National Association of State Budget Officers. *The Fiscal Survey of States.* Washington, D.C.: Author, May, 1998.

Osborne, D., and T. Gaebler. *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector.* New York: Penguin, 1992.

———, and P. Plastrik. *Banishing Bureaucracy: The Five Strategies for Reinventing Government*. New York: Penguin Putnam Inc., 1998.

Owen, M. "Colleges Object to Proposed Requirements for Reporting Their Costs." *The Chronicle of Higher Education* (26 June 1998): A29.

Reisberg, L., "Many Private Colleges Are Boasting of Smallest Tuition Increases in Years." *The Chronicle of Higher Education* (13 March 1998a), A51-A52.

———. "Survey Finds Growth in Tuition 'Discounting' by Private Colleges." *The Chronicle of Higher Education* (13 March 1998b): A52.

Ruppert, S. S., "Roots and Realities of State-Level Performance Indicator Systems." *New Directions for Higher Education*, no. 91 (fall 1995).

Schmidt, P., "A Building Boom for Public Colleges." *The Chronicle of Higher Education* (12 June 1998a): A29-A30.

———. "City University of New York Faces Tough Scrutiny." *The Chronicle of Higher Education* (9m May 1997a): A33-A34.

———. "More Money for Public Higher Education." *The Chronicle of Higher Education* (12 June 1998b): A30.

———. "Rancor and Confusion Greet a Change in South Carolina's Budgeting System." *The Chronicle of Higher Education* (4 April 1997b): A26-A27.

———. "States Increasingly Link Budgets to Performance." *The Chronicle of Higher Education* (24 July 1998c): A26.

———. "State Lawmakers Share the Wealth with Colleges and Their Students." *The Chronicle of Higher Education* (11 September1998d): A33-A34.

Standard & Poor's DRI. "Forecast at a Glance." In *Review of the U.S. Economy.* Lexington, Mass.: McGraw-Hill, July 1998a: ii-iv.

———. "Synopsis of the Forecast." In *Review of the U.S. Economy*. Lexington, Mass.: McGraw-Hill, July 1998b: 6-7.

Washington State Higher Education Coordinating Board. *1997-98 Tuition and Fee Rates: A National Comparison*. Olympia: Author, January 1998.

Western Interstate Commission on Higher Education and The College Board. *Knocking at the College Door: Projections of High School Graduates by State and Race/Ethnicity, 1996-2012*. Boulder, Colo.: Western Interstate Commission on Higher Education, February 1998.

Wyss, D. A. "Feeling Vulnerable." In Standard & Poor's DRI, *Review of the U.S. Economy.* Lexington, Mass.: McGraw-Hill, July 1998: 1-5.

Zumeta, W. "A Case Study: Where Can We Put All the Students?" *Thought & Action* 12 , no. 2 (Fall 1996a): 7-44.

———. "Meeting the Demand for Higher Education Without Breaking the Bank: A Framework for

the Design of State Higher Education Policies for an Era of Increasing Demand." *Journal of Higher Education* 67, no. 4 (July / August 1996b): 367-425.

———. "Public University Accountability to the State in the Late Twentieth Century: Time for a Rethinking?" *Policy Studies Review,* Symposium on Democracy and the Academy (forthcoming).