

Higher Education Finance in The Nineties

Lessons for the New Millennium

By William Zumeta

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Fiscal prospects for American higher education appeared rosy at the close of the 20th century. State politicians matched talk about education as key to the new booming economy with higher appropriations for institutional operations and for student financial aid, while unpopular tuition hikes moderated. The federal government—also in good financial shape—considered sizable increases in student aid grants, tuition tax credits, and research funding. These strong positive trends followed the upward creep in government support during the mid-1990s. That uptick, in turn, succeeded several years of cuts in taxpayer support and large increases in tuition.

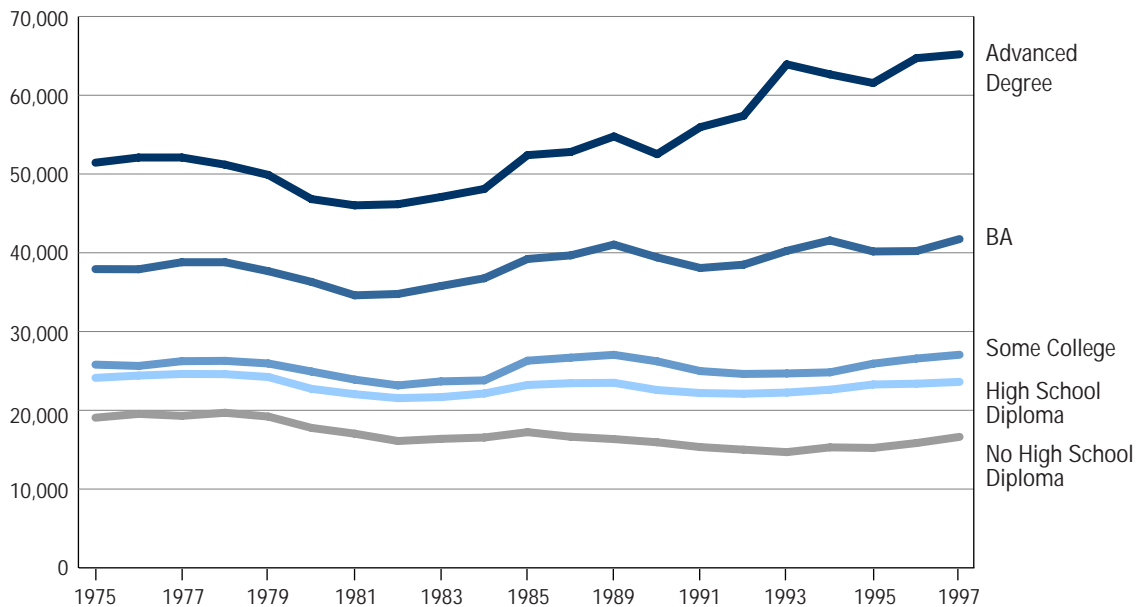
But analysis of higher education finance during the 1990s shows that structural problems in state fiscal affairs belie this rosy scenario. This chapter discusses these problems, their implications, and ways of addressing them. We focus on the states—the “owners” and primary source of support for most public college and university operations. State policies also influence student tuition and fees—the other key source of support. We confine analysis of federal policy to student financial aid—its main policy focus along with sponsoring research and development. Federal support—as a proportion of total resources devoted to higher education or as a proportion of federal expenditures—has remained stable for nearly 20 years, does not appear to be under threat, and may even increase as long as there is a budget surplus.

The stakes are high. Higher education contributes to economic advancement and to individual and societal welfare. The perspectives and skills associated with postsecondary education are crucial for the labor force in a “new economy” characterized by rapid technological and organizational change, global economic relationships, and the primacy of information. The share of economic growth attributable to labor force skills, say economists, is large and growing.¹ States with more educated populations show greater growth rates.² And the labor market rewards higher education and punishes the lack of it as never before (Figure 1).

The importance of higher education for individual and group opportunities heightens the role of public policy in assuring equitable access to its benefits. Policies and funding

Figure 1

**Income by Educational Attainment for Persons 18 Years Old and Over, 1975 to 1997
(Inflation Adjusted for 1999)**



Source: U.S. Census Bureau. March Current Population Survey. Income Statistics Branch/HHES Division. U.S. Department of Commerce, Washington, D.C.

Reprinted from College Board, 1999a, 20.

Note: No data for 1986 and 1987. Trend lines interpolated for those years.

mechanisms must make access to higher education available and feasible if all are to share in the fruits of the modern economy, for a growing pool of high school graduates come from minority ethnic groups and families of modest means.³

HIGHER EDUCATION FINANCE IN THE 1990s

Higher education suffered budget cuts and students faced steep price increases during a deep recession in the early 1980s. But most states swelled their budget commitments when the economy surged later in the decade, and higher education fared relatively well. By 1990, an overheated economy again sank into recession—first in the Northeast, later elsewhere.⁴ Aggregate output fell for two quarters in 1990–91, and unemployment climbed as high as 6.6 percent. Recovery from this downturn was slow and unsteady through 1993;

some regions recovered only much later.

These economic trends directly affected the fiscal fortunes of higher education. State aid to higher education comes from the *general fund*—the largest fund in the treasury—supported by income, sales, and other general purpose taxes.⁵ Other state functions, including (in descending order of support) elementary and secondary education, Medicaid,⁶ “corrections,” and public assistance, compete with higher education for general fund support.⁷ In most states, Medicaid overtook higher education as the second-largest state general fund budget item in the early 1990s and has since far outpaced the academic sector in its fiscal claims.

Aggregate state budget growth slowed as revenues declined during the economic downturn of the early 1990s (Table 1; the right-hand column shows the annual percentage changes adjusted for inflation back to 1979). Revenue shortfalls forced many states

Table 1

State Nominal and Real Annual Budget Increases, FY 1979 to FY 2001

Fiscal Year	State General Fund	
	Nominal Increase	Real Increase
2001*	3.8%	1.7%
2000*	6.9	3.0
1999	7.7	5.2
1998	5.7	3.9
1997	5.0	2.3
1996	4.5	1.6
1995	6.3	3.2
1994	5.0	2.3
1993	3.3	0.6
1992	5.1	1.9
1991	4.5	0.7
1990	6.4	2.1
1989	8.7	4.3
1988	7.0	2.9
1987	6.3	2.6
1986	8.9	3.7
1985	10.2	4.6
1984	8.0	3.3
1983	-0.7	-6.3
1982	6.4	-1.1
1981	16.3	6.1
1980	10.0	-0.6
1979	10.1	1.5
1979–2001 average	6.8%	2.1%

Source: National Association of State Budget Officers. Reprinted from National Governors' Association National Association of State Budget Officers, 2000, 2.

Note: The state and local government implicit price deflator and the consumer price index were used for state expenditures in determining real changes. FY 2000 figures are based on the change from fiscal 1999 actuals to FY 2000 estimated. FY 2001 figures are based on the change from FY 2000 estimated to FY 2001 recommended.

to increase taxes and reduce enacted budgets in mid-year between 1990 and 1993 to sustain even the lower budget levels.⁸ Higher education suffered in budgetary competition during the early 1990s. Medicaid, public assistance, and corrections are “cyclically sensitive”—they face increased demands during periods of economic distress. Welfare caseloads, for example, increased by about 5 percent in 1990, 10 percent in 1991, and 8 percent in 1992.⁹

Medicaid costs increased along with new federal coverage mandates, inflation in health care costs per unit of service, and intensified use of services by beneficiaries.¹⁰ The program made strong demands on state general funds: a 17 percent increase in 1991, 20 percent in 1992, and 10 percent in 1993.¹¹ Corrections spending also grew as states initiated “three strikes and you’re out” and other determinate sentencing mandates, and responded to court decisions requiring improved prison conditions. State spending growth for corrections actually slowed in the 1990s, but increases of 9 percent in 1991, 4 percent in 1992, and 7 percent in 1993 were still well above the aggregate budget growth rate for these years.¹² State budget authorities had to fund these entitled or mandatory functions so long as individual cases met legal eligibility requirements.¹³

States’ support of elementary/secondary education or “school aid”—averaging a third of general fund spending—is related to enrollments and therefore functions as an entitlement.¹⁴ School enrollments grew in most states during the early 1990s, but states did not increase real spending per student. Forcing local districts to assume more of the burden further moderated percentage growth rates for school aid. But states still had to find many additional dollars for this purpose.¹⁵

Voter-enacted tax or spending limitations, along with the economic downturn, constrained the growth of the budgetary pie.¹⁶ Policymakers, forced by the recession to enact tax increases, felt strong pressure to limit spending even where no legal requirement to limit revenue collections or spending existed. These policymakers looked to higher education for economies—the one large function seen as *discretionary* in budgetary terms. In tight budgetary times, states could limit higher education “caseloads” (enrollments)—or at least per-student funding—to ease pressure on the public fisc. This step was all the easier because, unlike Medicaid and K-12 education, colleges and universities could offset cuts in requested state appropriations by turning to other revenue sources, especially student tuition and fees.¹⁷ State support of higher education therefore nosedived in inflation-adjusted terms and fell in nominal dollar terms in three of the four fiscal years between 1990 and 1993 (Figure 2). State appropriations per full-time-equivalent

student, adjusted for inflation, fell by more than 15 percent between 1988 and 1993.¹⁸

Public colleges and universities responded to reduced state support by cutting operations, maintenance, and institutional support (general administrative functions) budgets, imposing hiring and salary freezes, reducing nontenured faculty positions, laying off employees, and increasing class sizes and faculty teaching loads.¹⁹ Enrollment growth stagnated, and reductions in courses and sections made it more difficult for students to complete their programs on time.²⁰ Tuition increased faster at public colleges than at independent institutions and far beyond rates of inflation and of gain in family incomes.²¹

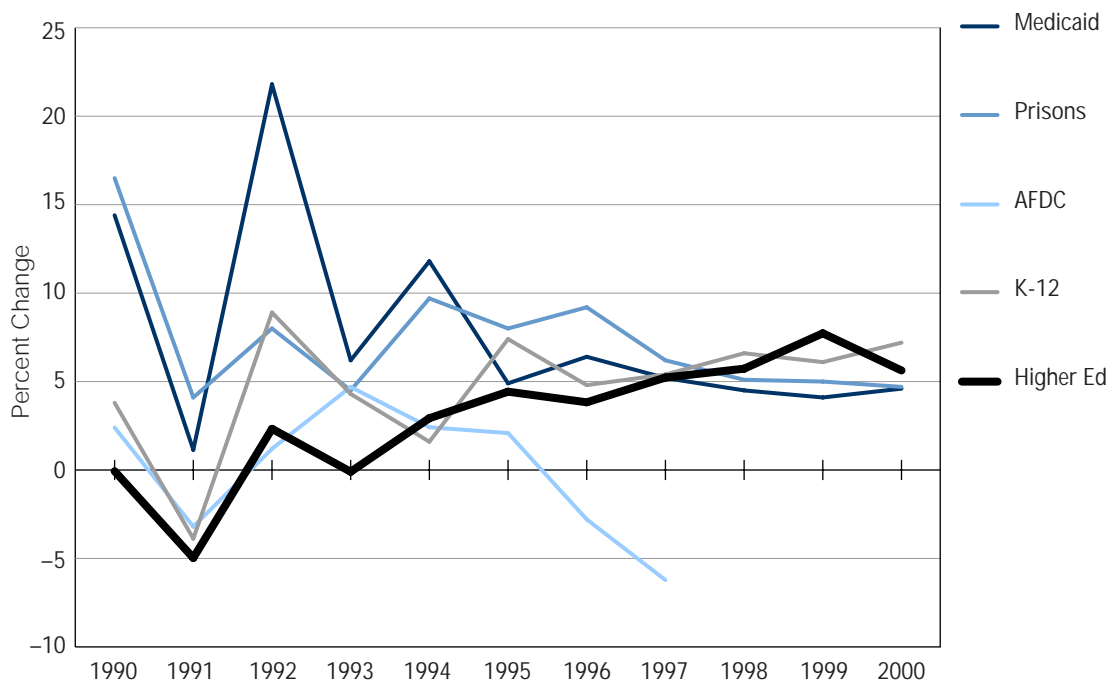
The national recession technically lasted only a few months and ended in 1991 (though much later in some states including California). By fiscal 1993, state finances showed positive signs. The aggregate year-end general fund fiscal balance—money in the treasury at the end of the fiscal year—climbed from 1–2 percent of expenditures in 1991 and 1992 to

4.2 percent in 1993 and to above 5 percent in the ensuing years (Figure 3). Many states—chastened by the pain of enacting sudden tax increases and spending cuts—projected lower revenues and higher expenditures than the actuality.²² Also, after the 1994 “Republican Revolution,” when the GOP won control of many statehouses, governorships, and Congress, policymakers enacted net tax and fee cuts for six straight years to more than compensate for the increases imposed during the downturn.²³ The \$28 billion in total cuts—including cuts proposed for fiscal 2001—reflected a dramatic increase over the \$3 billion in tax cuts enacted after the recession of the early 1980s. The difference reflected politics, not economics: states felt constrained to eschew spending wherever possible and return to taxpayers a substantial portion of revenues brought in by the recovery.

A movement tying appropriations more closely to accountability or performance measures accompanied the fiscal stress facing states in the 1990s.²⁴ Higher education, concluded

Figure 2

**Annual Changes in Major Expenditure Categories from State General Funds
FY 1990 to FY 2000***

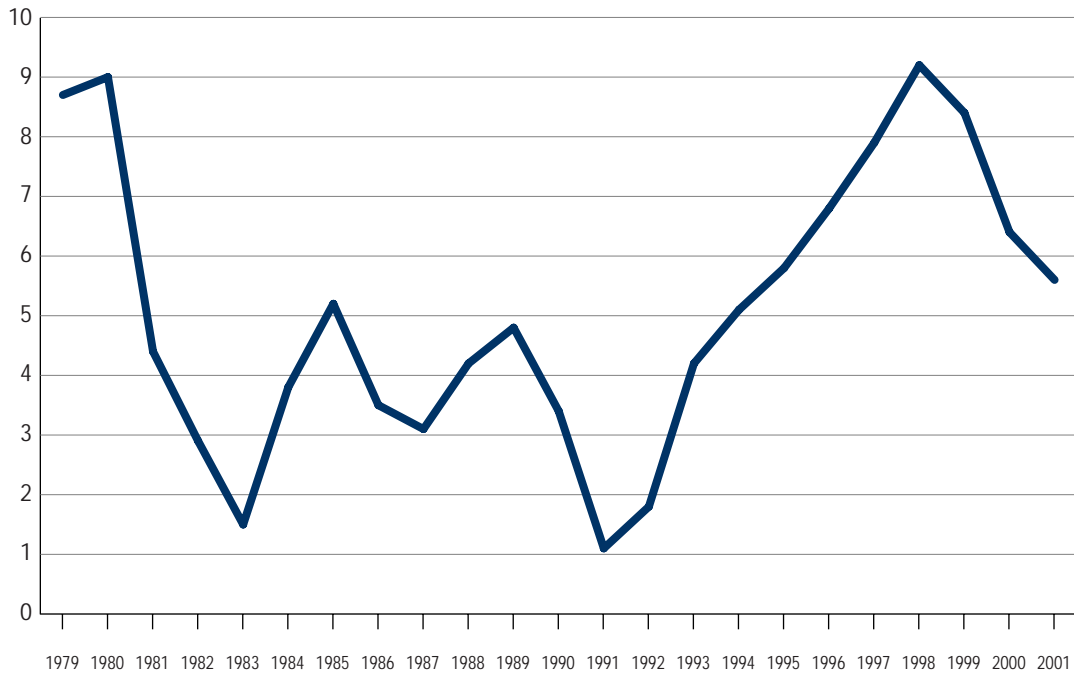


Source: Reprinted from Mortenson, 1999, 11.

* Data for FY 2000 is preliminary.

Figure 3

Total Year-End Balances as a Percentage of Expenditures, FY 1979 to FY 2001



Source: National Association of State Budget Officers

Adapted from National Governors' Association and National Association of State Budget Officers, 2000, 15.

concerned business interests, failed to follow the corporate response to technological change and global competition by streamlining and refocusing attention on quality. Many states “reinvented government” to become more customer-focused, entrepreneurial, and market-oriented.²⁵ The public health care sector, for example, restructured to contain costs. Policymakers pressured K-12 education to accept more accountability, measured by achievement on high-stakes tests. Welfare agencies focused on rapid job placements for recipients. Higher education confronted similar pressures; states required colleges to report more data about costs, efficiency, and outputs and tied appropriations to performance on specific indicators.²⁶

Higher education appropriations began to recover along with state fiscal fortunes in the mid-1990s and with reduced recession-related pressures on caseloads elsewhere.²⁷ Aggregate gains in appropriations were 2.8 percent in fiscal 1994, 4.3 percent in fiscal 1995, and 3.7 percent in fiscal 1996.²⁸ These gains slightly

exceeded the modest inflation rates of this period, but did little to make up for earlier shortfalls or to respond to the increased enrollment pressures in many states. Recovery in higher education support varied by region. Southern and Western states—California and Hawaii excepted—fared best through the downturn and recovery, while Northeastern and Midwest states experienced the most sluggish recovery.

Tuition increases moderated as state support increased and as opposition to large price hikes mounted. After double digit jumps in 1991–92 and 1992–93, average annual tuition hikes in public four-year colleges and universities eased to 8 percent in 1993–94 and to 6 percent in the next three years. Tuition increased at least 10 percent at public two-year colleges between 1991–92 and 1993–94, but fell to the 4 to 6 percent range over the next three years.²⁹ But these increases continued to exceed inflation rates and gains in measures of average family income, and state and federal politicians continued to protest high college charges.

Improvement continued at the end of the decade. The economic recovery passed previous records in length, and virtually all states reported budgetary gains. Pressures on state budgets from Medicaid, corrections, and public assistance moderated and states could fund higher education at levels exceeding inflation and enrollment growth. Appropriations per FTE student increased in inflation-adjusted terms after 1993, though still falling short of late 1980s peaks.³⁰ Aggregate gains for higher education appropriations climbed to 5.1 percent in 1997, 5.6 percent in 1998, and 7.6 percent in 1999. The largest gains—this was true through most of the 1990s—went to community colleges and state student aid programs.³¹ Two-year colleges benefited from interest in workforce-development programs and from the desire of policymakers to direct students to low-cost institutions. Support for student aid arose from concerns about the high price of college and from the political influence of independent colleges whose students heavily utilized these programs.

The fiscal 1999 appropriations increase for higher education was the largest rate of gain among any major function supported by the state general fund.³² But, in return, states pressed institutions for improved graduation rates, smoother transfers from two-year to four-year colleges, use of advanced technology in teaching, and heavier teaching loads. Enrollment surges spurred by the long-expected arrival of “baby boom echo” students forced colleges to stretch resources. Meanwhile, ominous fiscal signs appeared. Medicaid spending increased as expanded managed care reached a limit, more children enrolled under a new federal mandate, and the average age of participants increased.³³ Tax cuts and the growth of Internet sales—exempted by Congress from state taxation—eroded state tax bases.³⁴

RECENT ECONOMIC AND FISCAL DEVELOPMENTS

The national economy showed a healthy picture in early fall 2000. Unemployment rose to a 4.1 percent rate in August, just above the 30-year low set earlier in the year.³⁵ Markets and analysts viewed this uptick as a sign that the Federal Reserve Board had engineered a

modest slowdown after four quarters of an unsustainable 5 percent or greater annual growth rate.³⁶ The record nine years of economic growth showed no sign of ending; gains were spread out across the country.

State fiscal prospects were also favorable.³⁷ Fiscal 2000 revenues exceeded expectations in most states and fiscal 2001 projections suggested more gains, even after a seventh consecutive year of net tax cuts.³⁸ Expenditure budgets (governors’ proposals for fiscal 2001) remained conservative, totaling only 3.8 percent more than estimated fiscal 2000 general fund spending, compared with expected inflation in the 2 to 3 percent range. Such budgets would lead to a projected 50-state aggregate year-end fiscal balance of around \$29 billion—about 5.6 percent of planned expenditures—down from late 1990s peaks, but within the range of fiscal health. Barring an unexpected economic downturn, states will exceed the expenditure budget and final balance figures, but their publication does check spending. As for fiscal 2001, 22 states projected year-end balances below 5 percent of spending; five states expected a very thin ending balance of less than 1 percent.

Higher education again recorded a healthy fiscal 2000 gain in state appropriations—6.5 percent in general funds and 6.4 percent in appropriations from all state funds.³⁹ These figures represented a 1 percent drop from the fiscal 1999 gain and were below the fiscal 2000 gain for K-12 education by about the same margin. But higher education outpaced corrections and Medicaid and exceeded the 5.3 percent overall gain in general fund appropriations.⁴⁰ Gains in higher education funding in 32 states exceeded overall general fund expenditure growth, and no state reported a decline in higher education appropriations for the first time in 15 years. The long period of prosperity prompted state officials to aid *discretionary* parts of the budget like higher education generously. Appropriations gains were strongest in the South and West, as was true for most of the 1990s, but New England states appeared among the funding gain leaders for the first time in many years.⁴¹

Within higher education’s allocation, state policymakers again gave priority to workforce-development programs and to affordability

concerns by favoring two-year colleges and student aid. Some states froze tuition or limited increases at public colleges and offset the forgone revenues with additional funding.⁴² States also invested in deferred maintenance and capital expenditures, instructional technology, and programs encouraging corporate and academic use of research-based technologies. But many states, hesitating to assume long-term operational commitments, authorized one-time expenditures.⁴³

Tuition growth averaged 4.7 percent for public two-year colleges and 3.4 percent for public four-year schools between 1998–99 and 1999–2000, despite state efforts to moderate these increases. These rates significantly exceeded inflation rates and were in line with recent increases, but were lower than the hikes typical of the recession.⁴⁴ The Northeast and Midwest reported higher tuition than the South and West.⁴⁵

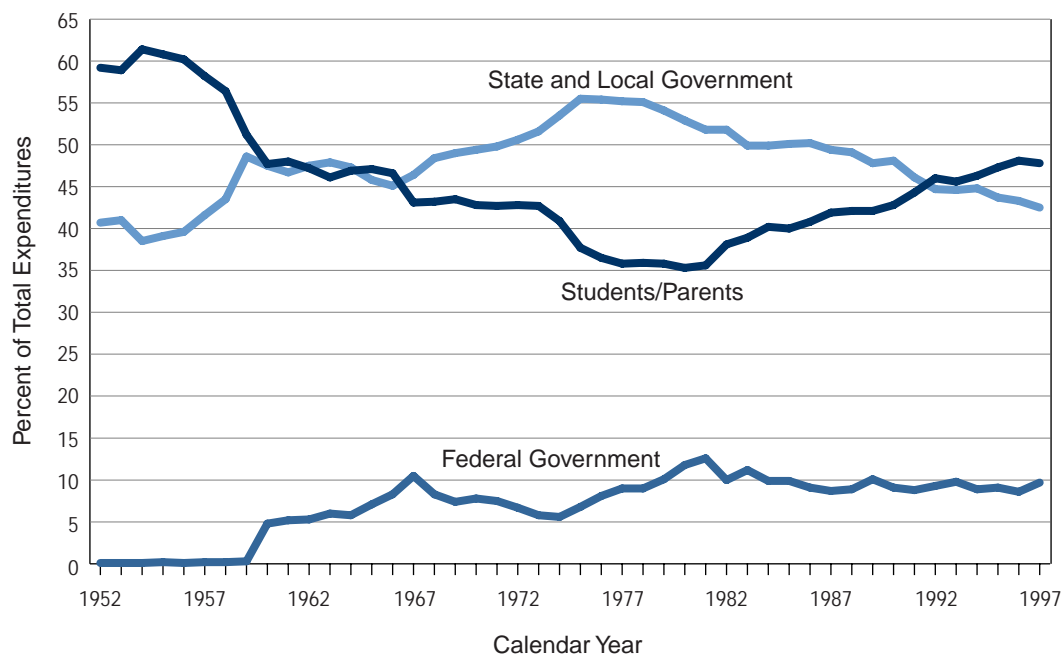
Federal and state officials continued to express concern about the price of college.⁴⁶ This is not surprising given that college

charges grew *in inflation-adjusted dollars* by 53 percent at four-year public institutions and 41 percent at four-year independent schools between 1988–89 and 1998–99 while median family income gained just 10 percent.⁴⁷ The share of higher education financing assumed by students and families grew from 35 percent to nearly 48 percent between 1980 and 1998, while the state and local share dropped from a peak of 55.5 percent to 43 percent between 1975 and 1998 (Figure 4). The mandate in the 1998 amendments to the Higher Education Act to report on college costs, prices, and student financial aid using standardized definitions beginning in 2001 will stimulate debate in federal and state venues. Colleges will not easily extract further large increases in revenues from students.

Aggregate student aid increased in the 1990s in line with growth in college charges, and the federal government recently added important new forms of aid to the mix.⁴⁸ But major changes in the forms of aid affected access goals and distributional equity. By

Figure 4

Distribution of Responsibilities for Financing Higher Education, 1952 to 1998



Source: U.S. Department of Commerce, *National Income and Product Accounts*
Reprinted from Mortenson, 2000, 15.

increasing borrowing ceilings under the federal student loan programs and creating a new unsubsidized loan program when it reauthorized the Higher Education Act in 1992, Congress precipitated a dramatic increase in student and family borrowing (Figure 5). Loans accounted for about two-thirds of the growth in total aid in the 1990s and for 58 percent of the dollar volume of all aid available (up from 47 percent in 1992–93).⁴⁹ Unsubsidized loans accounted for 45 percent of all federal student loans. Need-based grant aid grew sluggishly relative to college charges, so even students of modest means turned to loans or dropped out.⁵⁰

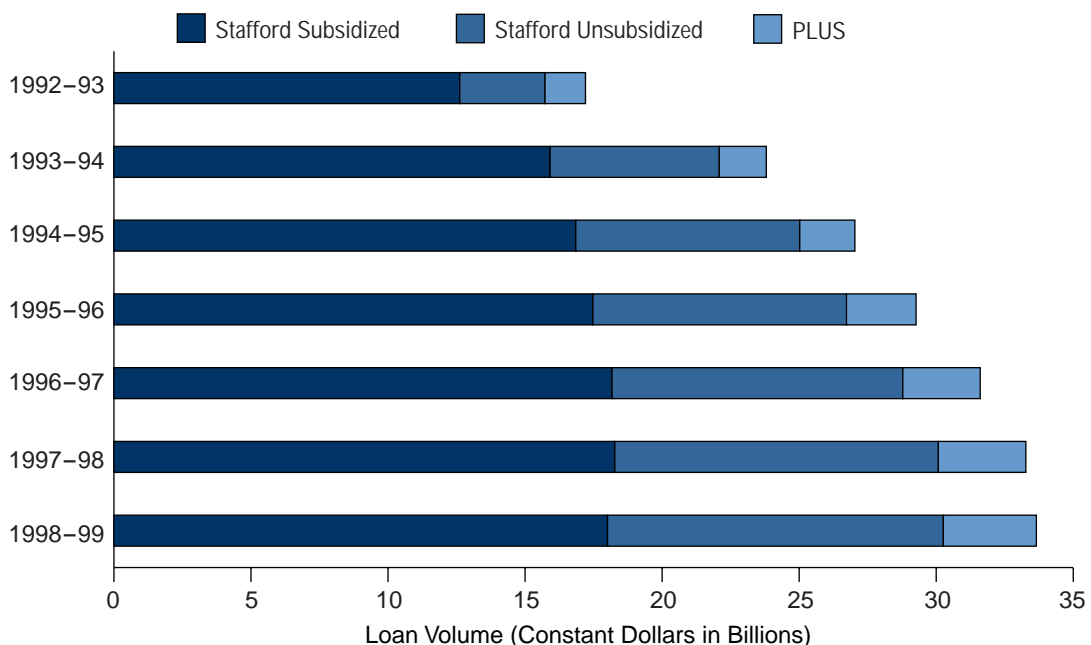
The massive federal Hope and Lifetime Learning tax credits and college savings incentives, enacted in 1997, moved federal aid policies further from their traditional focus on access for low-income students. These programs would provide an estimated \$12–15 billion annually in tax relief to students and their families when fully implemented—greater than the value of all state and federal grant programs combined.⁵¹ But the programs

offered few benefits to students and families with incomes too low to owe taxes or save for college. This shift may affect long-term support for need-based aid programs, thus skewing patterns of college attendance and completion even further toward the more affluent.

State grant programs grew by 65 percent in constant dollars during the 1990s to almost \$3.7 billion in 1998–99.⁵² State funding for traditional need-based aid programs increased, but the fastest-growing segments of state student aid were “merit-based” and workforce-development-oriented scholarship (or loan-forgiveness) programs. Spending on the merit-based aid programs in place in 35 states reached \$1.12 billion in aggregate funding in 1998–99—29 percent of aid funding in those states.⁵³ The number and priority of merit-based aid programs burgeoned since the advent of Georgia’s Hope Scholarship program in the early 1990s under the leadership of Governor (now U.S. Senator) Zell Miller.⁵⁴ The states create incentives for good performance by basing these scholarships on academic achievement, not on need.⁵⁵ Often, recipients

Figure 5

Growth of Stafford and PLUS Loan Volume, 1992–1993 to 1998–1999



Source: Reprinted from College Board, 1999b, 9

must attain a specific grade point average—usually a B-average—to become or remain eligible; the programs may therefore pressure teachers to shade grades upward.

This approach awards a disproportionate amount of available aid to affluent and non-minority students who average higher grades and who would have attended college in any case. Large scale funding could drain support for need-based aid programs that affect college attendance and persistence for students of modest means.⁵⁶ Georgia, for example, provided nearly \$200 million in Hope scholarships and less than \$0.5 million in need-based aid in 1998–99.⁵⁷

State funds also increasingly supported merit-based programs that enticed students to study in fields leading to occupations where workers are needed.⁵⁸ Small-scale programs had traditionally targeted the health professions, but some states now offer aid or loan forgiveness to students who become teachers or who seek careers in science and technology, as in Maryland, Missouri, and Pennsylvania.⁵⁹ Other states encouraged students to become child care providers and teacher aides.

States also provided tax benefits to families that saved for college or that prepaid tuition. Prepaid tuition programs ensured the funds to cover future public college tuition charges by allowing parents to deposit an amount reflecting current rates.⁶⁰ These programs may also lower political incentives to fund need-based aid for low-income students, since their benefits go to voters who have resources to save or invest in a prepaid tuition plan.

THE OUTLOOK

Favorable conditions for higher education funding should not blind anyone to emerging problems. Higher education must change to meet the needs of growing numbers of high school graduates,⁶¹ and to improve participation rates of disadvantaged populations and adults already in the work force. A recent analysis of state fiscal futures poses the key problem.⁶² Projecting current state revenue structures and caseload and expenditure patterns to 2008, the analysis concluded that 39 of the 50 states would face shortfalls relative to “current service level” needs *without any major economic downturn*. Nine of

the remaining 11 states had a surplus margin of less than 1 percent.

The analysis offered two reasons for this precarious fiscal situation: inexorable growth in caseload-driven service demands, especially Medicaid, and the failure of state tax revenues to grow commensurate with state personal income.⁶³ Barring a major change in the climate for taxation, the analysis concluded, higher education—a discretionary expense—would bear the brunt of necessary reallocations as it has done in the past. This sector would be unable to respond to the growth of currently eligible populations, much less increase access rates. Assuming no substantial economic downturn implies an unprecedented run of prosperity dating back to the early 1990s. A gloomy scenario—featuring at best a slow squeeze on higher education and stagnant participation rates—is likely to occur unless the structural position of higher education in state budgeting improves relative to the other major functions, or unless the state budget pie grows at a faster pace.⁶⁴

To forestall this outcome, higher education must help to grow the state budget pie more rapidly—the preferable option—or embed its claims for resources in statutory funding formulas. Higher education officials, under the second alternative, could seek laws that target population participation rates and formula-based funding levels to serve them. Or, states could guarantee a funding base by earmarking revenues from a substantial tax source for higher education. Some states have earmarked lottery and resource-based revenues, such as oil, gas, and timberland, but these sources have serious disadvantages. Acquiring a guaranteed share of a relatively stable, elastic revenue source like the state personal income tax is preferable.⁶⁵ Guaranteed funding by statutory formula would also promote institutional autonomy.

Colleges and universities can also look to alternative revenue sources, including private fundraising and sales of research, consulting, and contract training services to outside clients. In any case the last round of steep tuition hikes provoked sufficient consumer and political resistance to make similar increases unlikely anytime soon. Nor is dependence on tuition consistent with the goal of improving low-income access to

higher education, given the shift from need-based student aid.⁶⁶

A recession will produce a still gloomier picture. Demands from cyclically sensitive services—Medicaid, corrections, and public assistance—would presumably surge as state revenues plummeted. Worse, federal welfare laws now assign sole responsibility for funding caseload increases to the states. States could tighten standards or cut benefits to control costs since welfare is no longer an individual entitlement. But most states would probably respond to increased needs, and higher education would take the brunt of the reallocations to these recession-sensitive services.

Finally, states will increase performance expectations along with future funding. Higher education will not be exempted if these expectations prevail in other public sectors and in business. Academe will be asked to show, for example, that students graduate faster, teachers are better prepared, and graduates demonstrate learning outcomes and find appropriate employment.⁶⁷ The extent of these pressures may vary between states, but they are unlikely to wane.

Other social sectors recognize the contributions of the academic sector to economic growth and to equity for disadvantaged groups. Supporters of higher education must build on this recognition to sustain and enhance these contributions. The process begins by articulating the importance of adequate finances and of autonomy and flexibility in using those resources.

NOTES

¹ Murphy and Welch, 1989; Marshall and Tucker, 1992.

² Mortenson, 1998.

³ Western Interstate Commission on Higher Education and The College Board, 1998.

⁴ Data on the recession are from Gold, 1995.

⁵ Special funds, such as gasoline taxes and hunting and fishing license revenues, can be sizable but states strictly limit their uses.

⁶ This federal-state program provides health coverage for low-income people including the elderly.

⁷ Public assistance is dominated by Temporary Assistance to Needy Families (TANF, formerly Aid to Families with Dependent Children, or AFDC).

⁸ The number of states reducing enacted budgets peaked at 35 in FY 1992 (National Governors' Association, 2000, 15).

⁹ Gold, 1995, 28.

¹⁰ Gold, 1995, 29.

¹¹ Gold, 1995, 26.

¹² Gold, 1995, 26.

¹³ States could have changed laws governing eligibility and payments, but federal rules, court decisions, and political pressures limited this option.

¹⁴ States in aggregate provide more than 50 percent of school support; some states provide as much as 100 percent.

¹⁵ Gold, 1995, 27.

¹⁶ Gold, 1995, 10.

¹⁷ Institutions also sought to enhance their grant, contract, and gift income, but most rewards went to the major research universities. Also, soliciting increased donor support or R&D funding from a fiscally beleaguered federal government proved difficult during a recession.

¹⁸ Data from Research Associates of Washington, cited by McKeown-Moak, 2000, 5.

¹⁹ The data in this paragraph come from a survey reported in Serban and Burke, 1998.

²⁰ California enrollments declined by 200,000, mostly in the community college and California State University systems.

²¹ College Board, 1996.

²² Snell and Perez, 1996.

²³ Governors' budgets for FY 2001 proposed a seventh consecutive year of net tax cuts (National Governors' Association, 2000, 10-13).

²⁴ Zumeta, 2000a, 57-71, covers this issue.

²⁵ Osborne and Gaebler, 1992.

²⁶ Burke and Modarresi, 1999; Zumeta, 2000b. By 1999, Burke and Modarresi reported, 30 states employed some form of performance-linked budgeting; 16 tied some appropriations tightly to scores on performance indicators ("performance funding").

²⁷ Welfare policy changed during the mid-1990s as states and the Clinton Administration initiated aggressive programs to reduce the rolls. The 1996 federal welfare reforms guaranteed states level funding through 2002 while the rolls declined, but states must fund any future increases. Recent federal and state Medicaid policies sought to contain costs, especially by increasing the scope of managed care.

²⁸ Mortenson, 1999, 11, based on data from the National Conference of State Legislatures and Illinois State University.

²⁹ Data are from College Board, 1996.

³⁰ Research Associates of Washington cited in McKeown-Moak, 2000, 5.

³¹ Schmidt, 1999.

³² Data are from Mortenson, 1999.

³³ National Governors' Association, 2000, 20-26.

³⁴ Schmidt, 2000b.

³⁵ Hughes, 2000.

³⁶ Aversa, 2000.

³⁷ Data in this paragraph come from National Governors' Association, 2000.

³⁸ FY 2001 proposed tax cuts totaled about \$1.7 billion. The National Association of State Budget Officers characterized this amount as "significantly less than in years past and may signal a nationwide slowing in tax and fee cut initiatives" (National Governors' Association, 2000, 11).

³⁹ Perez, Grooters and Eckl, 2000, 17.

⁴⁰ The rapid gains in appropriations during the last two years enabled higher education to reverse a long slide in its share of state general funds. This share moved from 12.1 percent in FY 1998 to 12.9 percent in FY 2000, still far below the FY 1987 level of 15.5 percent (McKeown-Moak, 2000, 5).

⁴¹ This was true for one-year (FY 1999 to FY 2000) and two-year (FY 1998 to FY 2000) gains (McKeown-Moak, 2000, 5-6). The author derived appropriations data from the surveys conducted by Illinois State University.

⁴² McKeown-Moak, 2000, 8-9. Five states enacted legislation affecting tuition levels or tuition-setting in 1998; another 14 states took similar action in 1999.

⁴³ McKeown-Moak, 2000, 4-5. Limited data on priorities in FY 2001 budget proposals suggested similar foci (National Governors' Association, 2000).

⁴⁴ The average gain for four-year independent colleges was 4.6 percent (College Board, 1999a, 6). The figures were weighted by enrollment.

⁴⁵ College Board, 1999a, 10-13.

⁴⁶ McKeown-Moak, 2000, 8-9; Burd, 2000.

⁴⁷ College Board, 1999a, 14. The escalation in charges relative to family incomes was severe for low-income families, moderate but significant for middle-income people, and barely noticeable for high-income families.

⁴⁸ College Board, 1999a, 14.

⁴⁹ Data in this paragraph are from McKeown-Moak, 2000, 10.

⁵⁰ Kane, 1999 analyzes this issue.

⁵¹ McKeown-Moak, 2000, 10.

⁵² College Board, 1999b, 7; De Salvatore and Hughes, 2000, i. Federal matching funds for state need-based programs were frozen or cut in most recent years.

⁵³ De Salvatore and Hughes, 2000, ii.

⁵⁴ The Clinton Administration's Hope tax credits also grew from this seed.

⁵⁵ A combination of merit and need sometimes determines eligibility or priority.

⁵⁶ Kane, 1999; Thompson and Zumeta, 2001.

⁵⁷ De Salvatore and Hughes, 2000, 1, 11. The latter category, never large in Georgia, declined in the Hope years.

⁵⁸ A report by the American Association of State Colleges and Universities criticized the effectiveness of merit-based and occupationally oriented state aid programs (Schmidt, 2000c).

⁵⁹ Schmidt, 2000d. Illinois and West Virginia were also considering such programs.

⁶⁰ Schmidt, 2000a.

⁶¹ The U.S. Department of Education's "middle alternative" (most likely) projection of college enrollments foresees an increase of nearly 18 percent by 2010, which is considerably more than the expected growth in high school graduates (12 percent) (calculated from figures published in *The Chronicle of Higher Education Almanac*, September 1, 2000, 25).

⁶² Hovey, 1999. Hovey, a respected budget analyst, served as budget director for Ohio and Illinois and headed State Policy Research, Inc., before his death in 1999.

⁶³ Recent state tax cuts and the inability of states to tax services and electronic commerce play a major role.

⁶⁴ This scenario may prompt a push to reduce per student costs via use of instructional technology or to increase faculty teaching loads.

⁶⁵ But a few states have no personal income tax.

⁶⁶ See Kane, 1999 for an empirically based argument.

⁶⁷ Burke, 1997.

REFERENCES

- Aversa, J. "Spending Pace Slows; Home Sales Tumble," *The Seattle Times* (26 August 2000): B5.
- Burd, S. "Lawmakers Warn Colleges to Keep Their Prices Within Reach," *The Chronicle of Higher Education* (18 January 2000): A40.
- Burke, J. *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.
- _____, and S. Modarresi. *Performance Funding and Budgeting: Popularity and Volatility: The Third Annual Survey*. Albany, N.Y.: State University

- of New York, Rockefeller Institute of Government, Public Higher Education Program, 1999.
- College Board. "1996-97 Increase in College Costs Averages Five Percent, Student Financial Aid at Record High." Press release, September 25, 1996.
- _____. *Trends in College Pricing*. Washington, D.C.: College Board, 1999a.
- _____. *Trends in Student Aid*. Washington, D.C.: College Board, 1999b.
- De Salvatore, K., and L. Hughes. *National Association of State Student Grant & Aid Programs 30th Annual Survey Report: 1998-99 Academic Year*. Albany, N.Y.: New York State Higher Education Services Corporation for NASSGAP, March 2000.
- Gold, S.D., ed. *The Fiscal Crisis of the States: Lessons for the Future*. Washington, D.C.: Georgetown University Press, 1995.
- Hovey, H. *State Spending for Higher Education in the Next Decade: The Battle to Sustain Current Support*. San Jose, Calif.: National Center for Public Policy and Higher Education, 1999.
- Hughes, S. "Unemployment Rises, Factories Slow in August," *The Seattle Times* (2 September 2000): B4.
- Kane, T.J. *The Price of Admission: Rethinking How Americans Pay For College*. Washington, D.C.: Brookings Institution Press, 1999.
- Marshall, R., and M. Tucker. *Thinking For a Living: Education and the Wealth of Nations*. New York: Basic Books, 1992.
- McKeown-Moak, M.P. *Financing Higher Education in the New Century: The Second Annual Report from the States*. Denver, Colo.: State Higher Education Executive Officers and MGT of America, Inc., March 2000.
- Mortenson, T. "Educational Attainment in the States: Status and Importance to State Economic Welfare," *Postsecondary Education OPPORTUNITY* 72 (June 1998): 7-14.
- _____. "A Preliminary Report: FY 2000 State Appropriations for Higher Education," *Postsecondary Education OPPORTUNITY* 87 (September 1999): 11-13.
- _____. "Refinancing Higher Education: The National Income and Product Accounts," *Postsecondary Education OPPORTUNITY* 97 (July 2000): 10-16.
- Murphy, K., and F. Welch. "Wage Premiums for College Graduates," *Educational Researcher* 18 (1989), 17-26.
- National Governors' Association and National Association of State Budget Officers. *The Fiscal Survey of States*. Washington, D.C.: NGA-NASBO, August 2000.
- Osborne, D., and T. Gaebler. *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector*. New York: Penguin Books, 1992.
- Perez, A., J. Grooters, and C. Eckl. *State Budget Actions 1999*. Denver, Colo.: National Conference of State Legislatures, March 2000.
- Schmidt, P. "As Economy Chugs Along, States Pour Money into Higher Education," *The Chronicle of Higher Education* (17 December 1999): A28-29.
- _____. "Boom in Savings Plans Is Changing the Way Families Pay for College," *The Chronicle of Higher Education* (14 April 2000a): A42-43.
- _____. "Loss of Tax Funds to E-Commerce Could Pose Difficulties for Public Colleges," *The Chronicle of Higher Education* (9 June 2000b): A34.
- _____. "States Criticized for Emphasis on Merit Scholarships," *The Chronicle of Higher Education* (4 February 2000c): A38.
- _____. "States Offer Aid to Encourage Study and Develop Workers in High-Demand Fields," *The Chronicle of Higher Education* (4 February 2000d): A38.
- Serban, A. and J. Burke. "The Impact of State Budget Cuts on Public Higher Education 1990-96: The Cuts Are Clear, the Consequences Cloudy." Paper presented at the Association for Institutional Research Annual Forum, Minneapolis, Minn., May 17-20, 1998.
- Snell, R., and A. Perez. *State Budget Actions 1996*. Denver, Colo.: National Conference of State Legislatures, November 1996.
- Thompson, F., and W. Zumeta. "Effects of Key State Policies on Private Colleges and Universities," *Economics of Education Review* 19 (2000, in press).
- 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.: WICHE-CB, February 1998.
- Zumeta, W. "Accountability: Challenges for Higher Education." In *The NEA 2000 Almanac of Higher Education*. Washington, D.C.: National Education Association, 2000a: 57-71.
- _____. "Public Policy and Higher Education Accountability: Lessons from the Past and Present for the New Millennium." In D. Heller, ed. *Affordability, Access, and Accountability: The States and Public Higher Education*. Baltimore, Md.: Johns Hopkins University Press, 2000b, in press.