State Fiscal Constraints and Higher Education Spending: The Role of Medicaid and the Business Cycle

State governments historically have taken the lead in financing higher education. In fiscal year 2002, state governments spent approximately $63 billion on subsidies to higher education institutions. In contrast, the federal government’s higher education grants, loans, and tax credits totaled approximately $53 billion. Thomas J. Kane, professor of policy studies and economics at the University of California, Los Angeles and a nonresident senior fellow at the Brookings Institution, and Peter R. Orszag, senior fellow at the Brookings Institution, document the decline in state support for higher education over the last 20 years. They examine the interaction between state appropriations for higher education, other state budget items (particularly Medicaid), and the business cycle. Finally, Kane and Orszag discuss the effect of declining state support on the quality of teaching and research at public institutions and suggest possible policy responses to the shifting environment.

State Support for Higher Education

Measured several different ways, state support for higher education has declined over the past decades. For example, total state appropriations have fallen from roughly $8.50 per $1,000 in personal income in 1977 to about $7.00 per $1,000 in personal income in 2002. Since personal income amounted to $8.8 trillion in 2002, state appropriations would have been about $13 billion higher in 2002 if they had been maintained at the same ratio to personal income as in 1977.
State appropriations for higher education have also fallen substantially relative to overall state spending. Figure 1 shows that appropriations for higher education fell from 7.3 percent of state expenditures in 1977 to 5.3 percent in 2000 (the most recent year data are available). Since total state expenditures amounted to $1.07 trillion in 2000, appropriations for higher education would have been about $21 billion higher if the 1977 share had been maintained.

Figure 1.

A final perspective documents the decline in state appropriations as a share of public university revenue. Figure 2 shows that in 1977, state appropriations represented 46.5 percent of public university revenue. By 1996, that ratio had fallen to 35.9 percent.

Figure 2 highlights a key issue. Since state appropriations have been falling as a share of public university revenue, other sources of revenue must have been increasing. Indeed, revenue from tuition and fees at public colleges and universities has risen from about 13 percent of public university revenue in 1977 to about 19 percent in 1997. Given total 1997 revenue levels, this increase amounts to $7.5 billion, or an average of about $885 in tuition per full-time student at public institutions.

Explaining the Trends

The principal explanation for the trends described above is fiscal pressure from other state budget requirements, which in combination with political economy constraints on revenue lead to increases in other state budget needs that partially crowd out higher education appropriations.

Table 1 shows the share of state budgets devoted to different activities in 1985 and in 2000.

Table 1 suggests that spending on Medicaid and corrections could be associated with the relative decline in higher education spending. A variety of econometric analyses were run to test these relationships, as well as Table 1.
others. Results show that states with greater Medicaid obligations also experienced larger declines in higher education appropriations.

The federal government provides very different incentives to states through the Medicaid program than it does for higher education spending. Because the federal government provides more than a substantial match for state Medicaid spending, a dollar of Medicaid services for its residents costs a state significantly less than a dollar in state funds. As a result, if a state reduces state spending on Medicaid, it loses federal funds. In contrast, when a state reduces its subsidies to higher education and raises its tuition, the residents of the state may well receive additional federal funds, in the form of greater eligibility for subsidized federal student loans and increased tax credits under the HOPE Scholarship and Lifetime Learning Tax Credit programs.

Correctional spending is also negatively associated with higher education appropriations, but the relationship is not statistically significant. Thus, the increases in correctional spending as a share of state budgets do not seem to be systematically tied to reductions in state appropriations for higher education across states.

Not surprisingly, the business cycle also matters. Rising unemployment rates were generally associated with declining higher education appropriations. The general cyclical pattern of state expenditures—reductions during an economic downturn and then expansions during an economic recovery—is apparent in Figure 3.

Figure 3, which shows higher education appropriations per student between 1977 and 1997.

Following the usual pattern, appropriations declined during the early 1980s and early 1990s recessions. However, during the boom of the 1990s, the rebound in state appropriations to higher education was much more sluggish than it had been in earlier recoveries. Appropriations for higher education rose only slightly during the mid-1990s and did not regain their prerecession levels until 2000. A number of analyses and regressions suggest a strong negative linkage between higher education appropriations and Medicaid spending. In states with higher Medicaid spending, appropriations rebounded less during the economic recovery in the 1990s relative to states with lower Medicaid spending. The bottom line is that substantial increases in Medicaid spending during the 1980s and early 1990s appear to have played an important role in the failure of higher education appropriations to rise significantly during the 1990s boom. Thus, projected increases in Medicaid costs over the next several decades raise serious questions about the future path of state appropriations for public higher education.

Quality Concerns

The current economic downturn is putting heavy pressure on state budgets, and many states are sharply reducing appropriations for higher education. If state Medicaid commitments continue to grow, the reductions in appropriations for higher education could represent a permanent ratcheting down rather than a temporary decline.

At the same time, political constraints limit tuition increases at public universities, so that reduced appropriations partially manifest themselves in reduced quality at public relative to private institutions. Several measurements point in this direction. First, the ratio of educational and general spending per full-time equivalent student at public versus private institutions has fallen from about 70 percent in 1977 to about 58 percent in 1996. Salaries for professors at public institutions also have declined relative to those at private institutions: the ratio of salaries of full professors at public versus private institutions has fallen from about 95 percent in 1972 to about 83 percent in 1998. Finally, almost 50 percent of public, tenured faculty surveyed believe the quality of undergraduate education has declined at their institution, compared with 37 percent of private, tenured faculty who believe so.
Conclusion: Looking to the Future

Quality of higher education is difficult to measure; nevertheless, it is clear that to the extent that state Medicaid costs crowd out higher education appropriations in the future, projected increases in state Medicaid expenditures pose a threat to the public higher education system. Public higher education leaders would do well to participate in the search for solutions to the Medicaid challenge. Any reform that slows the growth of state Medicaid costs would also ease pressure on higher education funding.

Other policies to consider include the creation of state higher education trust funds, which would help smooth funding and avoid what have typically been substantial tuition increases imposed during recessions. Further, given increasingly scarce resources, states should consider front-loading their financial aid dollars for students in their first two years of college. Financial aid dollars should be used to encourage low-income youth to take a risk and experiment with college. States could expect those who realize they are “college material” and are capable of earning degrees to borrow more to finish the final few years of college. Another idea for cash-strapped states would be to raise tuition but provide tax credits to those college students who remain in the state afterward.

Finally, a public debate on the structure of financing higher education in the United States is in order. The current discussion must be expanded to acknowledge that the traditional financing approach, in which three things have been attempted simultaneously—that is, low tuition for all students regardless of need, access for low-income students, and preservation of quality—is increasingly untenable. Particularly in states that can expect large increases in the college-age population in coming years, such as California, the long-standing policy of keeping tuition low regardless of need will be difficult to maintain without further sacrificing quality in public higher education. The trade-offs inherent in this traditional approach should be recognized and debated so that a viable and acceptable balance can be achieved.

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