Public Education's Perfect Storm

J. Kent Caruthers
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October 1991. It was “the perfect storm” – a tempest that may happen only once in a century – a nor’easter created by so rare a combination of factors that it could not possibly have been worse.1

Introduction

The 1991 perfect storm, which occurred off the coast of Gloucester, Massachusetts and became widely known by the book and motion picture of the same name, was a combination of three distinct storms combined into one. Today, a confluence of six sets of trends are serving to create what is likely to become regarded as the “perfect storm” for funding of public higher education.

The six separate, but interrelated, trends are strong enrollment demand, deteriorating macroeconomic conditions, a weakened microeconomic environment, shifting political support, new competitive pressures, and structural barriers that impede effective response. Figure 1 depicts how these six factors have become a swirling storm around campus leaders.

Figure 1
Pressures Surrounding Public Colleges

Some of these six trends have been noted in earlier reports. For instance, the Education Commission of the States, in its State Education Leader, recently described the need for a “balancing act” by postsecondary education leaders to deal with “the tension between fewer resources and increased demand for higher education.”2 Similarly, an article in the NACUBO Business Officer noted that “Higher education institutions have been hit with a triple whammy – cuts in funding from state revenue, reduced gifts, and decreased earnings on investments.”3 We believe the situation may be even worse than described in such earlier reports in that we are observing six distinct trends that are each causing storm-like conditions for the higher education community.

Trends in Enrollment Demand

The first trend impacting on the higher education community is increasing student demand at public, private, and proprietary (for-profit) institutions. The current and projected growth in the numbers of students pursuing a post-secondary education is unparalleled since the early 1970s when the baby boom generation arrived on campuses across the nation.

A major factor in the recent surge in enrollment levels is the growing size of the traditional college-aged population cohort. The number of high school graduates in the United States is projected to increase by 15.2% between 1999 and 2009, after being relatively stable for much of the preceding decade. Some have referred to this cohort as either a “baby boomlet” or the “baby boom echo.”4 Also, the nation has been experiencing an increase in the rate of college participation. Between 1988 and 1997, the proportion of recent high school graduates enrolled in college increased from 59% to 67%–a significant gain, representing 14% more students from a fixed student cohort.5

Figure 2 summarizes the impact on enrollment levels of the combination of these two demographic trends. The three line graphs in the exhibit depict the projected percentage growth rates in traditional college-aged population, a continuation of the trend of increasing rates of college participation, and the resulting 30% potential growth in enrollment of the traditional college population that can be expected over a future ten-year period.

A third factor underlying the rapid growth in enrollment is the expanding definition of the makeup of the college age population. Although the tendency continues for public policymakers to discuss public higher education as a service for 18-22 year-olds, about half of today’s college students are older than 22. Indeed, some states are beginning to base their higher education master plans on the needs of state residents aged 18-44 for educational opportunity. Older students will continue to be a major component of the strong enrollment demand facing most public colleges and universities.

Figure 2
Trends in High School Graduation and College Enrollment

Clearly, one factor in the aging of the student body is the current weakness in the national economy. Numerous studies have found that enrollments in both community colleges and graduate programs run countercyclical to employment opportunities in the economy. Community college enrollments have soared in the past few years, and, according to an American Association of Community Colleges spokesperson, “is at record levels across the country.” Graduate enrollments have accelerated their long-term growth pattern after the fall of the “dot.com” economy and loss of lucrative starting salaries for recent baccalaureates entering the job market.

However, we believe that the aging student population is more than just a temporary reaction to the current economic climate and represents a much longer-term phenomenon. Along with the general acceptance of the notion by both potential employees and their employers that a college degree has become the basic entry-level job requirement for career positions is the even stronger belief that today’s workers must continuously update their skills to remain competitive for career advancement. Figure 3 shows how the educational level of the American workforce has changed over time. Over the past three decades, the proportion of the workforce holding a college degree has expanded from 14% to 38%, and a majority of workers have now earned at least some college credit.

![Figure 3](image)

**Figure 3**

**Educational Attainment of National Labor Force**

<table>
<thead>
<tr>
<th>Year</th>
<th>Less than HS</th>
<th>HS Graduate</th>
<th>Some College</th>
<th>College Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>40.0%</td>
<td>38.1%</td>
<td>11.8%</td>
<td>10.1%</td>
</tr>
<tr>
<td>1980</td>
<td>36.1%</td>
<td>39.8%</td>
<td>17.6%</td>
<td>16.4%</td>
</tr>
<tr>
<td>1990</td>
<td>20.6%</td>
<td>39.5%</td>
<td>26.4%</td>
<td>13.5%</td>
</tr>
<tr>
<td>2000</td>
<td>11.4%</td>
<td>38.1%</td>
<td>22.0%</td>
<td>13.7%</td>
</tr>
</tbody>
</table>

Source: Calculated from data in the *Statistical Abstract of the United States*, U.S. Census Bureau.

In summary, the recent national average enrollment growth of 2% to 3% per year, which has been much higher in some states and at some institutions, has added significant workload for many colleges and universities. Projections of continued strong growth in enrollment will continue to create funding pressures for public institutions for the foreseeable future.

**Deteriorating Macroeconomic Conditions**

According to a recent report from the National Governors Association (NGA), “Fiscal Year 2004 will be the third year in a row of major state fiscal problems, making this the worst fiscal crisis since the Second World War.” Already in the current 2003 fiscal year, the report notes that more than half the states have made program cuts that include K-12 and higher education.

The NGA report continues: “State revenues were down 6.3% in 2002, the first full year that states have witnessed a decline in revenues for as long as credible statistics are available back to the Second World War.” The revenue shortfalls have contributed to lower appropriations for most state programs and functions, including those for public colleges and universities.

As bad as the general pattern of state budget cutbacks seems, the impact on colleges and universities is even more severe in most states. This is because higher education is usually regarded as the biggest discretionary item in a state’s budget. Thus, lowered state appropriations for higher education also are due to colleges receiving a smaller slice of the state budget pie. In particular, higher education is competing for legislators’ attention with rising costs for healthcare (especially Medicaid), anti-terrorism initiatives, and constitutionally mandated programs. Figure 4 shows that the share of the state general fund budget appropriated to colleges and universities in Kansas, for example, has shrunk from 16.3% in 1990 to 12.7% in 2002.

**Figure 4**

**Trends in Share of State Budget**

<table>
<thead>
<tr>
<th>Year</th>
<th>Higher Education Share of State General Fund Appropriated</th>
<th>Adjusted General Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>16.3%</td>
<td>16.1%</td>
</tr>
<tr>
<td>1991</td>
<td>16.1%</td>
<td>15.8%</td>
</tr>
<tr>
<td>1992</td>
<td>13.5%</td>
<td>13.3%</td>
</tr>
<tr>
<td>1993</td>
<td>13.3%</td>
<td>12.7%</td>
</tr>
<tr>
<td>1994</td>
<td>12.7%</td>
<td>12.4%</td>
</tr>
<tr>
<td>1995</td>
<td>12.5%</td>
<td>12.3%</td>
</tr>
<tr>
<td>1996</td>
<td>12.7%</td>
<td>12.3%</td>
</tr>
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<td>1997</td>
<td>12.3%</td>
<td>12.1%</td>
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<td>12.3%</td>
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</tbody>
</table>

Source: MGT of America, Inc., *Kansas State Funding for Higher Education (2002)*.

The weakened national economy also has adversely affected other sources of funding for colleges and universities. Beyond lower state appropriations, development officers are noting a pattern of reduced or deferred private gifts. According to a report in the *Chronicle of Higher Education*, “Even the most grizzled of fund raisers, people who have been in the game for decades, can’t recall another period marked by such jagged highs and lows.”

The ripple effects of the floundering stock market and the poor economy also have had an impact on total contributions to higher education as giving fell slightly in the 2002 fiscal year. The dip is the first in 14 years. A sharp drop in gifts from alumni was the primary source of the 1.2% decline, according to the Council for Aid to Education, which conducts the annual “Voluntary Support of Education” survey. Alumni giving, which the council calls “the bedrock” of higher-education support, was off by nearly 14%, or about one billion dollars, in 2002.

Coupled with curtailed private giving is the lower rate of return from endowments built from gifts in earlier years. Virtually every college has experienced a lower rate of return on its investments, and most...
have even seen a net reduction in portfolio value. The 2002 NACUBO Endowment Study recorded an average 6% decline in portfolio value over the 12 months ending June 30, 2002.\footnote{11}

Overall, the outlook for external funding of higher education is bleak. State government finances, in general, are facing their greatest crisis in most peoples’ memories, and higher education is losing even its relative share of this shrinking pie of state funds. Private giving, a second major external source of funding for colleges, is also an increasingly unreliable and unstable stream of revenue.

**Weakened Microeconomic Environment**

Not only are colleges and universities enduring shortfalls in their funding from external sources, they also are facing difficulties in controlling their rate of expenditure growth and in maintaining the flow of revenue from sources that are more likely to be under their own internal control.

Unlike many industries, the higher education industry has yet to realize significant internal savings from increased productivity. A major factor in this lower growth in productivity is that colleges have very people-intensive production functions. Salaries typically represent three-fourths or more of total institutional expenditures – a comparatively high rate among major industrial groups.

Colleges and universities, as compared to other industries, have not been able to use technology to replace personnel in their core functions, especially in terms of serving more students with fewer personnel. Instead, the principal value of technology has been to enhance quality of service. As such, technology expenditures have tended to increase costs rather than to increase productivity in public colleges.\footnote{12}

Faculty salaries, in particular, are the largest single item of expense at most colleges and universities, representing approximately 40% of the total education and general budget. For many years, average faculty salary rates have risen more rapidly than most broad measures of inflation such as the Consumer Price Index (CPI). In fact, according to the Chronicle of Higher Education’s coverage of the Annual Report on the Economic Status of the Profession by the American Association of University Professors, average faculty salaries nationally grew by 3.8% in 2001-02, which was the largest increase in 11 years.\footnote{13} Faculty compensation was experiencing its greatest growth in over a decade during the same year that state revenues were experiencing their greatest shortfall since the Second World War.

One of the reasons that faculty salary rates continue to rise during an otherwise weak economy is that many colleges are facing a growing number of retirements from their professorial ranks. Faculty who were recruited in response to the growing enrollment caused by the baby boom generation in the late 1960s and early 1970s are now completing thirty years of service and reaching peak benefit levels in their retirement plans.

Other major components of the college budget are also not immune from rapidly escalating costs. The Higher Education Price Index (or HEPI), which measures trends in the cost of a hypothetical market basket of goods and services purchased by colleges and universities, has historically risen faster than the Consumer Price Index (CPI), which is based on a similar market basket approach for measuring inflation facing American households. The costs of library resources and technology have been especially strong factors in the higher HEPI inflation rate. Figure 5 demonstrates how the rate of faculty compensation outpaced the CPI by 22% during the past two decades.

As discussed above, most revenue for public colleges and universities come from external sources (governments, donors) over which the institutions are able to exercise little control. The major revenue source that is subject to some internal control is student tuition. Although college tuition rates have increased rapidly during the past few years, further significant growth from this internal source of revenue no longer may be as possible as in the recent past. Colleges are facing increasing opposition to double-digit tuition increases from both parents and political leaders, who are becoming less willing to grant colleges the freedom to control their own tuition rates. A U.S. Congressman, in fact, has announced that “he plans to introduce legislation that would punish colleges that raise their tuition too much.”\footnote{14} Taken as a whole, the internal economics of colleges and universities represent yet another major funding challenge. Colleges are facing strong internal cost pressures and are losing control of their primary source of internal funding.

**Shifting Political Support**

Coupled with problems of reduced external financial support for public higher education are issues related to shifting political support. Increasingly, governors and state legislatures are not as understanding of the cost pressures facing colleges and universities. A spokesperson for the National Governors Association, for instance, was quoted in the Chronicle of Higher Education as saying that governors are asking: “Why are colleges unique among public services that their costs have to go through the roof?”\footnote{15}

More broadly, among elected leaders there appears to be a strong anti-tax sentiment to salvage weak state budgets. Many politicians have expressed their philosophy that the states must live within their means rather than increase taxes to maintain current levels of service. Some leaders, in fact, even support lower taxes as a long-term solution to economic recovery for their states.

Instead of finding additional revenues to balance the budget, fiscal conservatives long have expressed interest in privatization of various state functions and programs as a strategy for cost control. In some cases, privatization also has been touted as a vehicle for service enhancement as well as savings. Increasingly, variants of privatization

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**Figure 5**

**Increases in Faculty Salaries and the CPI, 1984-2002**


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Educational Considerations
and outsourcing are being seen as a means to address educational matters. For K-12 education, there is growing support for funding charter schools and voucher programs. For higher education, vouchers have begun to be discussed in Colorado as a means for providing state citizens with higher education opportunity.\textsuperscript{16}

Increasingly, governors and legislatures are more closely scrutinizing how colleges and universities are performing and using their state-appropriated funds. In some states, their efforts are taking the form of calls for greater accountability. (See related article by Joseph Burke in this issue.) In other instances, political leaders are actively pursuing proposals aimed at reducing costs of higher education, including efforts to merge institutions or consolidate their administrative functions.

Unfortunately, in recent years one of the more popular vehicles for targeting state funds for the support of higher education students – merit-based scholarships – tends to undermine institutional finances. Known by various names, such as the “HOPE” scholarship in Georgia, many states have redirected state funds that might have been used for general state appropriations to subsidize student tuition payments.

In general, the HOPE-type scholarship programs cover the cost of tuition for students who had moderately high grades (e.g., a “B” average) in high school. Research has shown that the biggest beneficiaries of these programs tend to be students from upper middle and high-income families.\textsuperscript{17} This means that state funds that could have been available to support greater state appropriations for institutions are instead being used to lighten the tuition burden on relatively wealthy families.

Such merit scholarship programs surely have made public colleges more attractive to some students who otherwise might have left the state or attended a private college, thus increasing tuition income for the public colleges. Hopefully, these scholarship programs have enabled many low-income students to pursue a college education who otherwise might not have been able to afford college. Overall, however, the state merit scholarship programs have served to weaken the financial base of public colleges and universities. The net tuition income from the relatively few additional students attracted by these programs does not nearly match the amount that has been diverted from general institutional support to provide scholarships for students who already have the financial means to attend college.

**New Competitive Trends**

Concurrent with all the other pressures now facing public colleges is the emergence of new competitors, particularly regionally-accredited proprietary institutions (e.g., the University of Phoenix) that offer baccalaureate and graduate degrees. Although the full impact of these new types of entities on public colleges is yet to be determined, accredited proprietary institutions create a further unwelcome pressure in an already troubling environment.

At least two types of pressure on public institutions are foreseen. The most obvious impact is the direct competition for students, although the impact is likely to be much greater than losing a limited number of students and tuition dollars to another institution. This is because program offerings at proprietary colleges tend to be in areas with relatively high student demand and comparatively low costs. To use the vernacular of the business world, proprietary colleges are with relatively high student demand and comparatively low costs.

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**Future Possibilities**

Will the typical college or university survive this perfect storm? And, if so, how? Since the storm conditions will have different strengths in different states, survival strategies will need to vary. However, those colleges and universities that will weather the storm most successfully are likely to share a number of common characteristics. To weather the storm, public and private colleges and universities should:

- Establish and operate under a sound enrollment management plan:
• develop more diversified funding sources;
• implement more efficient academic and administrative support systems;
• become more accountable for educational outcomes to financial sponsors and reinforce the public value of public higher education;
• focus plans and resources on their core strengths; and
• create more flexible and dynamic planning and policy systems.

Footnotes


8 Ibid.


12 Our references to increasing productivity address only the quantitative aspects or numbers of students served. Clearly, a strong case can be made that improving the quality of the product increases productivity.


16 Ibid.