

Can College Prices be Controlled at Private, Four-Year Universities?

I. The changes in prices during the last two decades

Private four-year universities offering doctoral degrees are among the most prestigious institutions educating business and government leaders. Not only are they in the top ranks of national rankings of US News and World Report (USNWR), but they are also regarded as the best higher education institutions across the globe according to the rankings of other countries' institutions, such as Times magazine in UK or Shanghai Jiao Tong University in China. Whereas these institutions' influence on society is significant, their list prices both in nominal and real terms are becoming unreachable by many families. By description, nominal tuition prices are the figures where the effects of inflation have not been accounted for whereas the real prices are the ones where the effects of inflation have been factored in. According to National Center for Education Statistics (1998), between 1985 and 1995, average tuition and fee per full-time student increased at private universities from \$12,023 to \$16,344 in 1997 constant dollars. Baum (2001) affirms that, in 1999 constant dollars, growth rates in prices were 48% and 26% in 1985-92 and 1992-99 respectively.

Moreover, these institutions are becoming less affordable for low- and middle-income families since the cost of attendance as a proportionate of family income increased remarkably. Ehrenberg (2000) points out that family incomes did not keep up, on average, with the increase in consumer prices and in real terms, the median family in America was worse off, for example in 1992-93, than it was in 1980-81. Private four-year institutions' cost of attendance was 93% of low-income families' income in 1981-82 and became 162% in 1999-2000. The figures were 28% and 44% respectively for middle-income families. The study of Maag and Fitzpatrick (2004) includes similar results regarding private four-year colleges' tuition. Between the 1980-81 and the 1990-91 academic years, the inflation-adjusted cost of attendance at private four-year institutions increased by 61.2% whereas inflation-adjusted median family income rose only by 9.4%. It should be kept in mind, nonetheless, that these numbers all reflect the changes in list prices which are gross figures. Today, more institutions provide grants with a tendency of more merit-based aid and when paying their tuition, students deduct the grants they receive.

II. Why is tuition going up?

a. Instructional and administrative costs, and productivity

Instructional costs, by and large, are the biggest portion of the costs of private four-year institutions. According to Digest of Education Statistics, in 2000-01, 32.2% of expenditures of private four-year institutions went to instruction. Without much need to explain, the universities need high-calibre faculty members in order to provide better instruction and high quality education. Another factor

is that professional life offers good salaries for the well-educated, and in order to attract and retain quality faculty, the institutions have no choice other than trying to get closer to the compensation levels of business life. Educational costs per student rose mainly because of the fact that private four-year institutions were not able to create productivity gains unlike the rest of the economy. If we measure productivity by the number of students that each faculty member educates, the nature of quality education does not let the productivity level go up since low student-faculty ratio has been traditionally essential for a quality college education. Vedder (2005) points out that while it took 18 to 19 employees to educate 100 students in the mid-1970s, it now takes 21 people for the same service. According to Ehrenberg, not to lose their competitive people to professional life, higher education institutions could not allow faculty salaries to decline compared to other individuals' increasing salaries in other professions following the productivity gains created. In short, they had no choice but to increase their tuition levels.

On the other hand, Vedder (2005) reveals that while American universities spent nearly 8 cents of each dollar on administration in 1929, they now spend 14 cents. The increase in the number of personnel has not only occurred in new faculty employment, but also in non-teaching professionals who mostly are bureaucrats with no direct impact on learning. According to the author, the number of the non-teaching professionals in American universities rose from 3 in 1976 to 6 in 2001 for every 100 students.

b. Financial aid

One critical factor having impact on the list prices of colleges is the institutional financial aid. Increasing competition to bring the highest peer effect to the campus, especially among the most selective institutions, leaves the schools with no choice other than offering rising amounts of financial aid. The boosting financial aid is a significant part of increasing costs and tuition. At private universities, non-need aid per freshman (in 1991 dollars, after adjusting for inflation) increased from \$253 in 1983-84 to \$742 in 1991-92 (McPherson and Schapiro, 1998). In these schools, where non-need aid accounted for only 21% of the total in 1991-92 (17% in 1983-84), the dollars per freshman accounted roughly triple of the amount at public universities. Tuition discounting, though, does not always end up in intended consequences. Davis (2003) argues that colleges which offered the deepest discounts generally lost the most tuition revenue and tuition discounting did not always result in increasing student quality. Increasing financial aid in this competitive environment left the schools with less tuition revenue for their other educational needs, which in turn forced the institutions increase their tuitions even more.

On the other hand, putting emphasis on quality and spending more efforts to climb the rankings ladder make the institutions distribute their aid funds on merit-based fashion, rather than need-based. Merit-based institutional aid is one of the major criticisms facing the universities today. Remembering that one of the main characteristics of American tertiary education tradition is to offer aid to needy

students, colleges are questioned with regards to their policies in the pathway of access and affordability. Hossler (2004) argues that “enrollment managers are ruining American higher education. They are undoing our commitment to justice and need-based financial aid.” He further deepens the discussion by asserting that “every dollar that goes to enroll students who do not really require aid diminishes access and equity for those who have moderate and high levels of financial need.”

c. Admissions

Admission decisions are becoming more complicated and colleges spend a significant time, effort, and money as to decide who to accept. Institutions have to look at applicants’ high school GPA, class rank, standardized tests (SAT or ACT), recommendations, extracurricular activities, and essays. As some part of this process is completely subjective, it is a challenging task for admissions officers whose aim is to reach the optimum decision of forming an incoming class with high peer effects and diversity. The universities have only limited numbers of slots especially at top private schools and they are under pressure to give preferences to low-income students while trying to attain diversified student body.

As a result, the structure of enrollment management has been changing and the universities, with concerns of cost, speed, accuracy, and diversity (Long, 10/13/2005, lecture notes), have to build up comprehensive admission procedures which cause higher costs. Fallows (2003) points out that “the system has become ‘marketized’ in the sense that its participants need increasingly to think of themselves in business terms.” In order to cope with this overloaded system, the institutions need more personnel working in admissions offices. Moreover, their technological needs to support these services have been increasing, their documentation services have been on the rise and they spend more on postal services.

d. Academic and professional support for students

In order to address the academic needs of the students, universities provide remediation courses prior the start of college classes. A preparedness study conducted in Ohio reveals that 36% of ACT test-takers did not meet an academic core curriculum (Long, 11/01/2005, lecture notes). Accordingly, of the students who have been placed in remediation in Math and English, respectively 42% and 27% took less than core curriculum. The figures were 19% and 12% respectively for Math and English for the students who took academic core curriculum. While the ones to blame change from the schools to the teachers, guidance counselors, students or policy makers, the fact is that nationally 35% to 40% of 1st year students (55% at community colleges which are out of the scope of this paper) take remediation courses (Long, 11/01/2005, lecture notes). Beside remediation, the universities offer tutoring services for their students as an additional academic support, and career services while the students get prepared for business life or further academic and professional studies. Despite the fact that in some states such as Virginia,

Minnesota and Florida remediation costs have been incurred either by secondary schools or students, in general, all these academic and professional efforts add more to the universities' operational costs.

e. Changing demographics and non-traditional students

Universities' undergraduate student body has changed significantly in its demographic structure. Nontraditional students are defined in general as the ones whose ages are above 24 and/or who delay enrollment after high school, attend part-time for at least part of the year, work full-time, is considered financially independent, has dependents, does not have a high school diploma, is a displaced worker or unemployed, is a welfare recipient, and is an immigrant (Long, 11/10/2005, lecture notes). The demographics, economical and social factors changed undergraduate students' structure so much and today 73% of undergraduates have at least one nontraditional characteristic mentioned above. Because of the increasing number of nontraditional students, universities face a new competition in order to attract this type of students. Meeting nontraditional students' needs -such as flexible schedules and programs, developmental education, re-training issues, child care centers, commuter lounges, open units or offices during night hours or weekends- require additional spendings in universities' cost management system.

f. Technology and distance learning

Today's universities invest more on technology as the improving IT systems have been demanded and used in universities with an increasing pace. According to Educause 2002 Summary Report on IT, 81.5% of classrooms are equipped with wired internet, 39% with LCD projectors, and 31% with computers. Further, Kvavik and Caruso (2004) reveal that of the senior students, 99.4% use IT in writing documents, 99.6% use e-mail, and 96.4% use IT in classroom activities and studying. Same study measuring the perceived benefits of IT in the classroom points out that 48.5% of students find it convenient, 16.6% think it helped manage class activities, 16.1% think it saved time, and 12.7% believe it improved the learning. According to Allen and Seaman (2005), a significant number with more than 1.6 million students study online, and this figure is expected to grow substantially over time. Many of the studies suggest that not only distance-learning courses compare favorably with traditional classroom-based instruction, but also they end up with high student satisfaction (Merisotis & Phipps, 1999).

Colleges now face higher costs arising from technology. The facts that hi-tech products need to be replaced with new ones in time intervals of three to five years, and more staff are needed to support the use of technology put more pressure on the schools. Ehrenberg (2000) attributes to Cornell case where each of 1,600 faculty members is provided with a new machine every 3 years. With a decent assumption of \$2,500 spending per scholar, it requires Cornell University to spend as much as \$1.33 million a year, which is a remarkable figure and repeats itself in every other technological advancement cycle to keep up

with. The author reminds that the spendings do not include the costs of software licenses, fees for connective machines to networks, and support personnel. Despite the increasing expenses, schools opt for improving technology. A study of Allen and Seaman (2005) suggests that every group of schools, except Baccalaureate institutions, agree that online education is critical to their long-term strategy.

g. Athletics

Successful athletic programs may help the institutions create publicity across the country and create an attractive climate for student recruitment. Having said that, there are only few cases that athletic success can turn into an economic value for institutions. Baade and Sundberg (1996) argue that whereas winning percentages are not a significant determinant of alumni giving, bowl game appearances result in significantly higher gift totals. On the other hand, NCAA men's basketball tournament appearances are correlated with higher alumni giving at public universities, but not for private institutions. After all, investment in athletic programs can be a risky decision by two means. One is that spending on athletics more does not guarantee more successful teams, and the other is that spending on sports programs may decrease alumni giving if it comes at the expense of academic quality.

To conclude, athletic spendings increase the costs of universities and except few schools such as Notre Dame -where revenues exceeded the expenses by over \$12 million in 1996-97-, Duke -where the freshman class jumped by 19% after it reached in the Final Four of the NCAA tournament in 1986-, and Georgetown -which was pleased with the increased number of applications after its successful basketball seasons in the 1980s (Ehrenberg, 2000), spendings for athletic teams may only cause an upward direction in the universities' cost structure. While proportionately small in overall spending (4% at Division I-A in 2001), athletic expenditures add up to significant amounts in billion-dollar budgets of universities.

Are these increased prices justified in terms of the missions and goals of higher education? According to Bowen (1980), the dominant goals of institutions are educational excellence, prestige and influence, and in the quest of these goals, there is virtually no limit to the amount of money an institution could spend. Bowen argues that each institution raises all the money it can and each institution spends all it raises, which all conclude that the cumulative result is an ever-increasing expenditure. As mentioned above, increases in tuition and fees -except a few, such as athletic spendings- arise from many rational decisions of colleges like employing quality faculty members and maintaining low student-faculty ratios, providing financial aid either to the needy or to the deserving in order to attract the brightest students, providing extra support for the academic needs of the students, satisfying the changing needs of non-traditional students, and investing in technology in order to increase the quality level of education. I argue that these all lay out the justification of increased prices, and universities -which have no intentions other than providing a world-class education- are the last to blame.

III. A look for the future

Looking at the trends of the last two decades and increasing competition, I argue that we are not able to see any signs of changes in the price structure of private four-year institutions. Thus, high tuition, high aid trend can be expected to continue in the coming years. However, tuition should be taken as a gross term and my anticipations are based on gross prices. In order to retain their competitiveness level and recruit the brightest students, universities will need to, at least, maintain their financial aid levels in real terms; so I expect their institutional aid to increase as well as their gross tuition prices. At least, this is going to be the case for selective private institutions because of a consent decree entered into between a group of universities and the US Department of Justice in 1991. The decree prohibited the institutions from taking joint actions in financial aid offers and “it is likely that [it] caused tuition increases at these institutions to be higher than would otherwise have been the case.” (Ehrenberg, 2000, p. 15)

Even if federal financial aid programs remain their proportion of the prices, increasing real prices mean an increase in absolute family contributions in dollar terms. To give a numeric example, 25% financial aid for a college with \$20,000 list price means a family contribution of \$15,000. If the list price becomes \$30,000 after a number of years (in today’s constant dollar amount), a consistent 25% federal aid would mean that family contribution goes up to \$22,500. If the remaining part is not compensated by the universities’ institutional financial aid packages, private four-year institutions will continue to be more expensive in real terms for many American families in the coming future. However, the study of the College Board (1998) raises more concerns that federal grant aid for needy students has not even kept up with the rate of inflation since the start of the program in the early 1970s. Accordingly, in constant 1997-98 dollars, the grant level declined from \$4,000 in 1975 to \$2,700 in 1997.

Ehrenberg (2000) argues that unless the richest private universities with the highest endowment -Princeton, Harvard, and Yale- slow down their rate of increase in tuition, other institutions will not have the luxury to do so as they cannot charge their students higher tuition levels with the fear of losing their best students to better-endowed competitors. However, the author adds that if these institutions cannot maintain their accessibility while their endowments continue to increase, they may face government proposals which aim to limit tax exemptions on their endowment income and private contributions.

Private universities are all concerned with the quality of their education and their existence is very much linked with their academic excellence. They need more faculty members not only for smaller class sizes but also to allow their current faculty members to devote more time for their research. They need to delve into new fields of study. They want the classrooms to be equipped with the newest technology. They expect extensive research facilities and libraries. They ask for higher discretionary funds for research. These needs all sum up to higher expenses and sad to say, there are enough reasons to be worried about the future of college prices.