1997

Using institutional financial aid to discount tuition

Jon D. Buse
University of Northern Iowa

Using institutional financial aid to discount tuition

Abstract
The purpose of this paper is to examine the increases in institutional spending for financial aid and to discuss the implications for colleges and universities. Specifically, it will examine how these increases have affected the way institutions award financial aid. The consequences of these changes are then discussed and a case study of a mid-sized, public university is presented to provide insight into the systems of awarding institutional aid. The discussion concludes with ideas for easing the need for institutions to commit such large amounts of money towards aid programs.

USING INSTITUTIONAL FINANCIAL AID TO DISCOUNT TUITION

A Research Paper

Presented to

The Department of Educational Leadership,

Counseling, and Postsecondary Education

University of Northern Iowa

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts in Education

by

Jon D. Buse

May 1997

This Research Paper by: Jon D. Buse

Entitled: Using Institutional Financial Aid to Discount Tuition

has been approved as meeting the research paper requirement for the Degree Master of Arts in Education.

5.1.97 Michael D. Waggoner

Date Approved — Dr. Michael Waggoner/Director of Research Paper

5-1-97 Larry Keig

Date Approved — Dr. Larry Keig/Second Reader of Research Paper

5.1.97 Michael D. Waggoner

Date Received — Head, Department of Educational Leadership, Counseling And Postsecondary Education

As the cost of tuition continues to grow faster than the rate of inflation, colleges and universities are being asked to justify the increases to families as well as those responsible for governing the institutions. Reduced government funding for higher education, the method for determining financial aid eligibility, and increased administrative expenses have contributed to the problem of rising tuition rates. Likewise, stiff competition for students has colleges and universities reexamining their financial aid and pricing strategies. Government and institutional policies may, in fact, contribute to the problem by increasing the expenses of colleges and by discouraging institutions from controlling spending.

Since 1990, the average tuition at private and public institutions has risen by 95% and 82% respectively (Morganthau and Nayyar, 1996). These increases can be blamed in part on increased spending within higher education. Reiland (1996) found that the number of administrative positions in colleges has more than doubled in the last twenty years and the administrative cost per student has increased 19%. Increases in the number of faculty positions have also been seen to a lesser degree. Reiland also points out that average salaries for professors have increased more than 100% between 1980-1993.

In conjunction with increased spending by institutions, federal aid to higher education has declined in the wake of increased spending for entitlement programs such as medicare and medicaid. Such reductions are realized in decreased funding for financial aid programs and reduced state aid. Fully funding the financial aid programs, however, does not alone solve the problem. The methodology used to determine financial aid eligibility may actually reduce incentives for families to save for college because it reduces the eligibility of families with higher savings. A recent survey of college bound students that showed family savings has declined illustrates this problem (Sevier and Kappler, 1996).

In an effort to alleviate the financial strain, institutions have sought ways to increase tuition revenues through efforts to maintain or increase enrollments. They have implemented complex marketing strategies that include glossy publications, telemarketing, and increased institutional funding for financial aid and merit scholarships. In addition, there is pressure to improve facilities and academic programs to aid recruitment efforts. These strategies, and the increased enrollments that often result, create more expenses by forcing institutions to hire additional personnel, to provide more money for financial aid, and to increase class sizes.

These effects contribute to the public's growing skepticism about the quality of higher education and are outcomes of the cycle of rising costs created by federal and institutional policies. The current methods being employed to alleviate these problems have contributed more to the problem than to the solution and need to be re-evaluated. It is important to determine which systems are effective in providing access to higher education, without overinflating the costs or sacrificing educational quality.

The purpose of this paper is to examine the increases in institutional spending for financial aid and to discuss the implications for colleges and universities. Specifically, it will examine how these increases have affected the way institutions award financial aid. The consequences of these changes are then discussed and a case study of a mid-sized, public university is presented to provide insight into the systems of awarding institutional aid. The discussion concludes with ideas for easing the need for institutions to commit such large amounts of money towards aid programs.

Methods of Awarding Institutional Aid

While experts debate the impact financial aid has on enrollment decisions, it is clear that colleges are spending more money on student aid programs. Between 1983-1991, institutional spending for financial aid increased 10% above the rate of inflation for need-based aid and 13% for merit or non-need based assistance (McPherson and Schapiro, 1995). In addition, spending for merit aid increased at twice the rate of need-based aid at public institutions (McPherson and Schapiro).

A study by the Institute for Research on Higher Education at the University of Pennsylvania (1994) found that colleges are offering more financial aid to a larger percentage of applicants. In many cases financial aid is derived from tuition revenue. When financial aid is awarded in this way, the process is described as "tuition discounting". The methods used to discount tuition are complicated and in 1995 prompted Morganthau and Nayyar to liken college costs to airline ticket prices where every student pays a different rate.

In an effort to stretch institutional financial aid dollars, colleges and universities often rely on a process called "financial aid leveraging" when making aid awards. Leveraging is characterized by Gose (1996) as a process of determining the minimum amount of money needed to recruit and enroll students. To do this, institutions organize students into groups based on family income, ethnic background, and academic interests and determine the impact financial aid has on their likelihood to enroll. The benefits of leveraging include: (a) a more efficient use of money, (b) higher enrollments, and (c) increased tuition revenues.

Many institutions are beginning to take leveraging a step further by systematically awarding only a portion of a student's need, a process called, "gapping." Students are then expected to pay the amount of tuition not funded through financial aid (McPherson and Schapiro, 1993). In addition to gapping, some colleges and universities employ the controversial method of considering a student's ability to pay for college in making admission decisions. McPherson and Schapiro explain that institutions may in fact admit students without regard to need, but may choose not to award aid to average students. Likewise, colleges at times consider ability to pay in admitting students who have academic deficiencies or have been placed on wait lists. Students at these institutions who can pay the full tuition are more likely to be admitted.

In addition to determining the specific amount of financial aid to award students, institutions adjust pricing strategies as well. One method is to increase both tuition and institutional spending for financial aid. Hearn and Anderson (1995) describe this as a, "high tuition/high aid" strategy. This method allows colleges to enhance the quality of programs at a reasonable cost, while at the same time making education accessible to most students. Hearn and Anderson explain how the Minnesota legislature developed a high aid and high tuition approach. To implement this strategy, the state first determined the percentage of total college costs that students should pay and what percentage should be paid by the state. The amount paid by the state would vary depending on the expected parental contribution and amount of federal aid received by each student. Once the plan was in place, the state began to increase tuition rates. The logic of a "high tuition/high aid" approach is that middle to upper income families absorb the tuition increases, while the needier students benefit from the additional financial aid. Likewise, colleges realize higher revenues, which may be utilized to improve program quality (Hearn and Anderson, 1995).

In contrast to the high aid and tuition method, some colleges have begun to implement a strategy to reduce tuition and institutional financial aid. Waldorf College, an independent, two-year college in Iowa, facing a reduction in tuition revenue as a result of increased spending for financial aid, responded by cutting tuition and financial aid spending. In addition, the college sought to develop an honors program, revamped its residence halls, and organized a new career resource facility. As a result, the college has experienced growth in both enrollment and tuition revenue (Hamm, 1995). Similar results were seen by Mills College in California after implementing a program to freeze tuition (Rothman, 1995).

Taking a more innovative approach, Southern Vermont College developed a system to award more institutional aid without adjusting tuition rates. To accomplish this, the institution surmised that it needed to fill as many classes as possible in order to make the most of the fixed expenses (i.e., faculty salaries, utilites, etc.) required to teach each course. An advising system was devised with the ability to provide details on required courses and the number of students needing each course for any given semester. This allowed the college to eliminate courses that were not needed and at the same time ensured that each student had the opportunity to enroll in the required courses. Then, after determining the amount of revenue that would be lost for each empty seat, the college awarded additional financial aid to entice more students to enroll. The increases in spending for financial aid were offset by decreases in spending on instruction. Southern Vermont, as a result, realized a healthy increase in total enrollment and increased funding for capital projects and salaries (Glasser, 1993).

Consequences of Awarding Institutional Aid

The competitive quest for students that has fueled the development of leveraging and pricing strategies has had some negative impact on the tuition revenue of institutions and has fed the growing public mistrust of higher education. According to the study compiled in 1994 by the University of Pennsylvania Institute for Research on Higher Education (IRHE), one of the chief problems in increasing the amount of money being spent on institutional aid arises when colleges and universities enlarge aid budgets at a higher rate than the stated tuition. Such increases may be large enough to cause a decrease in an institution's net tuition revenue, which is defined as the difference between the total tuition revenue (gross revenue) and the amount being spent on institutional aid. The IRHE report examined enrollment data, spending for financial aid, and the tuition revenue of five private colleges in Pennslyvania and found that all five experienced increases in gross tuition revenue while only two of the colleges realized increases in net revenue from tuition and financial aid spending.

The public seems to view institutional awarding practices and tuition increases with growing contempt. The use of tuition revenue to fund financial aid programs means that families who pay the entire cost subsidize the educations of those with lower incomes. Also, if the "high tuition/high aid" approach is effective, increases in tuition are still viewed negatively by families who feel an increasing burden to pay for college and view institutions as unwilling or unable to limit spending (Morganthau and Nayyar, 1996). McPherson and Schapiro (1993) suggest that alternative packaging strategies, such as leveraging, also contribute to the public's suspicions. These doubts are confirmed if colleges use leveraging to limit aid awards of students who show too high an interest in the college or if students choose more popular majors (Gose, 1996). In addition, administrators at institutions that lower or halt tuition growth fear that the public may perceive that the quality of their institutions has diminished (Hamm, 1995; Rothman, 1995).

The negative consequences often associated with institutional financial aid programs should provide the motivation for colleges and universities to study their awarding strategies to evaluate fairness and effectiveness. Initial study should include an evaluation of tuition revenue and enrollment changes.

Case Study

The University of Northern Iowa is a comprehensive, public university of approximately 13,000 students. Students attending the university benefit from both need-based and merit-based institutional financial aid awarded from a fund called the Student

Assistance Setaside (SAS) as well as other sources of federal aid. Funds for the SAS are derived each year from tuition increases. In this case study, an evaluation of the data from the 1992-93 and 1995-96 academic years was conducted to determine if increases in institutional financial aid have impacted enrollment and tuition revenue. Enrollment figures are listed for the fall semesters 1992 and 1995 (Table 1). Full-time equivalents (FTE's) were determined for both the fall and spring semesters of each year and then multiplied by tuition to determine the gross tuition revenue for each academic year. The net tuition revenue was then derived by substracting the total amount spent on SAS from the gross revenue (Butler-Nalin et al., 1992; DiBrito et al., 1995).

During the period, freshmen enrollment increased from 1,683 in the fall of 1992 to 1,951 in the fall of 1995. Despite this period of growth, enrollment remained steady because an increasingly large number of students were graduated. Since the amount of money allocated to SAS is tied to tuition increases and enrollment has remained relatively stable, growth in tuition and institutional aid has been comparable. Likewise, net tuition revenue has increased steadily which indicates that the university has not overallocated money to financial aid.

The institution has shifted slightly larger amounts of money from need-based to merit-based aid in an effort to recruit more high ability students. This coincides with initiatives to distribute scholarships and need-based financial aid more effectively. In 1992 the University awarded need-based aid on a "first come-first served" basis. This meant that certain high ability students with financial need who submitted financial aid applications later in the spring often received less aid. The new leveraging strategy implemented in 1994 involved awarding a portion of need-based institutional funds on a "first come-first served" basis, but also dedicated a share of the funds to recruiting high ability, minority, and non-resident applicants. Such a strategy provides greater educational access to those with demonstrated financial need, while making aid awards that are more in line with institutional enrollment goals.

The academic profile of UNI indicates that the number of high ability students has increased slightly between 1992 and 1995. The number of entering freshmen who ranked in the upper 10% percent of their high school classes and scored a 27 or above on the ACT increased from 136 in the fall of 1992 to 156 in the fall of 1995 (DiBrito et al., 1995).

One can speculate that the leveraging strategies implemented by the University are responsible for the increase, but this cannot be proven to any degree of certainty. The institution has made great strides in more efficiently using its financial aid dollars, yet it has not dramatically increased the amount of money being spent on financial aid.

Significant increases in enrollment, particularly that of high ability, minority, and non-resident students have not been realized. The University of Northern Iowa has not, however, suffered from the negative consequences that are often associated with awarding institutional financial aid. Net tuition has increased and enrollment has remained steady during a period when the number of graduating high school seniors has been in decline.

Table 1

Comparision of Institutional Enrollment and Financial Aid Data for 1992-93 and 1995-96

Institutional Data	Academic Year 1992-93	Academic Year 1995-96	Percent Increase
Enrollment			
Undergraduate	10,353	10,138	-2%
Graduate	854	956	12%
Total	11,207	11,094	-1%
Tuition			
Undergraduate			
Resident	$2,088	$2,386	14%
Non-Res	$5,430	$6,462	19%
Graduate			
Resident	$2,346	$2,834	21%
Non-Res	$5,986	$6,462	17%
Student Aid Setaside (SAS)			
Merit Based	$999,306	$1.2 Million	17%
Need Based	$1.5 Million	$1.7 Million	14%
Total	$2.5 Million	$2.9 Million	15%

Table A (Continued)

	Academic Year		
Institutional Data	1992-93	1995-96	Percent Increase
Tuition Revenue			
Gross Revenue	$24.5 Mil	$28.6 Mil	16%
Net Revenue	$22 Mil	$25.7 Mil	17%

Likewise, the leveraging strategy employed ensures that a portion of financial aid be awarded on a first-come basis, avoiding the negative awarding practices sometimes associated with leveraging. Additional study into the institutional aid program at Northern Iowa would provide valuable information regarding the impact financial aid has on the enrollment decisions of specific populations. This information may prove useful in helping UNI attain a more diverse student body.

Reevaluating Higher Education Finance

In order to limit the growth of institutional spending for financial aid and the negative side effects discussed previously, growth in tuition needs to be limited. The factors that influence the growth of tuition are diverse and complex. To help alleviate the strain being placed on institutions, government financial aid policies should be reassessed ınd institutions should work to control spending.

Critics of higher education believe that colleges have overspent. Professors are ıccused of having light teaching loads, while institutions are spending too much money on :apital improvements, new academic programs, and salaries. While college spending has ncreased, students have become more demanding. A survey conducted by Sevier and (appler (1996) indicates that students are highly interested in the academic reputation of he institution. They rate the quality of faculty and available majors as very important actors in their college selection. Reiland (1996) confirms that students demand top quality rograms, facilities, and athletic programs.

At the same time, increases in the number of faculty members has not kept pace vith the increased number of students attending college. Benjamin (1995) points out that rom 1949-1989 the number of students in college increased five times, while the number f professors increased three times. Institutions are hiring more part-time instructors and ncreasing class sizes to alleviate this strain and to save money. Benjamin maintains that he quality of faculty and student interaction has suffered as a result of both trends.

Institutions fear that downsizing may cause students to overlook their institutions nd increase dissatisfaction among students with the quality of teaching. Rather than utting programs and personnel, institutions and students may be better served by oncentrating on becoming more efficient with existing resources. Improved efficiency and valuation can have positive effects on college tuition by controlling costs, while at the ame time maintaining a high level of student satisfaction.

It is also argued that the growth in spending by colleges and universities is in part a result of the rules that determine a student's need for federal financial aid. In theory, the financial aid eligibility of a student increases as the cost of attendance rises, which is an attempt to neutralize institutional cost in the selection process. In a 1991 report on the institutional impact of federal financial aid, Rose and Sorenson determined that 33% of federal aid directly supports institutional budgets. Since the amount of federal aid a student receives is directly tied to the cost of attendence and since institutions directly benefit when students receive federal aid, it can be said that the federal aid rules provide little incentive for colleges to keep costs down (Hood, 1993).

Federal regulations also deter family savings by incrementally reducing the eligibility of students who have more money saved (Hood, 1993). A 1995 study by Feldstein on the effects of financial aid policy revealed that the rules governing financial aid have created a "tax" on family savings and have encouraged families to rely more on financial aid, rather than savings, to pay for college.

To boost the incentive to save, Hood proposed that the government allow families to put money into tax free accounts that can be used to pay college expenses. An additional idea would allow families to take money for college from retirement accounts without penalty. Hood maintains that these measures will put families in charge of spending for education, which may provide colleges with the incentive to lower costs. It may also be beneficial to tie some forms of federal assistance to academic performance in an effort to encourage academic excellence (Grossman, 1995).

In addition to changes in governmental regulations, studying the impact of financial ıid on enrollment and persistence is a valuable way for colleges and universities to make ·fficient use of student aid while providing a broader access. Somers (1995) describes tatistical models that were developed to determine the impact of financial aid on ·nrollment and retention. The models analyze the amount and type of financial aid being ıwarded and the impact these awards have on initial enrollment, persistence between emesters, and year to year persistence for students with various backgrounds. Knowing ıow financial aid affects the enrollment decisions of specific populations allows institutions o make a more efficient use of aid dollars in targeted areas while at the same time roviding educational access to students who may otherwise not afford college.

To reduce the strain on institutional aid budgets, and the potential negative effects, olleges and universities need to manage existing resources more effectively through ınovative programming. Institutions should focus on the quality rather than the quantity of ıeir academic programs and should also evaluate the effectiveness of their financial aid rograms in order to maintain enrollments. Additionally, government policy needs to rovide incentive for families to save for college and for institutions to control costs. ;estoring confidence in higher education requires the cooperation of students, faculty, ollege administrations, and government and is imperative for the fiscal health of the ıstitutions.

References

Benjamin, E. (1995). A faculty response to the fiscal crisis: from defense to offense. In M. Berube & C. Nelson (Eds.), Higher education under fire: Politics, economics, and the crisis of the humanities (pp. 52-72). New York: Routledge.

Butler-Nalin, P. (1992). A profile of students enrolled at the University of Northern Iowa fall semester 1992 (#70-92-G). Cedar Falls, IA: University of Northern Iowa, Office of Institutional Research.

DiBrito, W. (1995). A profile of students enrolled at the University of Northern Iowa fall semester 1995 (#74-95-G). Cedar Falls, IA: University of Northern Iowa, Office of Institutional Research.

Discounting and Its Discontents (1994, July/August). Change,26(3), University of Pennslyvania, Institute for Research on Higher Education, 33-36.

Feldstein, M. (1995). College scholarship rules and private saving. The American Economic Review, 85(3), 552-566.

Glasser, W. A. (1993). Tapping a hidden source of financial aid. The College Board Review, 168, 2-8.

Gose, B. (1996, September 13). Colleges turn to "leveraging" to attract well-off students. Chronicle of Higher Education, A45.

Hamm, W. E. (1995). The Waldorf tuition and grant reduction experiment. New Directions for Higher Education, 89, 41-52.

Hearn, J. C., & Anderson, M. S. (1995). The Minnesota financing experiment. w Directions for Higher Education, 89, 5-25.

Hood, J. (1993, October). How to hold down college tuition costs. Consumer's search Magazine, 76, 10-15.

Hubbell, L. W., & Rush, S. C. (1991). A double-edged sword: Assessing the pact of tuition discounting. Business Officer, 25(6), 25-29.

McPherson, M. S., & Schapiro, M. O. (1993). The search for morality in financial l. Academe, 79(6), 23-25.

McPherson, M. S., & Schapiro, M. O. (1995). Pricing and financial aid in a fting environment. The College Board Review, 175, 18-21.

Morganthau, T., & Nayyar, S. (1996, April 29). Those scary college costs. wsweek, 127, 52-56.

Reiland, R. R. (1996, September 30). Deconstructing the ivory tower. National view, 18, 36.

Rose, D. C., & Sorensen, R. L. (1991). Federal student financial aid awards as bsidies for higher education: What kinds of institutions are we supporting? Research in gher Education, 32(5), 525-537.

Rothman, M. L. (1995). The Mills College tuition-freeze experiment. New ections for Higher Education, 89, 53-63.

Sevier, R. A., & Kappler, S. D. (1996). What students say: Results of two national veys on how students choose a college (White Paper. No. 3). Cedar Rapids, IA:

Stamats Communications.

Somers, P. (1995). A comprehensive model for examining the impact of financial aid on enrollment and persistence. Journal of Student Financial Aid, 25, 13-27.