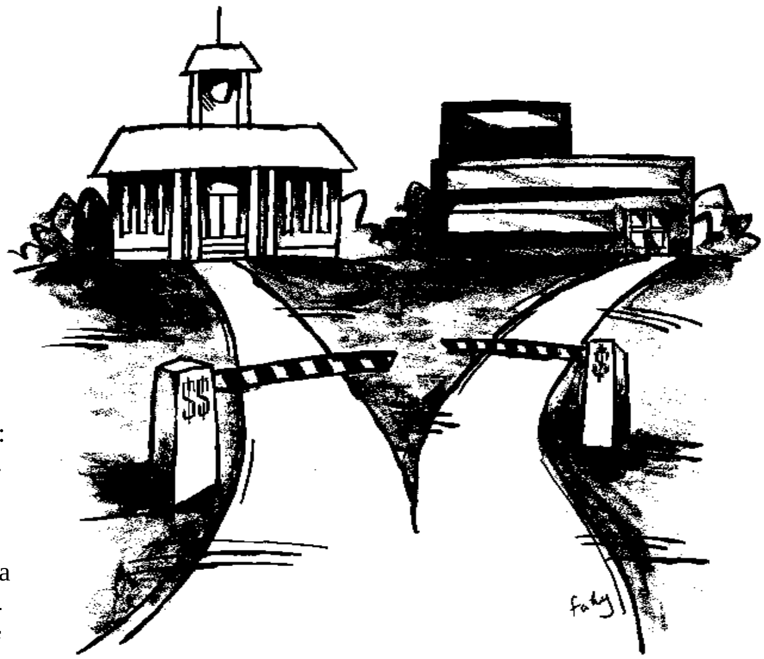
The Choice-Income Squeeze

How Do Costs and Discounts Affect Institutional Choice?



As market forces continue to shape higher education, two questions are becoming increasingly important: Has the market worked to the advantage of well-to-do students and to the disadvantage of students from low-income families? With the market increasingly setting the price that students and their families are expected to pay for a college degree—and as those prices continue to rise substantially faster than inflation—has there been a redistribution of enrollment associated with price hikes?

Last year's May/June *Landscape* documented the "price-income squeeze" in higher education, focusing on how the four-year cost of attending college has increased substantially faster than median family incomes in the United States. Indeed, the full cost of attending a private college or university is now more than double the median family income and, for the first time, the four-year cost of attending a public institution exceeds that median. This issue of *The Landscape* broadens that discussion by focusing on questions of price and *choice*: the relationship between financial aid; the average net tuitions that low-, middle-, and upper-income students are expected to pay at both public and private institutions; and the shifts in enrollments that may be associated with family income.

Aid and Access: A New Accounting

National Center for Postsecondary Improvement researchers Michael McPherson of Macalester College and Morton Schapiro of the University of Southern California have been studying the effects of financial aid on student access to postsecondary education and institutional choice. Using data from the National Postsecondary Student Aid Study (NPSAS) and the American Freshman Survey, they investigated how different forms of financial and merit aid affect the choices of students from different family-income groups concerning which college or university to attend.

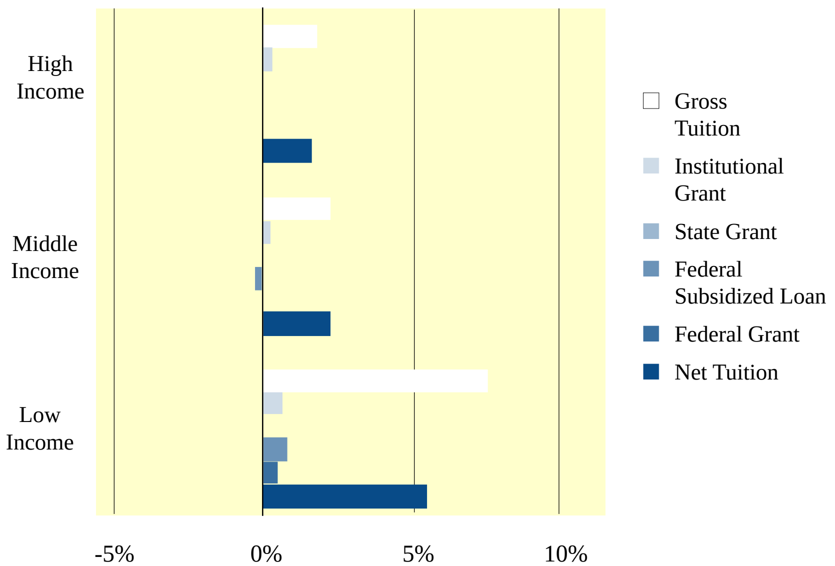
The sum of their research documents how students from lower-income families have the greatest difficulty meeting ballooning tuitions: expressed as a percentage of family income, net tuition increases for these students are up to three times those of students from upper-income families. First-time, full-time students from families with the lowest incomes were the only group to increase their enrollment in community colleges, while students from the most affluent families substantially increased their enrollment in the nation's most selective undergraduate institutions.

Discounts Matter: Thresholds of Affordability

The analysis begins by substantiating a common-sense notion: students who come from low-income families face a serious financial burden when paying for a college education. To measure the magnitude of the real increase in the price of college attendance from 1987 to 1993, the average net tuition (gross tuition minus state, federal, and institutional grants, plus student loans) paid by each income group—low, middle, and high—was divided by a midpoint: for the low-income group by \$15,000, for the middle income group by \$50,000, and for the high-income group by \$85,000. The results of these calculations, displayed in Chart 1 for public institutions and Chart 2 for private

The National Center for Postsecondary Improvement (NCPI) is supported under the Educational Research and Development Center program, agreement number R309A60001, CFDA 84.309A, as administered by the Office of Educational Research and Improvement (OERI), U.S. Department of Education. The findings and opinions expressed by NCPI do not necessarily reflect the position or policies of OERI or the U.S. Department of Education. The Institute for Research on Higher Education retains the copyright for this column.

Chart 1
Change as a Percentage of Income Group Midpoint between 1987 and 1993 in Tuition and Aid for Students at Public Institutions in Constant Dollars



institutions, reflect just how different the increase in net tuition, proportional to income, has been for each income group.

While in constant dollars each group paid more to attend college in 1993 than in 1987, the increase in net tuition as a proportion of income for low-income students at *private* institutions was three times greater than that of high-income students—while the increase for low-income students at *public* institutions was more than twice that of high-income students.

What Charts 1 and 2 also make clear is that increases in financial aid simply did not keep pace with increases in tuition. Though private institutions on average increased the value of institutionally awarded aid in real terms—and increased it substantially faster for low-income than for either middle- or upper-income students—those increases were not sufficient to offset the rise in price and the decline in the real value of external aid funds.

How, then, have changes in net price and the relative distribution of financial aid influenced students' enrollment choices? Although more students now attend college than ever before, there are clear signs that higher prices have made more students cost-sensitive—hence the rise in institutional funds largely for discounting purposes—and have begun to restrict students from lower-income families from some postsecondary markets.

To answer this question, McPherson and Schapiro drew upon data from two administrations of the American Freshman Survey: 1981 and 1997. Six income categories were developed that make comparisons at both points in time possible (Chart 3).

The data from 1981, reporting family income for 1980, used the following definitions to group the six income categories displayed in Chart 3:

- Lowest Income: less than $10,000 annually
- Lower-Middle Income: $10,000 to $14,999 annually
- Middle Income: $15,000 to $29,999 annually
- Upper-Middle Income: $30,000 to $49,999 annually
- Upper Income: $50,000 to $100,000 annually
- Highest Income: more than $100,000 annually

The data from 1997, reporting family income for 1996, used the following definitions to group the six income categories:

- Lowest Income: less than $20,000 annually
- Lower-Middle Income: $20,000 to $29,999 annually
- Middle Income: $30,000 to $59,999 annually
- Upper-Middle Income: $60,000 to $99,999 annually
- Upper Income: $100,000 to $200,000 annually
- Highest Income: more than $200,000 annually

Inflation for the years 1980 to 1996 was 90.4 percent, making the

1997 categories slightly more restrictive—that is, the categorization slightly lessens the severity of the findings being depicted.

The trends are not so dramatic as worrisome, particularly at the two ends of the income spectrum: Lowest Income, on the one hand, and Upper and Highest Income on the other. In the latter case, there is a clear movement away from public two-year institutions and, in the case of students from the Highest Income families, away from non-selective four-year institutions.

In fact, the probability that a student from one of the nation's richest families will attend a highly selective institution increased from one in five in 1981 to one in four in 1997. Just over half of the students from these families attended either a highly selective or a medium selective institution in 1997, up 7 percentage points from 1981. Unless one is prepared to argue that the 1997 freshmen from these families were inherently smarter than their counterparts in 1981, then the conclusion is that another characteristic made them that much more attractive to highly selective institutions. One possible answer, of course, is that these were the students who had the ability to meet the rising tuitions that highly selective institutions were charging.

The other end of the income spectrum tells the converse tale. Freshmen from families with the Lowest Incomes have begun to shift their enrollment toward public two-year institutions, and mostly away from non-selective, four-year institutions. The most obvious way for these students to avoid increases in net tuition was to shift their preferences to lower-cost—indeed, the lowest-cost—providers. It is the way markets work.

What is also clear is the declining interest of all but low-income students in attending a public two-year institution. While overall, there was a net shift of about 4 percentage points away from public two-year colleges as an enrollment choice for first-time, full-time college freshmen, that rate was exceeded for each of the key income bands in the middle of the distribution:

Chart 2
Change as a Percentage of Income Group Midpoint between 1987 and 1993 in Tuition and Aid for Students at Private Institutions in Constant Dollars

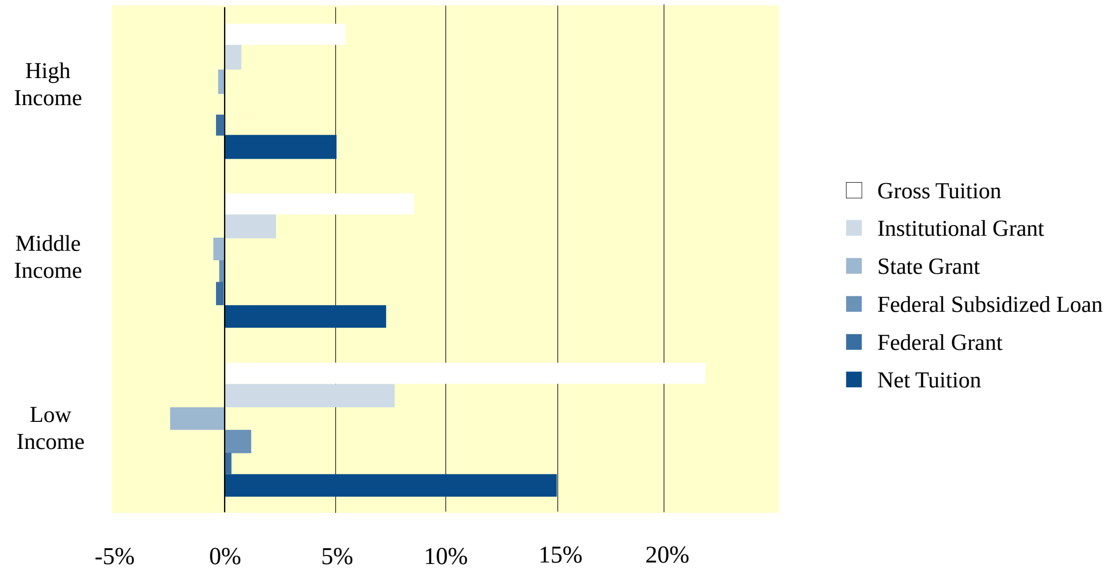
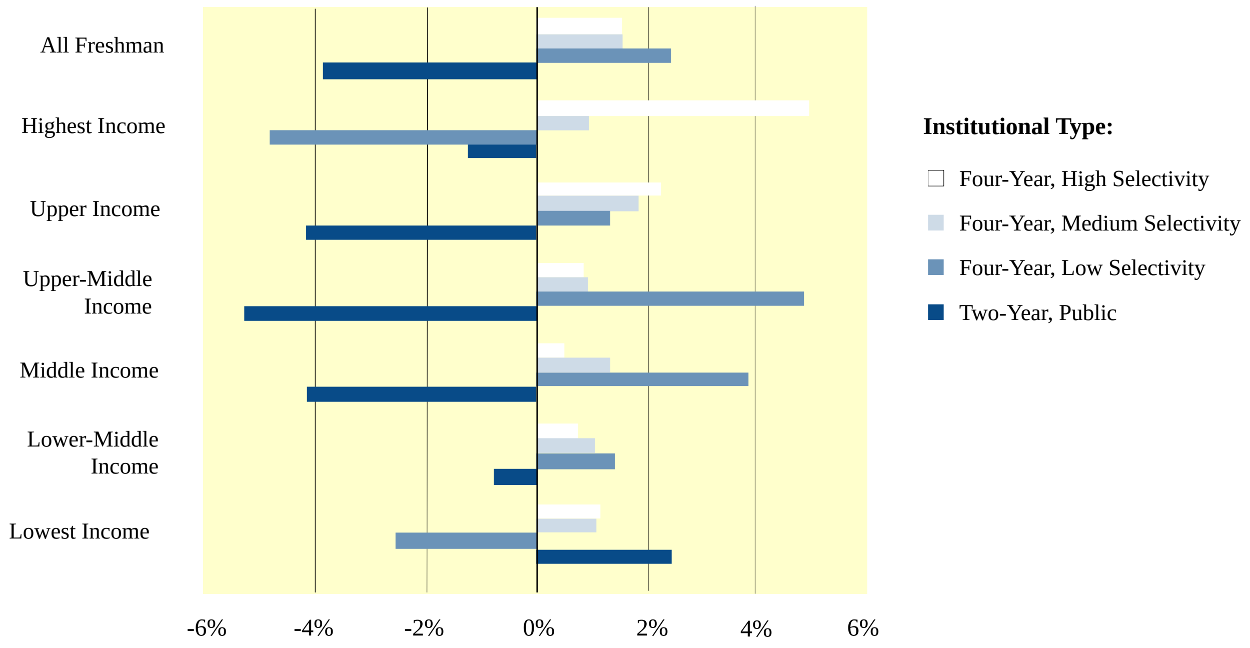


Chart 3
Percentage Shift in Enrollment by Income Bands: 1981 to 1997



Middle Income, Upper-Middle Income, and Upper Income. If present trends continue, these students will likely follow the pattern established by the students from the wealthiest families: minimal enrollment in public two-year colleges; decreasing enrollment in non-selective four-year institutions; and increasing enrollment in selective institutions, where the ability to pay is becoming ever more important. Taken to their logical conclusion, these trends suggest that a restratification of American higher education may be under way.

Perspective

Although the percentages of most tuition hikes are no longer in the double-digits, as they were through the early 1990s, no one—least of all the nation's colleges and universities—is talking about rolling back prices. The ironic exception may be in the prices charged to those most able to pay. The fact that these students have faced lower percentage increases in the net tuitions they are charged suggests a lot about who does and who does not have bargaining power in the new market for higher education. Understanding how institutions set their "sale" prices—and how the market determines who gets those discounts—becomes an increasingly important policy question for both institutional leaders and federal and state legislators.

Having raised these issues, McPherson and Schapiro are turning next to the just-released 1996 National Postsecondary Student Aid Study (NPSAS). Employing the classifications developed as part of the NCPI market taxonomy (*Change* November/December 1997 and January/February 1998), they plan to explore the continuing interplay of market forces, college prices, and the availability of student financial aid. Stay tuned. □