# Financial aid for college students: Have the barriers to opportunity been lowered?

There is no more senseless waste than the waste of the brainpower and skill of those who are kept from college by economic circumstance.

Lyndon Johnson, proposing a national War on Poverty, March 1964

At the 1987 Research Workshop sponsored by the Institute and the U.S. Department of Health and Human Services, Sandra Baum presented a paper on aid to low-income college students. The discussant for the paper was Lee Hansen, an Institute affiliate with extensive experience in the economics of education. The presentation thus brought together two research generations: Hansen was a staff member on the President's Council of Economic Advisers when the War on Poverty was launched; Baum was awarded a Small Grant under the Institute's program supporting studies by new scholars. Appropriately, a recent paper by Hansen and Jacob Stampen provides the historical context within which to place Baum's findings.<sup>1</sup>

## Student aid and the changing national goals of higher education

Over the past forty years the federal government has continually expanded its financial support for higher education, supplementing the traditional role played by states and the private sector. Table I documents the growth in that spending since 1963. In tracing the economic and demographic factors that have influenced federal intervention since World War II, Hansen and Stampen discerned a pendulum swing between concern for the quality of education and concern for equality of opportunity. Each swing enlarged federal support, although in varying degrees.

The immediate postwar years marked a period of emphasis on broader opportunity, inaugurated by the landmark G.I. Bill of 1944, offering federal aid to enable veterans to attend college. Extended to cover those who served in the Korean War, this assistance stabilized campus enrollments in the 1950s by offsetting the decline in persons of college age due to the low Depression-era birthrates. Because aid was not extended to nonveterans, however, the period 1946–57 was one of modest federal investment in higher education. As had long been true, postsecondary education was considered suitable for high school graduates of demonstrated ability, and monetary support consisted primarily of scholarships awarded on the basis of merit rather than need.

World War II and its aftermath gave new prominence to higher education: academicians played an important part in the war effort; colleges and universities helped ease the transition from a wartime to a peacetime economy. When new concerns emerged, it was from academic institutions that solutions were sought.

In 1957 the launching of Sputnik made it evident that Russia had overtaken America in science and technology and raised questions about the quality of education. One result was the National Defense Education Act of 1958, which offered graduate fellowships for students who became teachers and National Defense Student Loans that allowed graduates and undergraduates to borrow at subsidized rates. Now termed National Direct Student Loans, this program still exists, as shown in Table 1.

The major concern in the late 1950s remained one of helping certain promising students, not necessarily of lowering financial barriers for young people of limited economic means. The early 1960s ushered in a period emphasizing equality of opportunity. The new economic concept of human capital stressed investing in education to improve national productivity and individual well-being. Social scientists pointed as well to the "talent loss" resulting from the failure of qualified but poor high school graduates to enter college. Combined with the antipoverty campaign and the civil rights movement, these forces contributed to passage of the Higher Education Act of 1965, adding three new programs: (1) Equal Opportunity Grants, now named Supplemental Educational Opportunity Grants (SEOG), which provide funds to institutions for student scholarships to be disbursed on the basis of need; (2) federally insured Guaranteed Student Loans (GSL), for middle- and low-income students; and (3) the Work Study program (actually created in 1964), which subsidizes work experience for needy students.2

The move toward greater educational opportunity gained further momentum with the publication of two reports in the

#### Table 1

#### 1975 1980 1985 Program 1963 1970 3,298 Pell Grants 1,629 2,660 Supplemental Educational 350 408 348 **Opportunity Grants** 325 State Student Incentive Grants 34 85 67 734 Work Study 552 513 610 National Direct Student Loans 356 584 800 774 740 Guaranteed Student 8,280 2,466 2,204 6.811 Loansa Social Security Survivors 1,212 1,901 2,099 0 7,271 656 Veterans' aid 211 2,724 1,911 Other grants 27 39 110 132 42 Other loans 102 78 68 218 594 14,890 15,682 14,259 Total federal 8,004 176 853 893 1.209 State grants 574 3,014 Institutional aid 940 2,343 2,496 2,383 Total 1,710 10,921 18,239 18,958 18,482

#### Student Financial Aid Available under Individual Programs, Selected Years, 1963–1985 (In millions of 1982 dollars)

Source: Sandra Baum, "Financial Aid to Low-Income College Students: Its History and Prospects," IRP Discussion Paper no. 846-87, Table 2. Data from College Entrance Examination Board, *Trends in Student Aid*, 1980–1986 (New York: College Entrance Examination Board, 1986); Donald Gillespie and Nancy Carlson, *Trends in Student Aid*: 1963 to 1983 (New York: College Entrance Examination Board, 1983).

Note: The programs listed here are described in the text and in Table 2. Congress in 1986 enlarged the Pell Grant, Guaranteed Student Loan, and Work Study programs.

a Includes PLUS, a supplemental loan program.

late 1960s, one issued by the Carnegie Commission on Higher Education, the other written by Alice Rivlin, then Assistant Secretary in the Department of Health, Education, and Welfare.<sup>3</sup> Both urged federal financing of a larger system of need-based grants for college students. That system was instituted in 1972 with legislation authorizing Basic Educational Opportunity Grants, now known as Pell Grants, giving direct support to students of limited means, and a smaller program, State Student Incentive Grants, providing matching funds to states for needy-student scholarships. This legislation completed the federal student aid system that we now have, which consists of a combination of grants, loans, and job support to help the children of low-income families afford college.

In the 1970s middle-class families, experiencing the financial setbacks of inflation and recession while college costs rose, argued that they were neither rich enough to finance college for their children nor poor enough to qualify for needed assistance. The result was the Middle Income Student Assistance Act of 1978, which expanded income eligibility for both Pell Grants and Guaranteed Student Loans.

In 1980 Congress authorized increased funding for student aid, but 1981 marked the beginning of retrenchment, when the Omnibus Budget Reconciliation Act restricted the terms of GSLs and reduced support for Pell Grants. After 1981 Congress resisted further aid cuts proposed by the administration.

In the 1980s concern with quality again mounted when wellpublicized reports criticized both lower and higher education.<sup>4</sup> This concern was in part responsible for passage in 1986 of legislation reauthorizing the aid programs through 1991 and expanding the GSL, Pell Grant, and Work Study programs. The principle of federal aid to college students is now firmly entrenched, and major cutbacks appear unlikely.

Table 2 describes the distributional characteristics of the four major federal programs. It shows that the proportion of total aid that went to low-income students declined over the period from early to late 1970s, owing to expansion of aid to middle-income students, but that this proportion has risen during the 1980s. It also shows that the real value of individual awards has diminished, meaning that program enlargement has resulted in greater numbers of recipients rather than increased benefits to individual recipients.

#### Table 2

#### Federal Aid to Students of Low and Moderate Income, Selected Years, 1972-1983 (Dollars in constant 1984 values)

	1972-73	1979-80	1982-83ª
Pell Grants			
No. of awards	-	2,687,000	2,802,000
Proportion of funds to:			
Low-income students		59.8%	81.5%
Low- and moderate-income students		80.2%	95.4%
Average award:		¢1.001	¢1.007
Low-income students Overall	_	\$1,281 \$1,173	\$1,096 \$1,019
Overan	_	\$1,175	\$1,019
SEOG			
No. of awards	285,000	419,000	426,000
Proportion of funds to:		,	
Low-income students	68.2%	38.4%	37.6%
Low- and moderate-income students	98.5%	64.7%	65.1%
Average award:			
Low-income students	\$1,161	\$704	\$541
Overall	\$1,191	\$750	\$597
Work Study			
No. of awards	399,000	613,000	518,000
Proportion of funds to:	,	,	,
Low-income students	50.7%	34.7%	37.5%
Low- and moderate-income students	83.9%	58.9%	63.0%
Average earnings			
Low-income students	\$1,322	\$819	\$858
Overall	\$1,253	\$843	\$850
NDSL			
No. of awards	512,000	577,000	436,000
Proportion of funds to:			
Low-income students	37.1%	27.6%	29.8%
Low- and moderate-income students	69.7%	51.0%	57.7%
Average loan:			
Low-income students	\$1,274	\$813	\$804
Overall	\$1,380	\$827	\$851

Source: Baum, Table 3. Data from College Entrance Examination Board, Who Receives Federal Student Aid? (New York: College Entrance Examination Board, 1986).

Note: Pell Grant figures are for all students. The figures shown for the other programs are for dependent students only (those supported by their parents); their income refers to family income. Low-income is defined here as below \$15,000, moderate income below \$25,000, in 1984 dollars. Median family income in constant 1984 dollars ranged over this period from a low of \$25,216 in 1982 to a high of \$28,085 in 1978. aThe Pell Grant figures are for 1983-84.

#### Gauging the effects of student aid

Reliable estimates of the results of aid to college students have until recently been limited by lack of adequate data. Lee Hansen, one of the first evaluators, found in 1983 that despite the expansion of federal assistance on behalf of poor students, over the 1970s the college enrollment rates of below-median-income youth, regardless of race or sex, declined relative to the rates of above-median-income youth.5 These results cast doubt on the efficacy of aid to needy students. In the same year Charles Manski and David Wise estimated that the Pell Grants had significantly increased the enrollment of low-income freshmen, most of whom entered two-year colleges and vocational schools.6

With the advantage of a relatively new data set, Sandra Baum asked a more general question: Given the network of aid policies now in place, how many students appear deterred from higher education by lack of financial resources? She analyzed data from High School and Beyond, a large-scale longitudinal study of high school students undertaken by the National Center for Education Statistics beginning in 1980. Baum's sample consisted of 2,000 students who, as seniors in 1980, responded to questions about college aspirations and whose records contained information on parents' income, education, and occupation. Data from 1982 on the same respondents provided information about college attendance rates, and 1984 data were used to examine graduation rates.

She first divided the sample into three groups: those who in 1980 said they wanted to attend college and by 1982 had done so; those who said they did not want to attend college and subsequently did not; and those who said they wanted to go on to college, but two years later had not done so. Only 263 respondents, 13 percent of the sample, fell into the last category, suggesting that most students who say they wish to pursue higher education appear able to do so.

Baum then examined factors associated with lack of college aspirations among the 1980 seniors. Was low income the overriding factor, or did such constraints as rural residence or low parental education play a role? She found that among several specific characteristics (test scores, parents' income and education, residential location, race, religion, and sex), the most important explanatory variable was "ability," as measured by an achievement test administered during the survey. The higher the test score the more likely was the student to aspire to a college education. Parents' educational levels were also positively associated with college aspirations, but family income was not.

Investigation of actual 1982 college attendance rates among the entire sample (regardless of expressed intent in 1980) showed that the high school achievement scores, along with parents' education and occupation as well as their income, played a much larger role than did income alone. The differences between attendance rates of those with low versus high family income (46 percent versus 60 percent) were smaller than the differences between those in the lowest versus highest socioeconomic-status quartile (38 versus 83 percent). And attendance rates among those of low ability but high socioeconomic status were lower than among those with high ability but low socioeconomic status. Other studies have already documented the role of parents' socioeconomic status in determining the educational levels of their children; what is new in Baum's research is documentation of the importance of academic achievement in high school.

These results suggest that low academic ability combined with low parental educational levels, rather than purely financial considerations, are the primary deterrent to college enrollment. Yet, Baum pointed out, even if we conclude that financial-aid policies have helped increase college attendance, "we cannot necessarily conclude that equal opportunity goals are being achieved." Providing access to college does not assure graduation; perhaps poor students are less able to complete their college education. Moreover, if lowincome students are concentrated in two-year community or junior colleges, their economic opportunities may not be enhanced in the long run. To examine these issues Baum analyzed institutional attendance and dropout rates.

She found that the type of school attended was more closely related to measured achievement levels than to income: students of higher ability, regardless of income, were more likely to attend four-year colleges. And students entering two-year colleges were much more likely to drop out before completing a degree. High-income students at two-year schools dropped out much more often than did low-income students at four-year schools.

### **Recent evidence on effectiveness**

Baum concludes that in the 1980s low family income does not seem to deter qualified high school graduates from either aspiring to or entering college, and that academic ability is the most important predictor of college enrollment and persistence. Her evidence supports the results of studies at the University of Wisconsin–Madison by Jacob Stampen and Alberto Cabrera, who investigated the effects of our current financial aid system on (1) the extent to which needs-based programs do in fact reach economically disadvantaged college students; (2) the ways in which the three basic forms of aid—grants, loans, and work-study support—are "packaged" by students of varying income levels; and (3) the effects of aid on the tendency to drop out of college.<sup>7</sup>

To address the first two issues, Stampen and Cabrera analyzed a nationally representative cross section of 10,000 student-aid recipients in public colleges and universities during the academic year 1983–84. Their results showed that aid based on financial need does in fact flow primarily to students of low income. The analysis of aid "packaging" revealed that combining different forms of assistance was by far the rule rather than the exception. Grants, which have stricter eligibility limits than loans, went predominantly to low-income students, as did work-study support. Very few aid recipients with higher incomes (\$30,000 or more) had any form of assistance other than loans.

To assess the relationship between receipt of aid and the tendency to leave college, the authors compiled a longitudinal data base consisting of a 20 percent random sample of the 1979 freshman class in the University of Wisconsin System (thirteen separate campuses), whose records were followed for three years. There were no statistically significant differences in dropout rates of aided as opposed to more affluent, unaided students. The authors concluded that our student financial aid system now means that poor students are as likely to stay in school as students from higher-income families who do not receive any aid.

Baum's study and the Wisconsin research find that student aid has been effective in reducing financial barriers. Lower academic ability, more than any other factor, accounts for lower college enrollment and failure to complete schooling among students with less income. This conclusion moves our attention back to the role of elementary and secondary schools in promoting achievement. The message seems to be that, in order to promote the higher education of children from poor families, we must not only maintain financial aid programs but also do more to improve the quality of education at the elementary and secondary levels.

<sup>&</sup>lt;sup>1</sup> See Sandra Baum, "Financial Aid to Low-Income College Students: Its History and Prospects," IRP Discussion Paper no. 846–87; and W. Lee Hansen and Jacob O. Stampen, "Economics and Financing of Higher Education: The Tension between Quality and Equity," revised version, April 1987, of a paper presented at the annual meeting of the Association for the Study of Higher Education, San Diego.

<sup>&</sup>lt;sup>2</sup> The 1965 act transferred Work Study from the Office of Economic Opportunity to the Office of Education.

<sup>&</sup>lt;sup>3</sup> Carnegie Commission on Higher Education, Quality and Equity: New Levels of Federal Responsibility for Higher Education (New York: McGraw-Hill, 1968); Rivlin, Toward a Long-Range Plan for Federal Financial Support for Higher Education (Washington, D.C.: HEW, January 1969).

<sup>&</sup>lt;sup>4</sup> National Commission on Excellence in Education, A Nation at Risk: The Imperative for Educational Reform (Washington, D.C.: GPO, 1983); Integrity in the College Curriculum: A Report to the Academic Community (Washington, D.C.: Association of American Colleges, 1984); Ernest L. Boyer, College: The Undergraduate Experience in America (Princeton: Carnegie Foundation for the Advancement of Teaching, 1987).

<sup>&</sup>lt;sup>5</sup> Hansen, "The Impact of Student Financial Aid on Access," *The Crisis in Higher Education: Proceedings of the Academy of Political Science*, 35 (1983), 84-96.

<sup>&</sup>lt;sup>6</sup> Manski and Wise, *College Choice in America* (Cambridge: Harvard University Press, 1983).

<sup>&</sup>lt;sup>7</sup> Stampen and Cabrera, "The Targeting and Packaging of Student Aid and Its Effects on Attrition," *Economics of Education Review*, forthcoming, and "Exploring the Effects of Student Aid on Attrition," *Journal of Student Financial Aid*, 16 (Spring 1986), 28–40.