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ABSTRACT Changes in students' participation in higher education and in the federal aid they received are examined for 1969, 1974, and 1981 in order to relate the pattern of federal student aid disbursements to changes in the enrollment patterns among selected student groups. The following federal aid programs are examined: Pell Grants (Basic Educational Opportunity Grants), Guaranteed Student Loans, National Direct Student Loans, and College Work-Study. Changes in the patterns of student enrollments overall, by income, dependency status, gender, race, and age are related to the distribution of awards made under the federal aid programs. The sum of student aid awards to individual recipients is used to yield the number of unduplicated award recipients. Findings for 1974 and 1981 include the following: participation rates for all students aged 18 to 24 were up, while rates for older students were up even more; participation rates for dependent students with family incomes under \$7,500 fell more sharply than for any other income group; the higher the income, the greater the probability of receiving federal student financial aid; low-income students were more likely to receive a smaller award in 1981 than in 1974; and the proportion of students receiving a grant increased by 40 percent between 1974 and 1981. (SW)

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CHANGES IN COLLEGE PARTICIPATION RATES
AND
STUDENT FINANCIAL ASSISTANCE
1969, 1974, 1981

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EXECUTIVE SUMMARY

The purpose of Federal student aid programs is to foster equality of opportunity in postsecondary education by lowering the economic barriers that prevent greater participation. The measures of the aid programs' success are improvements in access and choice for targeted populations.

The evidence on whether the aid expenditures are meeting the objectives set by Congress is incomplete. Efforts to evaluate access and choice have been limited by inadequate data and methodologies that do not adjust for the inflation that has cut into student's incomes and the value of financial aid awards during the 1970s. This analysis makes such adjustments. Income categories and award values are both reported in 1981 dollars.

The study traces changes in student's participation in higher education and in the Federal aid they receive. The purpose of the study is to relate the pattern of Federal student aid disbursements to changes in enrollment patterns among selected student groups. The Federal aid programs analyzed here, are:

- o Pell Grants (Basic Educational Opportunity Grants)
- o Supplementary Educational Opportunity Grants
- o Guaranteed Student Loans
- o National Direct Student Loans
- o College Work-Study

Changes in the patterns of student enrollments in total, by income, dependency status, gender, race and age are related to the distribution of awards made under the Federal aid programs.

The analysis examines participation in postsecondary education for the years 1974 and 1981. Student aid patterns are also examined for the same period. The conclusions drawn from the findings are impressionistic. The study uses the best available data to find common patterns in how different groups have changed their participation in postsecondary education and in the disbursement of Federal student aid dollars.

Census data are used to measure access and choice. The participation rates reported in this study for 1981 represent the percentage of the college-eligible population who were enrolled in a postsecondary institution in 1974 or 1981.

The major findings on changing participation rates between 1974 and 1981 are:

- o Participation rates for all students 18-24 were up. The participation rates for older students were up even more.
- o The participation rates for dependent students aged 18-24 held steady as did the participation rates for independent students in the same age group.
- o Participation rates for dependent students in the lowest income categories (under \$7,500) fell more sharply than for any other income group.
- o Participation of white students was up more than participation of blacks, which still showed a modest improvement.
- o The participation rate for women was up, while that men was roughly the same as in 1974.

Data collected from entering freshmen are used to evaluate the distribution of Federal aid. The data indicate the following changes:

- o The probability of the lowest income students receiving an award did not change appreciably since 1974. But higher income groups showed an increase in their probability of receiving an award. The higher the income, the greater the increase in probability.
- o Low income students were more likely to receive a smaller award in 1981 than they were in 1974. Students in the \$12,500 and above income categories were more likely to receive a larger income award in 1981 than they were in 1974.
- o The proportion of students receiving a grant increased by 40 percent between 1974 and 1981 while the increase for self-help awards was up 126 percent.
- o White students increased in the proportion aided at a rate 5.5 times the increase for blacks. But blacks were still more likely to receive an award in 1981.
- o Blacks were more likely to receive a small award in 1981 than they were in 1974; whites were more likely to receive a larger award in 1981 than they did in 1974.

- o Men and women had the same shares of student aid in 1974. Women increased their share slightly relative to men in 1981.
- o Two-year public college students increased in the proportion aided more than any other sector. They were closely followed by students in the four-year private sector. Students in the private sector were still more likely to receive assistance in 1981 than were public college students.

These findings suggest that Federal financial assistance may indeed affect access and choice. The strongest relationship in the data is the decline in the size of student aid awards among lower income dependent students, aged 18-24, between 1974 and 1981. This relationship is consistent with the fact that lower income families lost purchasing power in relation to higher income families. Both income categories and aid awards have been adjusted for inflation.

The complementary finding to this decrease in aid to lower income students is the increase in aid received by higher income students. Once again, this finding is consistent with the fact that, in general, the higher income groups sustained their participation rates somewhat better than did the lower income groups.

In suggesting these relationships between aid and participation rates, it is important to remember that the lowest income students were still more likely to receive aid than other income groups, but that the gap narrowed between 1974 and 1981. A large part of the increase in aid for middle and upper income students was in the form of self-help. Lower income students received more self-help aid, but still relied largely on grant aid.

It should be noted that there were more poor people in college in 1981 than in 1974. The enrolled population with family income under \$7,500 increased from 3 percent to 5 percent of the total enrolled population.

The impact of increasing aid on student access is difficult to interpret. Overall participation rates of dependent students dropped between 1969 and 1974. The trend was reversed between

1974 and 1981. Much of the decline from 1969 to 1974 could be attributed to the decline in participation rates of males following the end of the draft. The continuing decline of low income students' participation rate may be attributed to the erosion of awards going to the lowest income population, while awards to every other income group have increased.

Independent student participation rates (aged 18-24) showed a sharp increase between 1969 and 1974. The rates have been relatively stable since then. This is in the face of the fact that a smaller proportion of the population was independent in 1981 than was the case in 1974. It is possible that early student aid programs were important in helping independent students attend college, but we have no data with which to explore this possibility.

Enrollment in college is a complex behavior. It is influenced by shifting cultural values, changes in the labor market, and changes in social policy. Student aid is but one factor among many that influence enrollment behavior.

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INTRODUCTION

The evidence on whether Federal student aid expenditures are meeting the objectives set by Congress is incomplete. Federal aid programs are a commitment to increasing access to postsecondary education and to enhancing student choice by lowering the economic barriers that prevent greater participation.

This study traces changes in students' participation in higher education and in the Federal aid they receive. The purpose of the study is to relate the pattern of Federal student aid disbursements to changes in the enrollment patterns among selected student groups. The Federal aid programs analyzed here are;

- o Pell Grants (Basic Educational Opportunity Grants)
- o Supplementary Educational Opportunity Grants
- o Guaranteed Student Loans
- o National Direct Student Loans
- o College Work-Study

Changes in the patterns of student enrollments in total, by income, dependency status, gender, race and age are related to the distribution of awards made under the Federal aid programs. The sum of student aid awards to individual recipients is used to yield the number of unduplicated award recipients.

The analyses examine participation in postsecondary education for the years 1974 and 1981. Student aid patterns are also examined for 1974 and 1981. The conclusions drawn from the findings are impressionistic. The study uses the best available data to find common patterns in how different groups have changed their participation in postsecondary education and in the disbursement of Federal student aid dollars. The means to prove causal or correlational relationships are not available.

The report is organized in the following manner:

o Introduction

- Issues in Federal Student Aid: a discussion of the effects of inflation on the analysis of student aid; the demographic changes which have occurred during the 1969-1981 period; the changes in college costs.
- Study Approach: an overview of the methodology employed in the analyses.

o Study Findings

- Changes in postsecondary education participation between 1974 and 1981.
- Changes in Federal student aid awards distribution by award size between 1974 and 1981.

o Conclusions

Issues in Federal Student Aid

Federal student aid programs are derived from the assumption that a reduction to students in the cost of attendance would increase the rate at which targeted students participate in postsecondary education, all other things being equal. Thus, the central question is how much Federal aid lower income students receive in relation to higher income students and the relationship of that aid to students' costs. Answering this question must be preceded by the resolution of several issues.

The Effect of Inflation

Whether students are able to attend college depends, in part, on the delicate balance of forces influencing family incomes, student aid availability and attendance costs. Inflation is one of these forces. Therefore, the effectiveness of Federal student aid in meeting its objectives can be measured only after appropriate treatment of inflation in the data. A family whose income increased from \$10,000 in 1974 to \$18,000 in 1981 had, at the end of that period, approximately the same purchasing power as they had in 1974. A student aid award of \$600 in 1974 was more valuable than an award of \$1,000 in 1981.

At the same time that inflation is eroding the value of family incomes and student aid awards, it is increasing the costs of college attendance. Inflation was all too evident in the 1970's, the period when there were large increases in Federal student aid funding.

One approach to the treatment of inflation is that used by Hansen (1982) in his study on the effectiveness of Federal student aid. Hansen divided the population of families with dependents aged 18-24 in 1971/1972 and 1978/1979 into two groups, one above and one below the median income. He then analyzed the proportion of dependents above and below the median income who attended college in each period. He justifies this treatment on the grounds that financial aid eligibility extends approximately up to the median income. He also analyzed his data by race, although it is not clear whether one median income or race-specific median incomes were used as the dividing point for all analyses. The finding of the study was one of "no clearcut effect of student financial aid in causing" the enrollment shifts which would be expected from the application of large sums of aid. Student aid was not analyzed by Hansen.

The study has been criticized by Breneman (1982) and others for the insensitivity of the median split as a treatment for inflation. A special analysis conducted as a step toward the present study suggests that an examination based on a median split of incomes in two periods masks significant shifts which have occurred within the national distribution of incomes.

For the special analysis, the population of families with dependents aged 18-24 in 1972 was divided into ten equal (in number of families) groups. The income levels separating the deciles were identified. These income levels were adjusted for the effect of inflation between 1972 and 1980. Then the corresponding 1980 population was divided according to its reported incomes into the 1972-adjusted decile income categories. The result indicated that 53 percent of the 1980 families fell within the lower half of the inflation-adjusted categories. In comparison to 1972, families in 1980 were more

likely to be found at the lower or upper end of the income distribution than in the middle.

Another way of measuring the effects of inflation is to examine the shares of the aggregate income held by families of different income categories. If the sum of incomes for all families in a particular income category in relation to the sum of incomes in other categories falls between two years, then that group of families' power in the marketplace has been eroded.

Table 1 provides the 1974 and 1980 income shares for families and unrelated individuals by race. The income of unrelated individuals is included because this group represents the subpopulation which includes many independent (from parental support) students. The "Change 74-80" line for each subpopulation indicates the differences in the subpopulations' 1974 and 1980 income shares.

The patterns of income shares are different for families and unrelated individuals: The lower-in-income 40 percent of families had their share of aggregate income reduced between the two years in comparison to higher income families. Non-white families lost more income share than did white families. In contrast, the unrelated group losing the most income share was the highest income group.

Clearly, inflation has had differential effects on different groups in the population. Since student aid is targeted to certain income groups, the effect of inflation entails detailed analyses. Leslie (1977), in his study of the Pell Grant program, adjusted family income for inflation. While perhaps done too soon to be a definitive study of the effectiveness of the Pell Program, the study found a positive relationship between development of this aid program and an increase in the representation of lower income students in postsecondary education. His study covered the years 1972 and 1975.

Table 1

Percent Share of Aggregate Income by Quintiles
Families and Unrelated Individuals
1974 and 1980

	Quintiles				
	Lowest %	Second %	Third %	Fourth %	Highest %
<u>All Families</u>					
1980	5.1	11.6	17.5	24.3	41.6
1974	5.5	12.0	17.5	24.0	41.0
Change 74-80	-0.4	-0.4	0.0	0.3	0.6
<u>White Families</u>					
1980	5.6	11.9	17.6	24.0	40.9
1974	5.8	12.3	17.6	23.8	40.6
Change 74-80	-0.2	-0.4	0.0	0.2	0.3
<u>Non-White Families</u>					
1980	4.1	9.5	16.0	25.2	45.3
1974	4.7	10.0	16.4	25.0	43.9
Change 74-80	-0.6	-0.5	-0.4	-0.8	2.4
<u>All Unrelated Individuals</u>					
1980	4.1	9.2	15.3	24.2	47.3
1974	4.2	8.9	14.6	24.1	48.3
Change 74-80	-0.1*	0.3	0.7	0.1	-1.0
<u>White Unrelated Individuals</u>					
1980	4.3	9.4	15.4	24.2	46.8
1974	4.4	9.0	14.7	23.9	48.1
Change 74-80	-0.1	0.4	-0.7	0.3	-1.3
<u>Non-White Unrelated Individuals</u>					
1980	3.5	8.6	14.3	24.6	49.1
1974	3.7	8.5	14.0	25.2	48.6
Change 74-80	-0.2	0.1	0.3	-0.6	0.5

Source: Current Population Reports, P-60, No. 132

Changes in Enrollment Patterns

In 1981, the college student population was 12.5 million, an increase of 36 percent from 1972. Part-time enrollment is increasingly popular. Part-time enrollments have increased from 3.1 million to 5.2 million students, up by 65 percent from 1972 to 1981. They now represent 41 percent of total headcount enrollment, a rise of 11 percent. (Dearman and Plisko, 1982; American Council on Education, 1981).

Students were older in 1980 than in 1970. The number of students over 35 rose from 824,000 to 1.4 million, an increase of 73 percent during the decade. This group was more likely to attend a postsecondary institution on a part-time basis. In contrast, postsecondary education saw only a 23 percent increase in the enrollments of 18-24 year old students over the same period.

Women were in the majority for all enrollments in 1980. In 1970, women represented only 43 percent of total enrollment. By 1980, they had increased to 51 percent of the total. In 1970, only 409,000 women over 25 were enrolled in institutions of higher education. By 1980, their number had more than doubled-- to 915,000, an increase of 124 percent. The number of 18-24 year old women students increased from 2.5 million to 3.6 million, a 43 percent increase over the decade. Several analysts have concluded that college deferments for draft-age men artificially inflated male enrollment rates from the late 1960's through the mid-1970's, the period in which recent veterans also used their G.I. benefits to attend college (Ed-Khawas and Henderson, 1982).

More blacks are enrolling in higher education. Their greater representation is related to a 55 percent increase in the number of black high school graduates between 1970 and 1980. Black students on campus have increased by 65 percent, up from 1.6 million to 2.5 million.

Standardized test scores have declined. This suggests that the preparedness of students for college has changed (Austin and Garber, 1982). The decline may make it more difficult for

students to stay in school, impeding the Federal aid objective of encouraging persistence in school.

Enrollment patterns as measured by family income and institutional type have also changed in recent year according to Leslie (1977). Between 1969 and 1975, freshmen from families with incomes over \$15,000 (in 1975 constant dollars) increased their share of enrollments by 3.3 percent, to 66.2 percent of the population. Between the same years, both the middle income population, with family income between \$10,000 and \$15,000, and the low income category, below \$10,000, lost representation in postsecondary education, by 1.4 percent and 1.9 percent, respectively.

From 1969, low income students' representation increased by 3.1 percent at two-year colleges, up to 29.3 percent in 1975; middle income representation actually declined four-tenths of a percent in the two-year category for the period, down to 28.8 percent. On the four-year level, low income students increased their representation by 1.9 percent, middle income students were down by one percent, and high income students were down by nine-tenths of a percent, (Leslie, 1977).

Changing Costs of College Attendance

The costs of college attendance lagged somewhat in relation to the inflation rate between 1974 and 1981. National Center for Educational Statistics figures (Grant and Eiden, 1982), adjusted for inflation, indicate that tuition charges for all public schools declined 9.9 percent between the two years. Private school tuition charges increased 2.1 percent.

Changes in Federal Student Aid

This study examines only those Federal student aid programs administered by the Department of Education. Table 2 shows the changes in these programs between 1974 and 1981. The last column in the table expresses the percentage change from 1974 in

Table 2

Federal Appropriations for Five Student
Financial Assistance Programs
(in Millions of Dollars)
1974-1981

Program	1974	1981	% Change in 1981 Dollars
Pell Grants (BEOG)	122.1	2,604.0	1054.0
Supplemental Grants (SEOG)	210.3	370.0	-4.8
Guaranteed Loans (GSL) (Loan Volume)	982.0	7,300.0	302.3
Direct Loans (NDSL) (Federal Share)	298.0	200.0	-63.7
College Work-Study (CWS)	270.0	550.0	10.2

Source: U.S. Department of Education, Annual Evaluation Report
Vol. II, Fiscal Year 1982, Office of Planning, Budget
and Evaluation.

the programs after adjustment for inflation. Appropriations for the Pell Grant program increased by a factor of ten during the period, after adjustment for inflation. The dollar volume of Guaranteed Student Loans (not a Federal appropriation) was three times as large in 1981 as it was in 1974 (also adjusted for inflation). SEOG and NDSL appropriations declined, while there was a modest increase in CWS funding.

In addition to the Department of Education assistance programs, other Federal aid programs for postsecondary education students have undergone considerable change over the period.

The Veterans Administration's estimated expenditures over the period have declined by 11.1 percent from \$1.8 billion dollars in FY 1973 to \$1.6 billion in FY 1981 (Veterans Administration, 1981). The recipient population went from 1,650,000 to 736,000. But, as measured from the peak in FY 1975, when benefits were \$3.2 billion distributed to 1,696,000 students, there has been a 50 percent decline (without adjustments for inflation).

Social Security benefits have also changed in the amount of aid allocated and the number of beneficiaries. In FY 1970, Social Security benefits for postsecondary education amounted to \$393 million and were used by 424,000 students. Benefits (\$856 million) and aided students (611,000) were higher in 1975. By 1981, benefits increased further to \$1,882 million, while the number of aided students declined to 601,000. Expressed in 1981 dollars, the increases in the aid appropriations were 57.2 percent between 1970 and 1975, and 30.2 percent between 1975 and 1981 (Office of the Actuary, 1982).

State aid for need-based undergraduate scholarships also increased over the period. The number of states and territories providing such aid, the amount of dollars allocated (unadjusted for inflation), and the number of students served, all increased.

In 1969-1970, 19 states and territories had need-based programs. They spent \$199.9 million on 470,000 students. By 1974-75, 813,000 students in 37 states and territories were receiving \$440.8 million. Estimates for 1981-82 are that all 57 states and territories had aid programs. They spent \$963.6 million on 1,330,000 recipients (Annual Survey, 1982).

Approach

This study seeks to identify the relationship between participation in postsecondary education and students' receipt of Federal student aid. The relationships discovered are the result of three separate analyses. First, participation in postsecondary education by selected groups was determined for 1974 and 1981. Second, the distribution of student aid awards by size of award for the same groups was also determined for 1974 and 1981. The findings of these analyses are reported in Section II of this paper. Third, the participation rate and student aid findings were compared to determine if similar patterns occurred in both data sets. The result of this analysis is reported in Section III.

Definition of Measures

This study employs data from two data sets: the Current Population Survey (CPS) from the Bureau of the Census for October 1974 and 1981, and the Freshman Norms surveys (CIRP) of the American Council on Education (ACE) and of the Graduate School of Education, University of California at Los Angeles, for 1974 and 1981. The CPS data are used to determine the proportion of the population, in total or by subpopulation, which was attending postsecondary institutions in 1974 and 1981. The CIRP data are used to determine the distribution of selected student aid awards by award size for the student population and for selected subpopulations in 1974 and 1981. Each of the measures used to reflect this data is defined below.

Participation Rate. This is the measure used to assess the proportion of the entire population or of subpopulations who are attending college. It is a ratio where the denominator is the total number of individuals in the population or subpopulation and the numerator is the number of individuals from the population or subpopulation enrolled in postsecondary institutions. For all but one of the participation rate analyses, the population is limited to the college-eligible population. That is,

the denominator of the ratio was defined as those individuals who were civilian, were not institutionalized, had graduated from high school, had not completed college and were not enrolled in graduate school. The exception is the analysis of participation rates by age. In this case, the denominator is the total civilian, non-institutionalized population in the relevant age groups.

The numerator of the participation ratio is the number of individuals (defined by the characteristics mentioned in the specific analyses) attending a postsecondary institution at some point during the school term in which the survey was conducted. Students not planning to attend for the remainder of the term are defined as not enrolled. This definition of enrollment differs from the definition of enrollment used by the National Center for Educational Statistics (NCES) and leads to lower counts of students. The NCES count of enrollment is taken at fall registration, the peak enrollment time.

Distribution of Awards. Data on student aid awards are taken from the CIRP surveys of freshmen, the Freshmen Norms data. The unit of analysis employed in this study is the individual student. Students are first divided into aided and non-aided groups. Aid awards for those who receive awards are aggregated to yield the unduplicated award distribution for the group under study. Thus, the student who receives both a Pell Grant and a Supplementary Education Opportunity Grant is counted as one recipient of grant awards.

Furthermore, that aid is aggregated into the categories "Grant Awards," "Self Help Awards" and "Total Awards." The Grant Awards category reports the number of recipients who received either Pell Grants or Supplementary Educational Opportunity Grants or both. The Self Help Awards category reports the number of recipients who received National Direct Student Loans, Guaranteed Student Loans and/or participated in the College Work-Study program. The Total Awards category represents all five programs.

Study Populations

Income Levels. Student aid disbursements are directed to targeted groups. Lower income groups should receive more aid than higher income groups. Consequently, analysis of student aid must consider the income levels of recipients. All analyses done for this study considered the income dimension. Groups within the general population were divided into nine income categories, from under-\$6,000 to over-\$50,000, to determine college-going participation rates. The analyses of student aid awards consider six levels of income, from under-\$6,000 to \$40,000 and over.

The analyses of income and award size conducted for this study reflect adjustment for the effect of inflation. All dollar figures used in the following analyses are stated in 1981 dollars. The 1974 population was redistributed into 1981 income categories to eliminate the effect of inflation-based bracket creep on participation rate analyses. The distribution of income for student aid recipients in 1974 was similarly adjusted so that family income in 1974 would be comparable to family income in 1981. Student aid awards for 1974 were inflated to 1981 dollars.

The incomes reported from both the CPS and the CIRP data are likely to be understatements of actual incomes. Both surveys employ a single question to determine income. It has been shown that use of a single question to assess income is likely to produce undercounts of income.

Population Characteristics. The majority of the analyses made in this study are based on the dependent population between the ages of 18 and 24. The current analysis employs the following divisions:

- o Total Population

- to show overall trends in college participation and in distribution of student aid awards.

- o Division of Dependency Status

- to differentiate between two economically distinct student groups. Dependent students are students who

have the support of their parents in attending college. Their attendance in college does not reduce family income; their own work may increase family income. In contrast, independent students usually must sacrifice income and lose time available for work, in order to attend school. Independent students are single individuals and married individuals who are no longer supported by their parents. Individuals over 25 years old are assumed to be independent.

o Division by Race

to determine the differential effects attributable to race. The reported data cover only the white and black subpopulations. The data on other groups, for example, oriental, are not reported because of their relatively small numbers in the underlying samples.

o Division by Gender

to capture the effects of the observed increase in women's participation in postsecondary education.

o Division by Age

to reflect the greater participation in postsecondary education of "non-traditional" students, that is students 25 years of age and older. This effect is noted, but the analysis is not pursued for lack of adequate student aid data on the older population.

o Division by Full-time and Part-time Study

to trace the growth of part-time study, an important phenomenon in higher education. Unfortunately, the data to carry out this analysis fully are not available.

Inflation Adjustment Technique

Dollar values used in this study are expressed in 1981 dollars. That is, income and student aid award data for 1974 were inflated to create comparability for the two years. The procedures used to inflate the 1974 income and award values are similar, although not identical.

Income values were adjusted in a three-step procedure. Income is reported in both CPS and CIRP in the form of number of individuals with income falling within income classes. The first step taken, then, was assignment to each unit (family or individual) an income value. This was done through application of established general relationships on the distribution of units within income classes. Thus, the income class \$5,000 - \$9,999 will have more units clustered near the \$9,999 value than near the \$5,000 value. Correspondingly, the \$25,000 - \$49,999 income class is more densely populated at the lower end than at the higher end. Use of the overall distribution of family or individual incomes permits assignment of a specific income value to each unit within an income class.

Once this assignment has been made, the assigned income values are multiplied by the inflation factor to arrive at the 1981-equivalent incomes. Finally, the inflated income values are then used to distribute the units to income classes. In general, this technique--following the overall distribution of incomes in the population--results in more inter-income class movement at lower income levels than at higher income levels.

The three-step procedure was also used to redistribute student aid award values. However, in the case of the awards data, all awards within an award class were assigned the value of the mid-point of the class. All awards over \$2,000 (the highest class) were assigned the value of \$2,500. The overall distribution of awards is an unknown, making impossible use of a more discriminating assignment procedure. The error introduced by this procedure is minimized through the application of the three-step procedure to each award separately before awards are aggregated to avoid double counting of aid recipients.

Limitations on the Data

The data are limited because of the means by which they were collected. Both sources of data are surveys. The methodologies used by both Census and ACE in expanding their survey results to national totals have implications for the

reliability of the resulting estimates. In general, more aggregated levels of the data are more reliable than the more disaggregated data. Readers are referred to the source reports listed in the Bibliography for further information.

A change between 1974 and 1981 in how the dependency status of students was assessed in CIRP poses a second difficulty. In 1974, students were asked only one question to determine dependency. More than a quarter of all students indicated they were independent of parental support in 1974. The 1981 questionnaire had three questions, all of which had to be answered in the affirmative for assignment to independent status. Only seven percent of the 1981 population was assigned to the independent status category. This definitional change renders meaningless any comparisons of the distributions of student aid for independent students in the two years. Only the 1981 data are reliable.

FINDINGS

This section reports the findings of this study. The results obtained from the analysis of participation rates, the CPS data, are reported first. Then the findings on the distribution of student aid from the CIRP data are reported.

Participation Rates

The participation rate for the college-eligible population aged 18-24 increased from 26.4 percent in 1974 to 28 percent in 1981. This increase was not evenly experienced by the different subsets of the population. The different results are reported in Table 3.

It is evident from these results that female students increased participation the most, while participation by black and independent students increased slightly. Male participation declined somewhat.

Participation by Income

Because the income characteristics of dependent and independent students are dissimilar, it is not appropriate to consider them together in determining participation rates. Dependent students are assigned to the income category of their parents. Independent students are assigned to an income category on the basis of their personal income. This assignment practice tends to cluster the independent students in the lower income categories. This is not surprising since 18-24 year old students generally have smaller incomes than parents of dependent 18-24 year old students.

Family income is not reduced by the enrollment of a dependent in college. However, independent students may have to reduce their income in order to attend college. Both full-time employment and full-time attendance at college would be required of independent students for meaningful comparisons by income category with dependent students.

Table 3

College-going Participation Rates
1974, 1981

College-going Population	1974	1981	% Change
All Students	26.4	28.0	+6.1
All Dependent Students	41.3	41.0	-0.7
All Independent Students	10.4	10.4	+1.0
All White Students	26.3	28.2	+7.2
All Black Students	23.2	23.7	+2.2
All Male Students	30.2	29.9	-1.0
All Female Students	23.0	26.3	+14.8

Source: CPS, 1974, 1981.

Participation rates of dependent and independent students aged 18-24 differ sharply (Table 4). A dependent student was roughly four times as likely to go to college as an independent student in 1974 and 1981. Overall, the participation rates of the two groups was virtually unchanged.

There are differences in participation rates among the dependent students by income categories. There was a decline among students in the income group \$0 - \$7,500, while there was an increase for almost all the other income categories. The only exception was the small decline noted for the income group \$12,500-\$15,000. Generally speaking, the group with the largest financial need and the lowest participation rates experienced the greatest decline.

Interpreting participation rates for independent students by income category can be misleading. The number of cases in each category is somewhat smaller for independent students than for dependent students and, therefore, more apt to reflect variation due to sampling error. The large number of students in the lowest income category reflects the large number of students who gave up their income to go to college.

Participation Rates of Dependents by Race

The overall participation rates for dependent blacks has declined since 1974 and increased slightly for whites. The largest decline for blacks was in the income categories under \$12,000. This is also the group with the largest proportional increases for whites.

Blacks in the income group \$12,000-\$25,000 were at least as likely as whites in the same income groups to go to college. Blacks in these categories showed the strongest gains in participation. In the higher income groups, blacks again showed a decline relative to whites. (The highest income group has relatively few blacks and thus is more sensitive to sampling error.) Overall, blacks lost ground to whites as measured by participation rates. This was especially true for the lowest income groups. Changes in the participation rates for blacks

Table 4

Participation Rates of Dependent and Independent Students
by Income
1974, 1981

Income Category	Dependent Students			Independent Students		
	1974	1981	% Change	1974	1981	% Change
0 - 6.0	27.3	24.4	-10.6	32.1	26.9	-16.2
6.0 - 7.5	30.7	26.5	-13.7	22.5	12.0	-46.7
7.5 - 10.0	30.2	35.2	+16.6	13.5	9.1	-32.6
10.0 - 12.5	29.7	33.5	+12.8	9.3	5.4	-40.9
12.5 - 15.0	31.1	29.9	-3.5	6.3	6.8	+6.3
15.0 - 20.0	33.3	34.1	+2.4	4.4	6.8	+54.5
20.0 - 25.0	36.2	38.2	+5.5	4.0	2.9	-27.5
25.0 - 50.0	43.5	44.6	+2.5	3.9	4.3	+7.7
50.0 +	61.9	63.0	+1.8	14.9	1.6	-89.3
Undefined	43.2	45.8	+6.3	15.8	8.7	-44.9
Total	41.3	41.0	-0.7	10.4	10.4	+1.0

Source: CPS, 1974, 1981.

and white students were very dissimilar by income category. Table 5 presents data for dependent students by race.

Table 6 shows the changes in participation rates for independent students by race. Independent whites remained about the same over the period, while black independent students showed an increase. Independent blacks are slightly more likely to go to college than whites.

Participation by Gender

In both 1974 and 1981, participation rates for dependent women exceeded those for dependent men, except in the lowest income category. Male participation rates declined over the period, while those for women increased.

Participation rates for men dropped in every income category except one since 1974. The biggest losses were in the lowest income groups. Table 7 details the differences in participation rates for males and females between the two years.

The changes in participation rates for independent males and females are similar to those for dependents. Men's rates declined, while women's increased. It should be noted that independent males were still twice as likely to attend college in 1981 than were independent females, although women in this age group are twice as likely to be defined as independent than men. Table 8 contains the participation rates by gender for independent students.

Participation Rates for Public and Private Institutions

Public colleges showed a decline in participation rates, while private colleges had an increase between 1974 and 1981. The decline in participation in public colleges was greatest for the low income population.

The magnitude of change in the private sector by income categories should be interpreted carefully because of the relatively small percentages participating in the low income groups. Low income students are not very likely to go to a private college. For example, in 1981 for every 100 individuals

Table 5

Participation Rates of Dependents by Race
by Income
1974, 1981

Income Category	White			Black		
	1974	1981	% Change	1974	1981	% Change
0 - 6.0	22.1	28.0	+26.7	30.7	21.2	-30.9
6.0 - 7.5	23.0	30.9	+33.4	42.5	20.3	-52.2
7.5 - 10.0	26.0	35.9	+38.1	36.0	31.9	-11.4
10.0 - 12.0	26.7	35.7	+33.3	32.3	23.4	-27.6
12.0 - 15.0	28.9	27.8	-3.8	32.9	35.4	+7.6
15.0 - 20.0	31.7	32.9	+3.8	33.3	35.5	+6.6
20.0 - 25.0	36.8	37.7	+2.7	29.8	37.1	+24.5
25.0 - 50.0	43.6	45.0	+3.2	38.9	38.3	-0.3
50.0 +	61.7	63.6	+3.1	56.3	33.3	-40.9
Undefined	44.9	48.8	+8.7	17.5	26.3	+50.3
Total	41.8	42.5	+1.7	33.3	29.9	-10.2

Source: CPS, 1974, 1981.

Table 6

Participation Rates by Race
for Independent Students
1974, 1981

Race	1974	1981	% Change
White	10.2	10.1	-0.10
Black	9.0	10.7	+20.00

Source: CPS, 1974, 1981.

Table 7

Participation Rates of Dependent Males and Females
by Income
1974, 1981

Income Category	Males			Females		
	1974	1981	% Change	1974	1981	% Change
0 - 6.0	27.9	24.8	-11.1	26.9	24.1	-10.0
6.0 - 7.5	36.7	22.5	-39.0	25.2	30.6	+2.14
7.5 - 10.0	32.7	28.8	-11.9	27.4	40.3	+47.4
10.0 - 12.0	28.4	28.3	-0.4	31.1	38.3	+22.8
12.0 - 15.0	29.8	28.2	-5.0	32.6	31.8	-2.5
15.0 - 20.0	31.6	31.6	0.0	35.4	36.7	+4.0
20.0 - 25.0	33.9	36.0	+6.2	39.1	40.7	+4.1
25.0 - 50.0	42.5	41.9	-1.4	44.7	47.8	+7.2
50.0 +	60.9	57.3	-5.9	63.0	70.1	+11.3
Undefined	43.3	46.8	+8.3	43.1	44.8	+3.9
Total	40.6	38.6	-4.9	42.1	43.6	+3.6

Source: QPS, 1974, 1981.



Table 8

Participation Rates by Gender
Independent Students
1974, 1981

Gender	1974	1981	% Change
Females	7.3	7.8	+6.8
Males	15.0	14.4	-4.7

Source: CPS, 1974, 1981.

in the income group, 0-\$6,000, 21.7 attended a public college and 2.7 attended a private college. It is only in the highest income categories that the participation of students in private colleges begins to approximate that of the public sector. It should also be kept in mind that private college enrollments are significantly smaller than public enrollments in absolute terms. Table 9 contains information on participation rates for dependent students in public and private schools.

Table 10 indicates that independent students increased participation in private institutions, while dropping slightly in public schools over the period. Independent students were still more likely to attend a public college rather than a private college.

Participation of Older Students

The enrollment of older students in college increased considerably between 1974 and 1981. In 1981, adults aged 25 and over represented 27.8 percent of total college enrollment. The total number of enrolled adults aged 25 and over for 1974 is unknown, since adults aged 35 and over were not counted then as enrolled by the Bureau of the Census.

Table 11 summarizes the demographic shift which has occurred in the college-going population as well as in the population at large. The population figures for 1974 and 1981 reported here are for the total civilian, non-institutionalized population. These figures are higher than those reported on other tables because the college-going participation rate analyses for ages 18 to 24, above, use only the computed college-eligible population as the basis for analysis.

The college-going participation rates shown in Table 11 reveal the change which has taken place in the composition of

Table 9

Participation Rates of Dependent Students
at Public and Private Institutions
by Income
1974, 1981

Income Category	Public			Private		
	1974	1981	% Change	1974	1981	% Change
0 - 6.0	25.5	21.7	-14.9	1.8	2.7	+55.6
6.0 - 7.5	24.1	21.7	-10.0	6.6	4.9	-27.3
7.5 - 10.0	26.1	25.8	-1.1	4.1	9.4	+129.3
10.0 - 12.0	25.9	25.4	-2.3	3.7	8.1	+118.9
12.0 - 15.0	25.4	25.0	-1.6	5.6	4.9	-12.5
15.0 - 20.0	24.1	26.0	+7.5	9.1	8.2	-11.0
20.0 - 25.0	28.0	29.5	+5.4	8.2	8.7	+6.1
25.0 - 50.0	32.9	32.2	-2.1	10.6	12.4	+17.9
50.0 +	41.3	38.9	-5.8	20.6	24.1	+17.0
Undefined	31.8	35.8	+12.3	11.3	10.1	-11.5
Total	31.0	30.1	-2.9	10.3	10.9	+5.8

Source: CPS, 1974, 1981.

Table 10

Participation Rates of Independent Students
by Public and Private Sector
1974, 1981

	1974	1981	% Change
Public	8.8	8.1	-8.0
Private	1.6	2.4	+50.0

Source: CPS, 1974, 1981.

Table 11
 Demographic Summary
 Participation Rates for the Civilian Non-institutionalized Population by Age
 1974, 1981

Age	<u>Population (x1000)</u>			<u>College Enrolled Population (x1000)</u>			<u>Participation Rates</u>		
	1974	1981	% Change	1974	1981	% Change	1974	1981	% Change
18 - 24	25,662	28,964	+12.87	5,756	6,837	+18.78	22.43	23.91	+6.6
25 - 29	15,899	19,780	+24.41	849	987	+16.25	5.34	4.99	-6.5
30 - 34	13,314	18,265	+37.19	423	741	+75.18	3.18	4.06	+27.6
Total 18+	141,080	162,830	+15.42	7,028	9,471	+34.76	4.98	5.82	+16.8

Source: CPS, 1974, 1981.

Note : 1974 enrollment total does not include enrollments of students aged 35 and over.

college enrollments. The participation rate for the "traditional" college-age group (aged 18-24) increased 6.6 percent between 1974 and 1981. The enrollment of persons aged 18-24 has grown less rapidly than the increase in the population.

The probability that an adult aged 25 or more would attend college was greater in 1981 than it was in 1974, even though there has been a dip for the 25-29 group. For example, the population aged 30 to 34 increased 37.2 percent during this period. The enrollment of this group, however, increased 75.2 percent. These two factors result in an increase in the participation rate for the group of 27.7 percent.

The college-going participation rate for the entire population over 18 years has increased. The available data indicate that increase to be 16.9 percent. This figure is undoubtedly an overstatement, because of the unreported 1974 enrollments. However, any reasonable imputation of the missing 1974 enrollment figures would still show a positive overall change in participation rates.

The change in the relationship between age and college participation rates implies that a student's age is less and less a predictor of college enrollment.

Student Financial Assistance

This section looks only at awards received by students from the Department of Education in 1974 and 1981. The aid programs are: College Work-Study (CWS), Pell Grant (BEOG), Guaranteed Student Loan (GSL), National Direct Student Loan (NDSL), and Supplementary Education Opportunity Grants (SEOG). The aid is reported by total and divided into Grant Awards (SEOG and BEOG), and Self-Help Awards (NDSL, GSL, and CWS). All 1974 dollars have been corrected for inflation to 1981 dollars; thus, award and income distributions are comparable for the two years.

Total Student Aid Awards

As shown by Table 12, the biggest growth in the percentage of students aided between 1974 and 1981 was in the higher income levels. Among lower income students, there was either a decline in the percentage of students aided or a smaller increase than that for the higher income students.

Lower income students were more likely to receive a smaller award from all sources combined in 1981 than they were in 1974 (Table 13.) They also were more likely to receive an award of less than \$1,000 in 1981 than was the case in 1974. Higher-income students in 1981 were more likely to receive a total award exceeding \$1,000 than they were in 1974. Note that in 1981, the over \$40,000 family income group which received aid was likely to receive an award between \$2,000 and \$3,000 in 56.9 percent of the cases.

Table 14 reviews the distribution of grant aid by income groups. Grant aid is comprised of BEOG and SEOG funds. The percentage of the population receiving this aid increased from 19.4 percent to 27.3 percent between 1974 and 1981. There was an increase in the proportion of students receiving grant aid in all categories except the lowest-income category (\$0-\$5,999), where there was a decrease of 9.3 percent in the number of grant awards. All recipients were more likely to receive a smaller award in 1981 than in 1974 (Table 15).

Table 12

Percent Aided by Income: Total Award
1974, 1981

Income Category	1974	1981	% Change
\$ 0 - 6	69.8	67.30	-3.6
6.0 - 12.5	49.13	65.47	+33.3
12.5 - 20.0	42.34	58.05	+37.1
20.0 - 30.0	32.17	50.77	+57.8
30.0 - 40.0	22.73	42.77	+88.0
40.0+	10.24	31.53	+207.9
Independent	33.83	54.17	+60.1
No Reply	13.51	30.91	+123.5
Total	28.21	47.24	+67.5

Source: Freshman Norms: 1974, 1981.

Table 13

Distribution of Total Award by Income and Size
1974, 1981

Income Category	Year	Award Size					Total
		\$1-999	1,000-1,999	2,000-2,999	3,000-4,999	5,000 Plus	
\$ 0-5,999	1981	30.8	30.7	17.9	17.9	2.7	100.0
	1974	18.1	35.4	19.9	17.3	9.3	100.0
6,000-12,499	1981	29.7	28.2	19.0	20.4	2.8	100.0
	1974	26.2	31.4	19.2	16.5	6.7	100.0
12,500-19,999	1981	28.4	25.4	23.9	19.8	2.5	100.0
	1974	30.2	29.4	18.8	16.1	5.6	100.0
20,000-29,999	1981	23.5	24.9	33.4	16.2	1.9	100.0
	1974	30.2	27.1	19.5	17.5	5.8	100.0
30,000-39,999	1981	17.4	24.6	44.8	11.7	1.5	100.0
	1974	29.2	24.4	20.6	19.8	6.1	100.0
40,000 Plus	1981	12.8	22.0	56.9	7.3	1.0	100.0
	1974	28.2	21.6	19.8	22.9	7.5	100.0
Independent	1981	28.2	26.8	24.2	18.3	2.4	100.0
	1974	26.2	29.6	18.6	17.6	8.1	100.0
No Reply	1981	26.1	25.7	34.4	12.3	1.5	100.0
	1974	28.1	29.8	19.1	16.9	6.1	100.0
Total	1981	24.1	25.6	32.5	15.7	2.0	100.0
	1974	27.7	28.5	19.2	17.7	6.8	100.0

Source: Freshman Norms: 1974, 1981.

Table 14 •

Percent Aided by Income: Grant Awards
1974, 1981

<u>Income Category</u>	<u>1974</u>	<u>1981</u>	<u>% Change</u>
\$ 0 - 5,999	66.79	60.57	-9.31
6,000 - 12,499	40.20	56.11	+39.58
12,500 - 19,999	31.68	43.24	+36.49
20,000 - 29,999	19.79	26.34	+33.10
30,000 - 39,999	10.35	12.96	+25.22
40,000 Plus	4.97	5.57	+12.07
Independent	25.20	41.40	+64.29
No Reply	8.90	15.80	+77.52
Total	19.41	27.25	+40.39

Source: Freshman Norms: 1974, 1981.

Table 15

Distribution of Grant Awards by Income and Size
1974, 1981

Income Category	Year	Award Size					Total
		\$1-999	1,000-1,999	2,000-2,999	3,000-4,999	5,000 Plus	
0-	1981	43.57	40.23	10.40	5.79	0.00	100.0
5,999	1974	21.36	42.77	19.87	12.66	3.33	100.0
6,000-	1981	47.94	38.96	8.89	4.21	0.00	100.0
12,499	1974	37.05	37.42	15.25	8.24	2.04	100.0
12,500-	1981	59.30	31.30	6.50	2.89	0.00	100.0
19,999	1974	46.12	34.12	12.56	5.74	1.39	100.0
20,000-	1981	68.67	23.89	5.77	1.67	0.00	100.0
29,999	1974	50.63	30.22	11.52	6.01	1.62	100.0
30,000-	1981	65.30	24.29	8.79	1.62	0.00	100.0
39,999	1974	57.73	22.49	9.84	7.50	2.44	100.0
40,000	1981	58.09	26.80	12.77	2.34	0.00	100.0
Plus	1974	50.10	22.74	10.46	10.26	6.44	100.0
Inde- pendent	1981	50.89	37.54	7.85	3.72	0.00	100.0
	1974	37.42	35.71	14.37	9.25	3.25	100.0
No Reply	1981	57.28	30.76	8.67	3.29	0.00	100.0
	1974	41.63	33.22	14.03	8.42	2.69	100.0
Total	1981	56.70	32.22	7.89	3.19	0.00	100.0
	1974	42.09	33.64	13.60	8.09	2.58	100.0

Source: Freshman Norms: 1974, 1981.

The largest increases in student aid have come in the form of self-help, that is, loans and work programs (Table 16). There is a subsidy associated with loan programs because students receive an interest rate less than that available on the market. It is evident from Table 16 that all income groups were using more self-help in 1981 than in 1974. The increase has been particularly sharp at the higher income groups.

The probability that a student received a self-help award of \$2,000 to \$2,999 increased, in general, as the family income of the student increased (Table 17). This award size category is the only instance in which the probability of receiving aid increases as income increases. The phenomenon is evident in both 1974 and 1981, but is most pronounced in the 1981 data. It reflects the utilization of guaranteed student loans by higher income students. Note that 62.4 percent of students in the \$40,000 and over income category who received self-help awards fall in this award size category.

The utilization of guaranteed student loans is not as pronounced among lower income students. Almost three quarters of the students in the lowest income category received less than \$2,000 in self-help awards.

Student Aid by Race

In general, black students were more likely than whites to receive aid in all income categories in 1981 (Table 18). However, the proportion of whites aided has increased more than the proportion of blacks aided between 1974 and 1981. The lowest white income population group showed a loss in the proportion of students aided. Blacks in the same income category showed an increase of only 5.1 percent in the proportion of students aided.

White and black students had their award size affected differently between 1974 and 1981. White students were more likely to have a small award, that is, under \$1,000, in 1974, while black students were more likely to have a small award in 1981. Awards for whites grew significantly in the \$2,000-\$2,999

Table 16

Percent Aided by Income: Self-Help Award
1974, 1981

<u>Income Category</u>	<u>1974</u>	<u>1981</u>	<u>% Change</u>
\$ 0 - 6.0	23.56	35.34	+50.0
6.0 - 12.5	23.08	39.43	+70.8
12.5 - 20.0	23.09	41.29	+78.8
20.0 - 30.0	20.03	41.52	+107.3
30.0 - 40.0	16.09	37.85	+135.2
40.0 +	6.55	28.78	+339.4
Independent	17.26	33.47	+93.9
No Reply	7.13	22.93	+221.6
Total	15.62	35.44	+126.9

Source: Freshman Norms: 1974, 1981.

Table 17

Distribution of Self-Help Awards by Income and Size
1974, 1981

Income Category	Year	Award Size					Total
		1-999	1,000-1,999	2,000-2,999	3,000-4,999	5,000 Plus	
0-5,999	1981	45.32	28.09	19.46	6.53	0.59	100.0
	1974	45.71	29.74	12.57	7.31	4.67	100.0
6,000-12,499	1981	37.01	31.00	24.00	7.48	0.51	100.0
	1974	34.66	34.01	17.94	10.96	2.43	100.0
12,500-19,999	1981	28.72	29.43	32.04	9.37	0.44	100.0
	1974	31.42	34.90	19.27	12.28	2.13	100.0
20,000-29,999	1981	20.30	27.96	41.15	10.07	0.53	100.0
	1974	26.25	31.84	22.31	17.02	2.59	100.0
30,000-39,999	1981	14.51	26.48	50.63	7.85	0.53	100.0
	1974	21.24	28.76	25.79	22.57	1.64	100.0
40,000 Plus	1981	9.45	22.83	62.44	4.79	0.49	100.0
	1974	16.67	23.03	25.15	27.58	7.58	100.0
Independent	1981	26.99	27.11	38.11	7.14	0.66	100.0
	1974	30.13	30.94	19.76	15.41	3.77	100.0
No Reply	1981	22.82	26.66	44.20	5.85	0.48	100.0
	1974	25.39	30.72	22.16	17.67	4.07	100.0
Total	1981	22.74	27.39	41.44	7.90	0.54	100.0
	1974	27.91	31.05	21.13	16.58	3.33	100.0

Source: Freshman Norms: 1974, 1981.

Table 18

Percent of White and Black Students Aided by Income
1974, 1981

Income Category	White			Black		
	1974	1981	% Change	1974	1981	% Change
\$ 0 - 6.0	81.68	65.04	-20.4	69.04	72.61	+5.17
6.0 - 12.5	44.72	64.01	+3.1	65.86	72.67	+10.34
12.5 - 20.0	39.86	57.04	+43.1	61.83	68.16	+10.24
20.0 - 30.0	30.61	50.39	+64.6	54.47	59.27	+8.81
30.0 - 40.0	22.35	42.75	+91.3	36.04	49.25	+36.65
40.0 +	9.77	31.42	+221.6	24.86	35.10	+41.19
Independent	29.46	52.44	+78.0	52.42	64.67	+23.37
No Reply	12.27	30.55	+149.0	32.28	42.13	+30.51
Total	24.97	45.75	+83.2	54.25	62.45	+15.12

Source: Freshman Norms: 1974, 1981.

category, as compared to blacks, whose award size remained about the same in the two years (Table 19).

Student Aid by Gender

In 1974, men and women were about equally likely to receive aid (Table 20). In 1981, 48.6 percent of the women received aid compared to 45.7 percent of the men. Women gained slightly in the probability of receiving aid in relation to men. Overall, the changes in the proportion of both men and women who received aid were greater as family income increased. At the \$40,000 and higher income level, the probability of receiving an award was approximately three times greater in 1981 than it was in 1974.

There was no appreciable difference in award size between the sexes in either 1974 or 1981. Similarly, there was little difference between men and women in either year in the mix of grant aid and self-help. Women have gained slightly in both categories in comparison with men.

Student Aid by Institutional Type and Control

The proportion of students receiving aid was higher for those in private colleges than those in public colleges in 1974 (Table 21). That continued to be the case in 1981. But the greatest percentage increase was for students in two-year public institutions, followed closely by four-year private colleges.

The largest increase in the utilization of self-help aid has been in two-year public colleges, followed closely by self-help increases in four-year private colleges. Table 22 details the changes in types of assistance by institutional type and control between 1974 and 1981. Two-year public college students and four-year private college students report the largest increases in self-help utilization while four-year public students report the largest increase in grant aid.

Table 19

Distribution of Total Awards to White and Black Students
by Award Size
1974, 1981

Award Size Category	<u>White</u>			<u>Black</u>		
	<u>1974</u>	<u>1981</u>	<u>% Change</u>	<u>1974</u>	<u>1981</u>	<u>% Change</u>
\$ 1 - 999	29.4	23.02	-21.70	21.18	29.84	+40.89
1,000 - 1,999	24.77	27.33	+10.34	32.17	30.18	-6.19
2,000 - 2,999	19.62	35.24	+79.61	18.93	19.23	+1.58
3,000 - 4,999	15.17	17.98	+18.52	18.34	17.26	-5.89
5,000 +	5.93	1.79	-69.81	9.38	2.85	-69.62

Source: Freshman Norms: 1974, 1981.

Table 20

Percent of Men and Women Students Aided by Income: Total Award
1974, 1981

Income Category	Men			Women		
	1974	1981	% Change	1974	1981	% Change
\$ 0 - 6.0	70.41	62.88	-10.69	69.32	70.21	+12.8
6.0 - 12.5	48.99	64.25	+31.15	49.27	66.48	+34.9
12.5 - 20.0	42.34	56.87	+34.32	42.35	59.16	+39.7
20.0 - 30.0	32.53	49.41	+51.89	31.72	52.24	+64.7
30.0 - 40.0	23.82	42.30	+77.58	21.28	43.23	+103.1
40.0 +	10.91	31.01	+184.23	9.42	32.12	+241.0
Independent	32.13	51.68	+60.85	36.11	56.26	+55.8
No Reply	12.22	28.08	+129.79	14.27	32.69	+129.1
Total	28.24	45.74	+61.97	28.16	48.64	+72.7

Source: Freshman Norms: 1974, 1981.

Table 21

Percent of Students Aided by
Institutional Type and Control
1974, 1981

<u>Institutional Type and Control</u>	<u>1974</u>	<u>1981</u>	<u>% Change</u>
2 Year Public	23.58	44.31	+87.9
2 Year Private	40.73	57.21	+40.5
4 Year Public	25.48	42.62	+67.3
4 Year Private	33.24	60.34	+81.5

Source: Freshman Norms: 1974, 1981

Table 22

Distribution of Student Aid by Institutional Type and Control
1974, 1981

<u>Institution Type & Control Type of Award</u>	<u>1974</u>	<u>1981</u>	<u>% Change</u>
2 Year Private:			
Grant	30.26	39.24	+29.7
Self help	22.31	41.49	+85.9
4 Year Private:			
Grant	22.93	32.5	+41.7
Self help	19.17	52.05	+171.5
2 Year Public:			
Grant	18.2	27.24	+49.6
Self help	9.60	29.78	210.2
4 Year Public:			
Grant	14.69	24.01	+63.4
Self help	17.49	31.46	+79.9

Source: Freshman Norms: 1974, 1981.

CONCLUSIONS

Our results suggest certain relationships between student aid and participation rates which may be useful in guiding further investigations. Our information is descriptive. We cannot prove that there is a necessary causal relationship between student financial assistance and participation rates.

The major findings on changing participation rates between 1974 and 1981 are:

- o Participation rates for all students 18-24 were up. The participation rates for older students were up even more.
- o Participation rates for dependent students in the lowest income categories (under \$7,500) fell more sharply than and other income group.
- o The participation rates for dependent students aged 18-24 held steady as did the participation rates for independent students in the same age group.
- o Participation of white students was up more than the participation of blacks, which still showed a modest improvement.
- o The participation rate for women was up while that for men was roughly the same as it was in 1974.

The results on the utilization of Federal student assistance indicate the following changes:

- o The probability of the lowest income students receiving an award did not change appreciably since 1974. But higher income groups showed an increase in their probability of receiving an award. The higher the income, the greater the increase in probability.
- o Low income students were more likely to receive a smaller award in 1981 than they were in 1974. Students in the \$12,500 and above income categories were more likely to receive a larger award in 1981 than they were in 1974.
- o The proportion of students receiving a grant increased by 40 percent between 1974 and 1981, while the increase for self-help awards was up 126 percent.
- o White students increased in the proportion aided at a rate 5.5 times the increase for blacks. But

blacks were still more likely to receive an award in 1981.

- o Blacks were more likely to receive a small award in 1981 than they were in 1974; whites were more likely to receive a larger award in 1981 than they did in 1974.
- o Men and women had the same shares of student aid in 1974. Women increased their share slightly relative to men in 1981.
- o Two-year public college students increased in the proportion aided more than any other sector. They were closely followed by students in the four-year private sector. Students in the private sector were still more likely to receive assistance in 1981 than were public college students.

Student Access

The strongest relationship in the data we have studied is the decline in college-going participation and in the number and size of student aid awards among lower income dependent students aged 18-24 between 1974 and 1981. This relationship is consistent with the fact that lower income families lost purchasing power in relation to higher income families. Both income categories and aid awards have been adjusted for inflation.

The complementary finding to this decrease in aid to lower income students is the increase in aid received by higher income students. Once again, this finding is consistent with the fact that, in general, the higher income groups sustained their participation rates somewhat better than did the lower income groups.

In suggesting these relationships between aid and participation rates, it is important to remember that the lowest income students were still more likely to receive aid than other income groups, but that the gap narrowed between 1974 and 1981. A large part of the increase in aid for middle and upper income students was in the form of self-help. Lower income students received more self-help aid, but still relied largely on grant aid. It should be noted that there were more poor people in college in 1981 than in 1974. The enrolled population with

family income under \$7,500 increased from 3 percent to 5 percent of the total enrolled population.

The evidence indicates that the bulk of the decline among low income dependent students was due to reductions in the participation rates of blacks. Low income whites increased their participation rates over the period.

In 1974, blacks were more likely than whites to go to college in all income categories up to \$20,000. In 1981, there was a change. Blacks were less likely than whites to go to college if their income was under \$12,000. Blacks still showed a higher probability of attending college in the income categories \$12,000 to \$20,000. The rates for the \$20,000-25,000 category were almost even. In the higher-income groups blacks were less likely than whites to go to college.

The differences between the two racial groups continue for independent students. Independent blacks increased their participation rates while whites held steady. It is worth noting that whites were more likely to be independent than blacks.

These differences in participation rates may be looked at in another way that is not reported in the findings, but is available from the data bases. Blacks made up 55 percent of the enrolled population with a family income under \$7,500 in 1974. That share dropped to just over 39 percent in 1981.

These enrollment changes occurred during a time when poor blacks were growing as a portion of the population. The black population 18 to 24 years of age has grown by 24 percent since 1974 while the growth of the white population has been eight percent. Blacks were much more likely to be poor. They made up over 44 percent of the population under \$7,500 in 1974 and over 47 percent in 1981.

The conflicting results for the black and white, low income groups are not easily explained by analysis of the student aid data. Blacks were more likely to receive aid in 1981 than were whites but the rate of increase in participation in aid programs was greater for whites than blacks. The size of the award

received by blacks has been eroded more by inflation than for whites. Blacks were more likely to receive a smaller award than whites in 1981. This is a reversal of the 1974 situation in which blacks were more likely to receive a larger award.

The impact of increasing aid on student access is difficult to interpret. Participation rates of dependent students dropped over all between 1969 and 1974. That trend was reversed between 1974 and 1981. Much of the decline from 1969 to 1974 could be attributed to the decline in participation rates of males following the end of the draft. The continuing decline of low income students participation rate may be attributed to the erosion of awards going to the lowest income population while awards to every other income group have increased.

Independent student participation rates (age 18-24) showed a sharp increase between 1969 and 1974. The rates have been relatively stable since then. This is in the face of the fact that a smaller proportion of the population is independent in 1981 than was the case in 1974. It is possible that early student aid programs were important in helping independent students attend college, but we have no data with which to explore this possibility.

Student Choice

Does student aid affect college choice? Possibly. The relationship between the patterns of enrollment in public and private institutions and the changing availability of aid reported in the data suggests that aid influences choice. There appears to have been a reduction in the participation of low income students in public colleges relative to private institutions. Independent students have also increased their participation rates at private colleges compared to public institutions. Independent students were still more likely to attend a public college in 1981, however.

Roughly 60 percent of the students in private colleges report receiving some form of federal aid in 1981 compared to 43 percent in public colleges. The increases in aid were greatest

in two-year public and four-year private schools. Self help aid is reported by one-half the students in private schools and 30 percent of the those in public.

The increase in participation rates for private institutions is a reversal of a 1969 to 1974 trend in declining participation rates in private sector institutions which exceeded the drop in public colleges. Thus, the 1974-1981 data suggest that there was a reversal of an existing trend, as aid to middle and higher income groups increased.

Final Comments

Enrollment in college is complex behavior. It is influenced by shifting cultural values, changes in the labor market, and changes in social policy. Student aid is but one factor among many that influence enrollment behavior. Three notable influences on enrollment which are not fully reflected in our analysis are:

- o The increasing participation by women in postsecondary education. It does not appear that student aid is directly related to this increase.
- o The age of the student population. The traditional consumer of postsecondary education, aged 18-24, was likely to be joined in class by an increasing number of older individuals in 1981. The growing propensity for part-time enrollment appears to be related to the changing age mix on campus. These phenomena represent a major change for postsecondary education. However, data on the age phenomenon are sparse. It is unlikely that student aid practices are primarily responsible for the changes, although the availability of student aid may have made a difference in making attendance possible.
- o Changing economic conditions. The relationship between college enrollment, foregone income and expected returns to education are not fully understood although there is some relationship. Both our years reflect different periods of economic activity--1974 was a recession year and 1981 was the end of a period of inflationary growth and the beginning of another recession.

Technical limitations on this study restrict us from drawing definitive conclusions from the data available to us. These limitations include differences in definition of income

categories between the two major data sources. The participation rate and student aid analyses are based on overlapping income categories. This lessens the precision of possible conclusions. All the data is based on self-reported data which is known for imprecision regarding financial status. Finally, the information is based on a sample which is liable to sampling error in reported values.

These limitations on our data--the presence of major changes on campus not related to student aid, and technical problems--force us to state our conclusions in comparative terms. Because the college enrollment decision is such a complex process, different results may be realized if different comparison years were used. Shifts in participation rates may take place over long periods of time. They reflect changes in attitudes and expectations, economic and labor market conditions, and family structure. The understanding of participation rates using just one variable is difficult.

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Fiscal 1983: Budget Targets Now Binding

With the beginning of the fiscal year Oct. 1, the preliminary budget targets set by Congress last June became binding limits on fiscal 1983 spending decisions.

Lawmakers included in the first resolution (S Con Res 92), cleared June 23, a provision stipulating that the budget guidelines set in that measure automatically would become binding if Congress did not approve a second resolution by the Oct. 1 beginning of the fiscal year. They thus bypassed provisions of the Congressional Budget Act of 1974 (PL 93-344) that mandated approval of a second resolution by Sept. 15:

Beset by election-year pressures stemming from a lingering recession and soaring federal deficits, members decided not to undertake a second resolution during this session. Although the validity of the figures in the first resolution was widely questioned, the House and Senate Budget committees put off until the 98th Congress any effort to revise or update them. (*Action on S Con Res 92, Weekly Report p. 1508*)

Binding Budget Levels. Pending adoption of a revised resolution, congressional spending decisions for fiscal 1983 will be governed by provisions of S Con Res 92 that called for budget authority of \$822.39 billion, outlays of \$769.818 billion, revenues of \$665.9 billion and a deficit of \$103.918 billion.

Spending legislation also must remain within the following limits for various program areas, as set in S Con Res 92 (in billions of dollars):

Function	Budget Authority	Outlays
National defense	\$ 253.566	\$ 213.966
International affairs	15.900	11.500
General science, space and technology	7.800	7.600
Energy	4.800	4.500
Natural resources and environment	9.500	10.950
Agriculture	6.692	9.042
Commerce and housing credit	7.100	2.837
Transportation	21.450	19.900
Community and regional development	6.900	7.700
Education, training, employment and social services	26.832	26.205
Health	79.569	77.816
Income security	274.797	270.895
Veterans benefits and services	24.560	23.823
Administration of justice	4.540	4.650
General government	4.800	4.650
General purpose fiscal assistance	6.500	6.500
Interest	113.200	113.200
Allowances	-3,016.000	-2,816.000
Undistributed offsetting receipts	-43.100	-43.100
Total	\$ 822.390	\$ 769.818

- Gave the Depository Institutions Deregulation Committee (DIDC), an inter-agency regulatory body, two months to create an insured account for thrift institutions and banks that would be "directly equivalent to and competitive with" money market funds. The minimum-account requirement was not to exceed \$5,000.

- Removed any interest rate differentials between banks and thrift institutions no later than January 1984. Currently, thrifts can pay a quarter percentage point more interest on certain deposits.

- Allowed S&Ls to offer checking accounts, but only to those businesses or entities that did loan business with the institution.

- Allowed S&Ls to stabilize their income by putting as much as 10 percent of their assets into commercial loans by 1984. Traditionally, savings institutions have had most of their assets invested in low-yield, long-term mortgages — one reason for their cur-

rent financial predicament.

- Prohibited commercial banks from selling casualty and property insurance. Banks could still sell credit-related insurance.

- Expanded the powers of both the FDIC and the FSLIC to assist troubled banks and thrift institutions through mergers. Such mergers could not be mandated unless the institution had net worth of less than .5 percent and it was determined the institution's net worth would be exhausted in six months.

- Gave priority for such mergers to in-state acquisitions, followed by acquisitions in contiguous states and other interstate acquisitions.

- Gave the National Credit Union Administration authority to approve mergers between insured credit unions when one faced financial trouble.

- Expanded the authority of bank service corporations, affiliates of two or more banks that provide various clerical services for their parent bank.

Under the bill, service corporations would be allowed to perform all the services of a state-chartered bank as well as some of those permitted a bank holding company.

- Overrode state laws barring due-on-sale clauses in home mortgage contracts. About 18 states have prohibited financial institutions from enforcing due-on-sale provisions in an effort to help promote home sales through mortgage assumptions when interest rates are high.

- Prohibited the Federal Home Loan Mortgage Corp. from implementing a ban on mortgage assumptions until July 1, 1983.

- Excluded real estate brokers from provisions of the Truth-in-Lending Act so that they could continue helping with loan arrangements for home sales.

- Amended the Federal Credit Union Act to simplify the organization of credit unions and broaden their mortgage lending powers.