

**BUDGET
ISSUE PAPER**



**Postsecondary Education:
The Current Federal Role
and Alternative Approaches**

February
1977



Congressional Budget Office
Congress of the United States
Washington, D.C.

POSTSECONDARY EDUCATION:
THE CURRENT FEDERAL ROLE
AND ALTERNATIVE APPROACHES

The Congress of the United States
Congressional Budget Office

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402 - Price \$1.40
Stock No. 052-070-03908-6

PREFACE

In 1977, the Members of the 95th Congress have the opportunity to redefine the federal role in postsecondary education through their budget and appropriations decisions. In reaching these decisions, the Congress will consider the effects on students and their families, and on educational institutions. More than likely they will grapple with several important financial and social issues: equal educational opportunity, the "squeeze" on middle-income families, and faltering institutions. This analysis focuses on the major federal goals in postsecondary education and the effects of federal programs on these goals. The Congress will be deliberating on these questions in the context of such issues as grade inflation, declining college entrance exam scores, and non-traditional students.

The report was prepared by Richard Wabnick with the assistance of Steven Chadima, Alan Fein, and David S. Mundel, all from the Human Resources Division of the Congressional Budget Office, under the direction of David S. Mundel and C. William Fischer. In accordance with CBO's mandate to provide objective and impartial analyses of budget issues, this report contains no recommendations.

Special thanks go to Betty Ingram of the Human Resources Division for her patience and skill throughout the preparation of the paper. The manuscript was edited by John F. Burby and prepared for publication under the supervision of Johanna Zacharias with the invaluable assistance of Patricia Knapick.

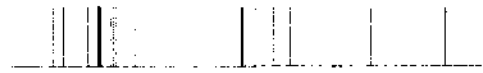
Alice M. Rivlin
Director

February 1977



TABLE OF CONTENTS

	<u>Page</u>
Preface	iii
Summary	xiii
Chapter I. Introduction	1
Federal Higher Education Goals.	3
Labor Market Effects of Postsecondary Education	4
Future Policy Questions	8
Chapter II. Federal Efforts to Achieve Equality of Opportunity.	11
Current Levels of Educational Opportunity	11
Effects of Federal Programs on Educational Opportunity	15
Chapter III. Federal Efforts to Ease Financial Burdens	21
Current Levels of Financial Burden.	21
Effects of Federal Programs on Easing Financial Burdens	27
Tax Credit Plans.	28
Chapter IV. Federal Efforts to Support Institutions.	31
Recent Studies.	31
Shifts in Enrollment Distributions.	34
Patterns of Federal Support to Institutions	36
Chapter V. Higher Education Budget Options.	39
Fiscal Year 1977 Issues	39
Fiscal Year 1978 Options.	43
Appendix.	53



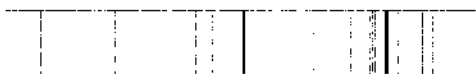
LIST OF TABLES

	<u>Page</u>
1. The Federal Postsecondary Education Budget by Funding Mechanism, for Fiscal Year 1977	2
2. Federal Postsecondary Education Funding by Budget Function, for Fiscal Year 1977	3
3. Federal Postsecondary Education Funding by Goal, for Fiscal Year 1977	5
4. Unemployment Rates by Educational Attainment and Race, Ages 16-24, for October 1974 and October 1975 (Persons Not Enrolled in School)	7
5. Average Annual Income of Individuals Twenty-five Years Old and Over, by Educational Attainment for 1969 and 1975 (in 1975 Constant Dollars)	8
6. Percent of Plan Fulfillment for Postsecondary Education for High School Seniors, Fall 1972	12
7. Percent of Enrollment Rates by Income Class and Achievement Level, Fall 1972	13
8. Percent of Students Fulfilling Plans to Attend School, by Socioeconomic Status (SES) and Type of School, 1972	14
9. Distribution of Fiscal Year 1977 Outlays for Student Assistance Funds by Income, in Millions	17
10. Percent Increase (+) or Decrease (-) in Proportion of Population 18-24 Years Old Enrolled Full Time in College, by Family Income, 1970-1975	22
11. Family Income and Student Charges, 1967 and 1975	25
12. Average Student Assistance Per Enrolled Dependent Student for Fiscal Year 1977	28
13. Estimated Tax Expenditures under Tuition Tax Credit Proposal, Fiscal Year 1978-1983	29

1111

1111 1111 1111 1111

	<u>Page</u>
14. Projected Distribution of Tax Expenditures Under Tuition Tax Credit Proposal by Income, Fiscal Years 1979-1983	30
15. Full-Time Equivalent Enrollments by Type of Institution, Fall 1971 and 1975	35
16. Distribution of Major Student Assistance and Research Funds, by Institution Type and Control for Fiscal Year 1977	37
17. Fiscal Year 1977 Supplemental Appropriation Options	41
18. Distribution of Student Assistance by Income Under Illustrative Fiscal Year 1977 Options	42
19. Distribution of Student Assistance Among Institutions for Fiscal Year 1977 Supplemental Appropriation Options	43
20. Program Requirements Under Alternative Fiscal Year 1978 Budget Options	49
21. Distribution of Major Student Assistance, by Income Level, for Fiscal Year 1978 Budget Options	50
22. Distribution of Major Student Assistance Programs, by Institution Type and Control, for Fiscal Year 1978 Budget Options	50
23. Five-Year Cost Programs Under Fiscal Year 1978 Options	51



FIGURES

	<u>Page</u>
1. Percentage of Funds and Recipients in Major Student Assistance Programs by Income Class: Fiscal Year 1977 Outlays	19
2. Percent Enrolled Full Time in College by Family Income, 1970-1975	23
3. Family Income and Student Charges, 1967-1975	24

APPENDIX TABLES

A-1. Percent of Plan Fulfillment for High School Seniors, by Socioeconomic Status and Type of School, 1972	55
A-2. Percentage of Fiscal Year 1977 Outlays in Each Major Student Assistance Program, by Income Class	56
A-3. Distribution of Student Assistance by Income, under Illustrative Fiscal Year 1977 Options.	57
A-4. Family Income and Student Charges, 1967-1975	58
A-5. Population 18-24 Years Old in Primary Families and Percent Enrolled Full Time and Part Time in College, by Family Income, 1970-1975	59

FIGURES

	<u>Page</u>
1. Percentage of Funds and Recipients in Major Student Assistance Programs by Income Class: Fiscal Year 1977 Outlays	19
2. Percent of 18-24-Year-Olds From Primary Families	23
3. Family Income and Student Charges, 1967-1975 and Student Charges as a Percent of Income of Families with 18-24-Year-Old Dependents, 1967-1975	24

SUMMARY

The passage of the 1976 Amendments to the Higher Education Act in late September last year established, at least for fiscal year 1978, the general structure of federal postsecondary education programs. The budgetary issues in this field that will confront the 95th Congress, therefore, will not center around overall authorization. Instead, the Congress will be concerned primarily with matters of appropriations and program funding. In other words: how should the money already authorized for postsecondary education be spent? And, what is the best way to go about achieving federal goals in this field? These are the issues analyzed in this report.

Federal policy concerning higher education is focused on three main, assisting objectives: providing equal educational opportunities to all Americans; maintaining the financial stability of colleges and universities; and relieving the financial burden on the families of students. The appropriations and budgetary choices for fiscal year 1978 in higher education primarily involve the allocation of federal funds among programs and the relative emphasis among the three principal goals.

Before taking up the long-range allocation questions, the Congress will make decisions on several programs for fiscal year 1977 that are administered by the Office of Education and that now operate under a continuing resolution.

This report first addresses the three general goals of federal policy in higher education and analyzes the effectiveness of present programs in meeting those goals. It then goes on to present options that illustrate the kinds of choices the Congress may make in deciding whether or not to change the existing patterns of funding for higher education. Three options are offered for short-term fiscal year 1977 decisions and four options for fiscal year 1978. The latter options range in cost from \$3.9 billion for current policy levels to \$5.0 billion for changes in programs that would increase federal support for all eligible students, including those from low-, moderate-, and middle-income families. The budgetary impacts of these fiscal year 1978 options over the next five years are also presented.

THE FEDERAL ROLE AT A GLANCE

In fiscal year 1977, the federal government will spend \$14.3 billion on higher education programs. This represents about 30 percent of the total costs of higher education. ^{1/} The scale of the federal effort means that federal expenditures have substantial effects on higher education enrollments, costs, directions, and strategies. Higher education policy also affects the nation's ability to meet the three broad goals.

The relationship between family incomes and enrollment rates, the distribution of students among types of schools, and the matter of students completing college have led to the federal concern with equality of opportunity. Regardless of achievement level, the likelihood of a high school graduate's enrolling in postsecondary education depends on his family's income level. For example, about 50 percent of the medium-achievement high school graduates from families with incomes of \$7,500 or less enrolled in postsecondary institutions. In contrast, about 75 percent of the medium-achievement high school graduates from more affluent families--those with incomes of \$15,000 or more--went on for higher education.

Cost is another major concern. A second goal of federal policy, therefore, is to ease the financial burdens of families supporting children in college. The expense of attending college has risen about 45 percent over the last five years. In the fall of 1970, the average cost was about \$1,650; by the fall of 1975, it had risen to about \$2,400. Although incomes have risen faster

^{1/} These funds include federal support for research and development conducted by academic institutions; federal support for students provided by the Social Security Administration, the Veterans Administration and the Department of Health, Education, and Welfare; and tax expenditures.

than costs during these years, many families still feel either squeezed out of higher education or restricted in their choice of an institution.

A third federal goal is to help keep institutions financially alive and productive. Various studies indicate that many postsecondary institutions are in financial trouble, although some observers question these findings. Other studies show that research universities--particularly private ones--are in worse financial distress than other kinds of institutions. This may result from declines in federal support for graduate students, unchanging levels of federal support (in constant dollars) for academic science, and the inability of institutions to enlist support from state governments.

Federal expenditures for higher education are provided through three mechanisms:

- o Student assistance, provided through grants, low-interest subsidized loan programs, and subsidized jobs. (Student assistance is provided both directly to students and through programs in which educational institutions administer and disburse aid. In fiscal year 1977, about \$7.9 billion will be provided in student assistance.)
- o Federal programs that provide assistance to institutions in the form of research contracts, categorical aid programs, and construction loans. (Institutional aid will total \$4.8 billion in fiscal year 1977.)
- o Federal tax expenditures to help fund higher education. (Tax laws allow parents to claim a child in school as a dependent even though the child's income exceeds that allowed for other dependents. The law also exempts scholarships from taxation and allows deductions for contributions to educational institutions. Tax expenditures for postsecondary education will total \$1.7 billion in 1977.)

Each program affects the achievement of one or more federal objectives. Student assistance programs lower the net cost of college to recipient students and their families. These reductions can increase the likelihood of enrollments, alter the distribution of students among types of institutions, and reduce the financial burdens on students and their families. The effects of these programs--whether they promote equal opportunity or reduce financial burdens--depend in large part on whether or not aid is given to low- and moderate-income students or to middle-income students. Most programs assist several income groups, but in varying proportions. The following table illustrates this pattern.

PROGRAM DISTRIBUTION OF STUDENT ASSISTANCE FUNDS AMONG STUDENTS BY FAMILY INCOME, FISCAL YEAR 1977 OUTLAYS

Program Types	Proportionate Direction of Funds			
	Low-income Students (\$0-7,500)	Moderate-income Students (\$7,500-10,000)	Middle-income and above (\$10,000 and over)	Self-Supporting Students (All Incomes)
Basic Grants	41	14	16	30
Supplemental Grants	38	18	21	22
Direct Loans	22	11	43	24
College Work-Study	31	16	33	20
Guaranteed Loans	26 <u>a/</u>	16 <u>a/</u>	57 <u>a/</u>	

SOURCE: CBO estimates based on Basic Grants application data, fiscal operations reports, and unpublished OGSL data.

a/ Includes some self-supporting students.

Student assistance and other programs also have different effects on institutions, their revenues, and their educational capacities because of differences in the types of institutions the programs tend to support. For example, about 68 percent of Basic Grant funds flow to students in public institutions, while only 55 percent of Direct Loan funds go to these institutions. Aid to developing institutions is directed primarily toward predominantly black schools (60 percent). Eighty percent of federal research and development funds go to public colleges and universities; 20 percent flow to private institutions.

Although it is not possible to make direct connections between particular programs and particular goals, programs can be linked with the predominant goals or purposes they serve. The following table shows that more than half of all federal support for higher education is directed toward achieving equality of opportunity.

FEDERAL POSTSECONDARY EDUCATION FUNDING FOR FISCAL YEAR 1977, a/ BY GOAL, b/ IN MILLIONS OF DOLLARS

Goal	Outlays	
	Dollars	Percent
Equality of Opportunity	7,362	51.2
Easing the Financing Burden	2,222	15.5
Institutional Capacities	<u>4,769</u>	<u>33.2</u>
Total	14,367	100.0

a/ Estimated.

b/ See Chapter I for a list of programs included in these categories.

FEDERAL POSTSECONDARY FUNDING OPTIONS

The current mix of policies and programs in the higher education budget represents one choice of focus and intensity for the federal effort in postsecondary education. Alternative distributions of funds and levels of funding would represent different degrees of commitment to the three goals of federal postsecondary education

policy and different applications of funding instruments. 2/

Decisions that the Congress will be asked to make about fiscal year 1977 supplemental appropriations and the fiscal year 1978 budget resolutions will provide an opportunity to examine alternative funding mixes. For example, for fiscal year 1977, student assistance funding might be kept at fiscal year 1976 levels (as in the continuing resolution), essentially cutting back support in "real" terms. Or "real" support could be maintained by fully funding the Basic Grants program and increasing aid to other programs in line with increases in higher education costs generally.

These somewhat restricted possibilities will be less important to the size and shape of the federal higher education budget than the wider-ranging fiscal year 1978 decisions will be. Four illustrative options provide an indication of the scope and variety of effects that can

2/ Only a portion--\$3.2 billion (22.3 percent) in fiscal year 1977 outlays--of the federal higher education budget is contained in the higher education subfunction (502) of the budget. This subfunction does not include veterans' benefits (702), social security student benefits (601), or support for academic research. It does, however, contain most of the "controllable" programs that can be considered to be largely oriented toward higher education goals. Consequently, the budget options addressed in this report deal solely with changes in support for subfunction 502 activities.

be achieved within the limits of recently enacted authorizations for subfunction 502 programs:

- Option I for 1978: "Current policy"--maintain funding for higher education programs (subfunction 502) at current real levels (allowing adjustments for inflation).
- Option II for 1978: Increased emphasis on equality of opportunity for low- and moderate-income students--increased support for programs targeted toward low- and moderate-income students (family incomes \$0-10,000).
- Option III for 1978: Increased emphasis on easing the financial burden for middle-income students--increased support for students from families with incomes between \$10,000 and \$15,000.
- Option IV for 1978: Combined emphasis on equality of opportunity and easing of financial burden--increased support for programs aiding low-, moderate-, and middle-income students.

The budget options range in total cost from \$3.9 billion (Option I) to \$5.0 billion (Option IV). In emphasis, they range from an extension of existing policy to higher levels of aid for all eligible students. As shown in the table below, Option I would provide \$1.08 billion to support equal opportunity for low-income students, while Option IV would increase support for this goal to \$1.14 billion. Option I would allocate \$451 million for moderate-income students, while Option IV would provide \$583 million for increased equality of opportunity for these students. The amount of support provided for reducing the college financing burdens facing middle-income families (those with incomes between \$10-15,000) would range from \$529 million (Option I) to \$787 million (Option IV).

ILLUSTRATIVE BUDGET OPTIONS IN HIGHER EDUCATION FOR FISCAL YEAR 1978, DISTRIBUTION OF STUDENT ASSISTANCE BY INCOME LEVEL UNDER EACH OPTION, IN MILLIONS OF DOLLARS

	Option I	Option II	Option III	Option IV
Total Budget Authority <u>a/</u>	3,879	4,702	4,531	4,971
Major Student Assistance Activities <u>b/</u>	3,333	3,864	3,781	4,071
Total Support Received from Major Student Assistance Activities by Family Income Level				
\$ 0- 7,500	1,083	1,097	1,042	1,142
7,500-10,000	451	603	535	583
10,000-15,000	529	695	736	787
15,000 and up	550	612	617	645
Self-Supporting Students <u>c/</u>	717	852	850	914

a/ Budget subfunction 502,

b/ See Chapter I for included programs.

c/ Self-supporting students are predominantly in the \$0-10,000 income category.

During the past five years, federal support for higher education not only has grown by 40 percent but has also been increasingly directed toward support of students rather than colleges or universities. In fiscal year 1977, nearly 70 percent of the federal budget for higher education represented direct aid to students, indirect aid provided through the schools they attended, or tax expenditures designed to help parents pay the costs of higher education. In addition, slightly more than half of all student aid, direct and indirect, was designed to equalize educational opportunities by assisting students from low- and moderate-income families.

The emphasis on student aid has been growing since 1944, when G.I. Bill benefits began flowing to veterans attending school after high school. In 1958, the National Defense Education Act expanded aid to students with a subsidized student loan program administered by colleges and universities. The Higher Education Act of 1965 authorized new forms of aid such as the Guaranteed Student Loans (GLS) and the Educational Opportunity Grant (EOG) programs. That same year, Social Security payments and payments under other income maintenance programs 1/ were made available to eligible families with dependents in college. Finally, in 1972, the Higher Education Act was amended to authorize Basic Educational Opportunity Grants (BEOG), which increased the aid available to low- and moderate-income students.

The 1972 amendments also expanded several other programs to "prepare students from low-income families for postsecondary education" and to "encourage qualified youths with financial or cultural need" who have the potential for postsecondary education. Table 1 shows the existing degree of emphasis on student assistance.

1/ These other payments are nominal and will not be included in this analysis.

TABLE 1. THE FEDERAL POSTSECONDARY EDUCATION BUDGET BY FUNDING MECHANISM, FOR FISCAL YEAR 1977, a/ IN MILLIONS OF DOLLARS

Funding Mechanism	Outlays	
	Dollars	Percent
Direct Student Assistance	6,848	47.7
Campus-based Student Assistance	1,036	7.2
Institutional Assistance	4,769	33.2
Tax Expenditures	<u>1,715</u>	<u>11.9</u>
Total	14,368	100.0

SOURCE: Unpublished agency outlay estimates.

a/ Estimated.

Federal programs in support of postsecondary education are funded through a variety of budget functions and subfunctions. The majority of controllable funds appear in Office of Education-administered higher education programs (subfunction 502), but a large portion of the federal support is in the veterans function (702), the social security segment of the income assistance function (601), and scattered among functions for various other agencies which support research and development at colleges and universities. The distribution of federal postsecondary funding by budget function is shown in Table 2. The budget options discussed in this report deal primarily with resources allocated to subfunction 502 programs.

Federal postsecondary policy functions within a complex system that is marked by diversity of students, institutions, and sources of support. Students in the postsecondary system have differing abilities and differing financial and educational needs. The array of institutions is wide, ranging from large public and private research-oriented universities to small, not-for-profit, private liberal arts schools to profit-making vocational trade schools. The federal network of assistance also is coordinated with support from other sources, including states, localities, private donors, and students and their families.

TABLE 2. FEDERAL POSTSECONDARY EDUCATION FUNDING BY BUDGET FUNCTION, FOR FISCAL YEAR 1977, a/ IN MILLIONS OF DOLLARS

Function	Outlay	
	Dollars	Percent
502	3,201	22.3
702	3,859	26.9
601	1,183	8.2
Research	4,409	30.7
Tax Expenditures	<u>1,715</u>	<u>11.9</u>
Total	14,367	100.0

SOURCE: Unpublished agency outlay estimates.

a/ Estimated.

FEDERAL HIGHER EDUCATION GOALS

The federal government seeks to meet three primary goals through its funding of postsecondary education.

First, it attempts to provide equal educational opportunities for all potential students. This entails filling a wide range of financial, cultural, and educational needs for minority students, educationally disadvantaged students, and students from low- and moderate-income families. These programs, designed to increase enrollments and completion rates, include: Basic and Supplemental Educational Opportunity Grants, Social Security educational benefits, Special Services for Disadvantaged Students, and other student assistance programs. The veterans' readjustment benefit program works toward the same goal by equalizing the educational opportunities of former servicemen.

Second, federal assistance serves to ease the burden of financing college enrollment for students and families. Programs oriented toward this purpose include the Guaranteed Student Loan Program through which the government enables lending institutions to make subsidized loans to

students; and tax provisions which allow parents to continue to claim students as dependents even if earnings of the students would ordinarily disqualify them as dependents, and which exclude scholarships from taxation. Other student assistance programs--including those primarily oriented toward the equality-of-opportunity objective--also reduce the financial burdens resulting from postsecondary enrollment.

Third, federal assistance serves to maintain and improve educational institutions. The government continues to support particular categories of institutions including: developing institutions, land-grant colleges, and special institutions for the deaf and blind. A large portion of federal financing of institutions is in support of research activities. However, this federal research support is only indirectly institutional support. The federal government has made available loans for college housing and other facilities construction during periods of expanded enrollment. In addition, the Congress has authorized, but never funded, direct cost-of-education payments to schools based on overall enrollment levels and enrollment of federal aid recipients in particular institutions. Tax policies that allow deductions for contributions to educational institutions also provide indirect federal assistance to institutions.

Although it is not possible to connect all programs to particular goals (e.g., student aid both helps students and may result in increased enrollments and increased tuition revenues that assist institutions), programs can be linked with the dominant goals they are intended to meet. Table 3 shows the share of federal higher education support that is directed toward achieving equality of opportunity.

LABOR MARKET EFFECTS OF POSTSECONDARY EDUCATION

Persons with postsecondary training continue to be more likely to be employed and to receive higher wages than persons without such training. However, much debate and analysis have recently been devoted to the question

TABLE 3. FEDERAL POSTSECONDARY EDUCATION FUNDING BY GOAL, a/ FOR FISCAL YEAR 1977, b/ IN MILLIONS OF DOLLARS

Goal	Outlay	
	Dollars	Percent
Equality of Opportunity	7,362	51.2
Easing the Financing Burden	2,222	15.5
Institutional Capacities	<u>4,783</u>	<u>33.3</u>
Total	14,367	100.0

SOURCE: Unpublished agency outlay estimates.

a/ Programs for equality of opportunity are: (1) Basic Grants; (2) Supplemental Grants; (3) College Work-Study; (4) Direct Loans; (5) Special Services for Disadvantaged Youth; (6) Social Security educational benefits; and (7) Veterans' benefits.

Programs for financing burden are: (1) Guaranteed Loans (including default fund); (2) State Student Incentive Grants; (3) tax provisions; and (4) minor scholarships.

Programs for institutional support are: (1) Developing Institutions, Cooperative Education, Veterans' Cost-of-Instruction Payments; (2) Facilities Fund; (3) Special Institutions; and (4) research and development funds.

b/ Estimated.

of whether the value of a college education, either to an individual or to society, is declining. 2/

In 1974 and 1975, when the overall unemployment rates were 5.6 percent and 8.5 percent respectively, the rates for recent high school graduates were 9.8 percent and 13.6 percent, while the rates for recent college graduates were at 5.0 percent and 8.3 percent. However, as Table 4 shows, racial unemployment data reveal that sometimes there are barriers to jobs that even a college diploma cannot overcome. Nonwhites have higher unemployment rates than whites at all levels of postsecondary educational attainment, 3/ although the unemployment rates of nonwhites and the gap between nonwhite and white rates both are lower among more educated individuals.

2/ Richard Freeman, "Overinvestment in College Training?" and Martin Carnoy and Dieter Marenbach, "The Return to Schooling in the United States, 1939-69," both in *Journal of Human Resources*, Summer 1975. Richard Raymond and Michael Sesnowitz, "The Returns to Investments in Higher Education: Some New Evidence," *Journal of Human Resources*, Spring 1975. Walter McMahon, Nguyen Hoang, and Alan Wagner, "Returns to Investment in Higher Education," Faculty Working Paper at the University of Illinois (Urbana/Champaign), February, 1976.

3/ This comparison does not hold for recent college graduates in 1975. Due to a small sample size for nonwhite college graduates, the differential between the white and nonwhite rates (8.4 percent versus 6.2 percent) is not statistically significant.

TABLE 4. UNEMPLOYMENT RATES BY EDUCATIONAL ATTAINMENT AND RACE, AGES 16-24, FOR OCTOBER 1974 AND OCTOBER 1975 (PERSONS NOT ENROLLED IN SCHOOL)

	Years of School	Percent		
		White and Nonwhite	White	Nonwhite
October 1974	12	9.8	8.7	17.7
	13-15	7.1	6.4	13.9
	16 or more	5.0	4.3	13.2 <u>a/</u>
October 1975	12	13.6	12.3	24.1
	13-15	10.5	9.3	20.3
	16 or more	8.3	8.4	6.2 <u>a/</u>

SOURCE: Bureau of Labor Statistics.

a/ These rates should be viewed cautiously because they have large standard errors due to the small sample size from which they were computed.

Most persons who complete some form of postsecondary training make more money than persons who do not. As shown in Table 5, the average college graduate earned \$15,260 in 1975, while the average high school graduate earned \$8,790. However, in 1975 constant dollars (i.e., dollars with equivalent purchasing power), a person with a college degree had a lower average annual income in 1975 (\$15,260) than a college graduate in 1969 (\$16,117), but suffered less of a drop than students at other educational levels. The additional income gained by completing college as opposed to simply graduating from high school also declined in real terms between these two years.

In a recent study of the rates of return to a college education, Richard Freeman concludes that rates of returns to private and social investment in college training are diminishing and that in 1974 the rates for both were less than 10 percent. 4/ Other researchers disagree. Some

4/ Freeman, op. cit.

TABLE 5. AVERAGE ANNUAL INCOME OF INDIVIDUALS TWENTY-FIVE YEARS OLD AND OVER, BY EDUCATIONAL ATTAINMENT, FOR 1969 AND 1975 (IN CONSTANT 1975 DOLLARS)

Educational Level	1969		1975	
	Income	Income Added Over High School	Income	Income Added Over High School
Completed Grade School	5,073		5,682	
High School Dropout	8,314		6,820	
Completed High School Only	9,560		8,790	
Completed 1-3 Years College	12,097	2,537	10,556	1,766
Completed 4 Years College	16,177	6,617	15,260	6,470

SOURCE: Census Bureau data.

claim that rates of return have been relatively stable and suggest that "the lack of evidence of diminishing returns can only be explained by the presence of a growing demand for educated manpower and graduates in possession of the newer skills." ^{5/} Much of the debate centers on whether or not there is a downward trend in rates of return. Most analysts agree that there still exists a positive return to investment in postsecondary education and that the returns are greater if the education is completed.

FUTURE POLICY QUESTIONS

Against this background, two questions are crucial to the design and evaluation of future federal higher education budgets:

^{5/} McMahan and others, op. cit.

- o What is the current status of each of the problems/goals toward which federal policy is oriented?
- o What are the effects of alternative federal policies on each of these problems or goals?

The succeeding three chapters will consider these questions as they relate to each federal goal.



CHAPTER II FEDERAL EFFORTS TO ACHIEVE EQUALITY OF OPPORTUNITY

Opportunities for postsecondary education remain substantially unequal among students from families with different incomes. For example, about 50 percent of medium-achievement high school graduates from lower-income families (\$0-7,500 annual incomes) went on to postsecondary education, compared with about 75 percent of similar achievement, higher-income (above \$15,000) graduates. Lower-income students also are less likely to enroll in higher-priced schools and less likely to complete their postsecondary educations. Federal student assistance programs can help correct these inequalities by producing lower net prices for students. These price reductions, in turn, increase the likelihood of enrollment, particularly among students from lower-income families.

CURRENT LEVELS OF EDUCATIONAL OPPORTUNITY

There are many ways of defining educational opportunity. Some definitions emphasize the inputs of the educational process; others the outputs. For example, the authors of the first Coleman report, who were commissioned to study educational opportunity at all levels, chose to measure equality of educational opportunity through an output measure--academic achievement. ^{1/} In analyzing the effectiveness of federal assistance in postsecondary education, two input variables and one output variable are often used as important measures of educational opportunity. On the input side, they are: (1) student access to some form of postsecondary education and (2) student choice among educational options. On the output side, persistence in school and the resulting likelihood of completion are important.

^{1/} James S. Coleman et al., Equality of Educational Opportunity, Washington, U.S. Government Printing Office, 1966.

Access 2/

Sixty percent of the 1972 high school graduating class planned to attend some form of postsecondary education, according to a national sample survey of 1972 high school seniors. (See Table 6.) Of the 40 percent who did not plan to attend, almost one-half came from the lowest 25 percent of the income (SES) 3/ distribution. Thus,

TABLE 6. PERCENT OF PLAN FULFILLMENT FOR POSTSECONDARY EDUCATION FOR HIGH SCHOOL SENIORS, FALL 1972 a/

Plans in Spring 1972 Planned Postsecondary Education	Activity in Fall 1972		
	Attended	Did Not Attend	All Activities
Education	44	16	60
Did Not Plan Post- secondary Education	6	34	40
All Plans	50	50	100

SOURCE: National Longitudinal Study of the High School Class of 1972: Planning and Activity States Analyses. Prepared for the National Center for Education Statistics by the Research Triangle Institute, September 1975.

2/ Data on accessibility of postsecondary schooling measures: (1) students' plans to attend school, which combine their desire to attend with their perception of their chances of attending and (2) school enrollment rates, which measure the barriers to access for certain groups and the supply of places in schools.

3/ Socioeconomic status (SES) is a composite index comprised of (1) father's education, (2) mother's education, (3) parental income, (4) father's occupation, (5) household items.

access seems to be limited for lower-income students who face or perceive financial, educational, and/or social barriers to entry.

For the group which did not attend school beyond high school, 40 percent said they did not do so for economic reasons (either the need for money themselves or their families, or the lack of money for school). This sampling of students suggests that about 20 percent of all graduating high school seniors (three million graduates in 1972) would report that they either could not or would not forego possible earnings or that they were simply priced out of the postsecondary education marketplace.

As can be expected, the students least likely to enroll are low-achievement students from families with low incomes. As income and achievement rise, so do rates of enrollment. Table 7 displays enrollment rates of students by income and achievement. 4/

TABLE 7. PERCENT OF ENROLLMENT RATES BY INCOME CLASS AND ACHIEVEMENT LEVEL, FALL 1972

Income Class <u>a/</u>	High School Achievement Level				All Achievement Levels
	Bottom 30	Second 20	Third 30	Highest 20	
\$0- 7,500	30	41	47	64	45
7,500-10,500	32	48	58	70	53
10,500-15,000	35	49	64	75	59
15,000 and up	47	64	77	86	72
All Incomes	35	50	62	75	57

SOURCE: Compiled by College Entrance Examination Board under contract to the National Center for Education Statistics.

a/ These groupings are approximate.

4/ The achievement measure is computed from rank in class and secondary school grade point average as reported by high school counselor.

Choice

On average, most students who plan (in the spring of their senior year of high school) to enroll in a particular postsecondary institution do, in fact, carry out the plan. Fulfillment of plans does, however, vary with family income. For example, 87 percent of the students from higher-income families who planned to attend a four-year college or university did so, while only 71 percent of their lower-income counterparts with similar plans did so. (See Table 8 for details.)

TABLE 8. PERCENT OF STUDENTS FULFILLING PLANS TO ATTEND SCHOOL, BY SOCIOECONOMIC STATUS (SES) a/ AND TYPE OF SCHOOL, 1972

Plans in Spring 1972	Fulfilled Plans	Did Not Fulfill Plans <u>b/</u>
High SES		
Voc-Tech	49.7	50.3
2-year college	68.8	31.2
4-year college	87.4	12.6
Middle SES		
Voc-Tech	52.1	47.9
2-year college	61.8	38.2
4-year college	79.1	20.9
Low SES		
Voc-Tech	42.7	57.3
2-year college	58.5	41.5
4-year college	71.2	28.8

SOURCE: See source for Table 6.

a/ See footnote 3/ in this chapter.

b/ Includes some students who planned a specific type of postsecondary education but attended another. For details, see Appendix, Table A-1.

The difference between actual enrollment patterns of groups of potential students and their plans to attend is caused primarily by lack of effective choice. Choice can be limited for reasons of money (different schools have different prices), academic standing (not all students may be admitted to all schools), and location (not all students live in geographic proximity to all types of schools).

Persistence

Completing school is an important component of educational opportunity. The evidence suggests that the rate of persistence is higher for students at four-year institutions than at two-year colleges. In a follow-up study of the 1966 freshman class, Alexander Astin found that 66 percent of the entering students at two-year colleges returned for a second year while 78 percent of those entering four-year schools returned. ^{5/} Because of the limitations of their choice among institutions, a larger percentage of low- and moderate-income students attend schools with lower persistence rates.

Persistence does not seem to vary by race or income--once allowances are made for institution type. Most recent evidence supports the conclusion that once students are enrolled, race is not a strong determinant of persistence. In fact, within given income and achievement levels, persistence of blacks slightly exceeded that of whites over a period of two years after they entered postsecondary schools in October 1972. There is, however, some evidence of higher dropout rates for blacks attending predominantly white colleges as opposed to primarily black institutions.

EFFECTS OF FEDERAL PROGRAMS ON EDUCATIONAL OPPORTUNITY

Since the primary federal mechanisms that influence educational opportunity provide financial assistance and

^{5/} Alexander Astin, College Dropouts: A National Profile, American Council on Education Research Reports (Washington, D.C., 1972).

| | | | |

incentives to students, two questions should guide an effort to design a budget that is oriented toward equality of opportunity:

- o Do financial incentives affect access, choice, and persistence?
- o Do federal programs create financial incentives for the types of students who experience equality of opportunity problems?

Several studies have attempted to describe the effect of price changes on enrollments. 6/ Their results show that students respond positively, by enrolling in greater numbers, to actions which reduce their tuition charges. The most recent studies (which use data from between 1966 and 1972) indicate that enrollments will increase by between 0.04 and 1.25 percent for every \$100 reduction in tuition charges. Several of the studies demonstrate that lower-income students respond more positively to tuition reductions. No studies have yet determined whether different forms of student assistance--grants, loans, or job subsidies--have different effects on student enrollment decisions.

Shifts in enrollment among types of schools can be expected if financial incentives are made large enough, but the size of subsidy necessary to alter student choices is highly uncertain. 7/ To the extent that choice is

6/ For a review of several of the most recent studies, see Jackson and Weathersby, "Individual Demand for Higher Education," Journal of Higher Education, November/December 1975.

7/ Additional research studies aimed at investigating these incentive effects are currently being supported by the Department of Health, Education, and Welfare and the U.S. Office of Education.

affected by financial incentives and that types of institutions (e.g., two-year versus four-year colleges) affect student completion rates differently, financial incentives can affect persistence and completion rates. Some studies report that lack of financing is an important reason for students dropping out of school.

Students from low- and moderate-income families and students with low academic achievement levels fare less well in any of the measures of equality of opportunity--access, choice, and persistence. From the available evidence, it seems that their behavior could be influenced by financial incentives.

Since 1972, the federal government has turned the focus of most of its direct financial assistance to low- and moderate-income students in an effort to enhance financial incentives. As shown in Table 9, about 55 percent of fiscal year 1977 outlays for student assistance funds will flow to dependent students from families with incomes of less than \$10,000.

TABLE 9. DISTRIBUTION OF FISCAL YEAR 1977 OUTLAYS ^{a/} FOR STUDENT ASSISTANCE FUNDS BY INCOME, IN MILLIONS OF DOLLARS

Income Range of Families of Dependent Students	Outlays					
	Major Student ^{b/} Assistance Programs		Social Security Outlays ^{c/}		Total	
	Dollars	Percent	Dollars	Percent	Dollars	Percent
\$0- 7,500	895	35	343	29	1,238	33
7,500-10,000	370	14	461	39	831	22
10,000-15,000	440	17	237	20	678	18
15,000-20,000	198	8	95	8	294	8
20,000 and up	72	3	47	4	119	3
All Self-Supporting Students	595	23	0	0	595	16
Total	\$2,570	100%	\$1,183	100%	\$3,755	100%

SOURCE: CBO estimates.

^{a/} Estimated.

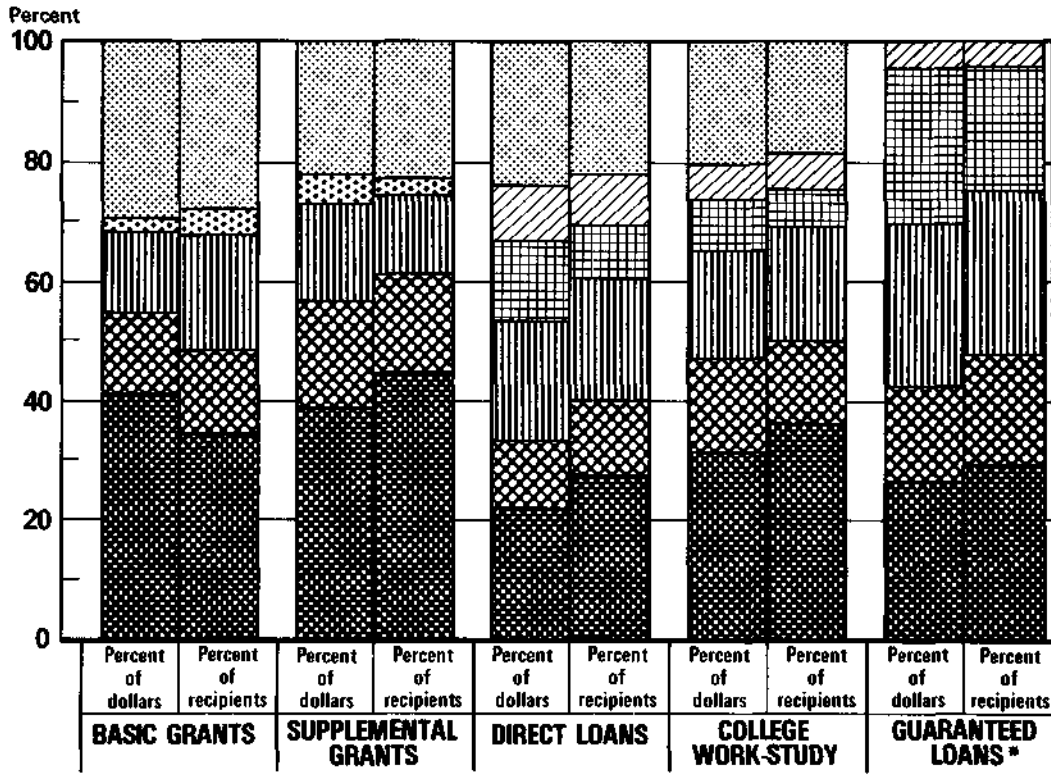
^{b/} Included are Basic Grants, Supplemental Grants, Direct Loans, College Work-Study, and Guaranteed Loans.

^{c/} Agency estimates as of December 1976.

Not all student assistance programs target their funds similarly and, as a result, they will have differential effects on student access and choice. While about 41 percent of Basic Educational Opportunity Grant funds flow to eligible dependent students with family incomes below \$7,500, only about 26 percent of the subsidized loans provided through the Guaranteed Loan program have been made to these low-income students. The other student assistance programs fall somewhere in between. (See Figure 1.)

Also, a small amount of assistance is aimed specifically at lower-achievement students through programs which provide remedial and other special services for potential postsecondary students. In the fiscal year 1977 Labor-HEW appropriations bill, about \$70 million was appropriated for these programs.

Figure 1.
Percentage of Funds and Recipients in Major Student Assistance Programs
by Income Class, Fiscal Year 1977 Outlays



Source: CBO estimates based on Basic Grants applicant data, fiscal operations reports, and unpublished OGSL data.

LEGEND

- \$0 - \$7,499
- \$15,000 and up
- Self-supporting Students
- \$7,500 - \$9,999
- \$15,000 - \$19,999
- \$10,000 - \$14,999
- \$20,000 and up



Available evidence suggests that, over the past nine years, federal programs have eased the financial burden for students from families with low and moderate incomes. The financial burden for middle-income families, calculated as a percentage of family income, has remained relatively stable during that time. One indication of the effect on low-income families is that full-time enrollment by students from families with incomes below \$6,000 a year actually increased during the 1975-1976 school year.

CURRENT LEVELS OF FINANCIAL BURDEN

It is often asserted that postsecondary education is becoming too expensive and that students, particularly those from middle-income families, no longer can afford to attend. Two perspectives on trends in the higher education system can help to demonstrate whether or not this assertion is correct. First, the enrollment rates of the traditional college-age population can be examined to determine if there have been differential changes in enrollment rates among different income groups. Second, changes in college costs relative to changes in family incomes and other sources of student financial support from which those costs are borne can be examined to investigate financing burdens, directly.

Patterns of College Attendance

The decision to attend college ("participation") is a complex one; it involves factors for which measurement tools are inexact or nonexistent. While it is not possible to fully assess the underlying influences on observed enrollment changes, shifts in participation by the traditional college-going population are an indicator of the collective effects of changes in family income, college costs, financial aid, attractiveness of a college education, military draft requirements, timing of college attendance, and other factors.

Between 1970 and 1975, the total full-time participation rates of the 18-24-year-old population decreased by an average of less than 1 percent (see Table 10 and Figure 2). However, this average masks considerable differences among the participation rates of different family income groups. Full-time participation by students from families in the lowest income group (under \$6,000 in 1975 dollars) increased by 13.6 percent and more than doubled on a part-time basis. At the same time, attendance on a full-time basis among students from the next higher income group (\$6,000-\$9,000 in 1975 dollars) declined 14.2 percent during the last six years. The groups for whom the least change was noted (on a full-time basis) were those whose family incomes in 1975 dollars were over \$9,000 (they experienced enrollment decreases of around 5 percent or less over the six-year period).

TABLE 10. PERCENT INCREASE (+) OR DECREASE (-) IN PROPORTION OF POPULATION 18-24 YEARS OLD ENROLLED FULL TIME IN COLLEGE, BY FAMILY INCOME, 1970-1975; INCOMES IN THOUSANDS OF 1975 DOLLARS

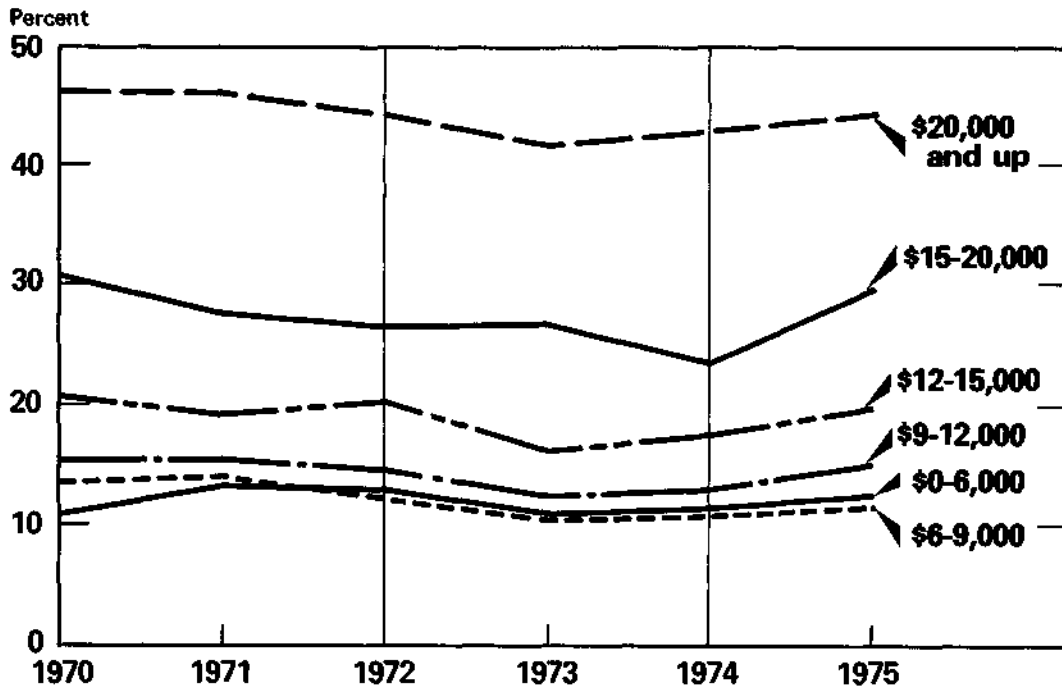
	0-6	6-9	9-12	12-15	15-20	20 and over	TOTAL
1970-1973	-6.4	-22.4	-20.6	-22.6	-13.3	-9.7	-8.0
1973-1975	+24.3	+10.6	+22.8	+22.4	+10.8	+6.5	+7.7
1970-1975	+13.6	-14.2	-2.6	-5.3	-3.9	-3.9	-0.9

SOURCE: CBO estimates based on Census Bureau data.

The 1973-1974 school year saw a substantial decrease in full-time attendance among this age group (partly attributable to the cessation of the draft), especially among potential students from families with incomes under \$15,000 (in 1975 dollars). These trends largely reversed themselves by the 1975-1976 school year. (Data for the current school year are not available at this time.)

Figure 2.

**Percent of 18-24-Year-Old From Primary Families
Enrolled Full Time in College by Family Income: 1970-1975**

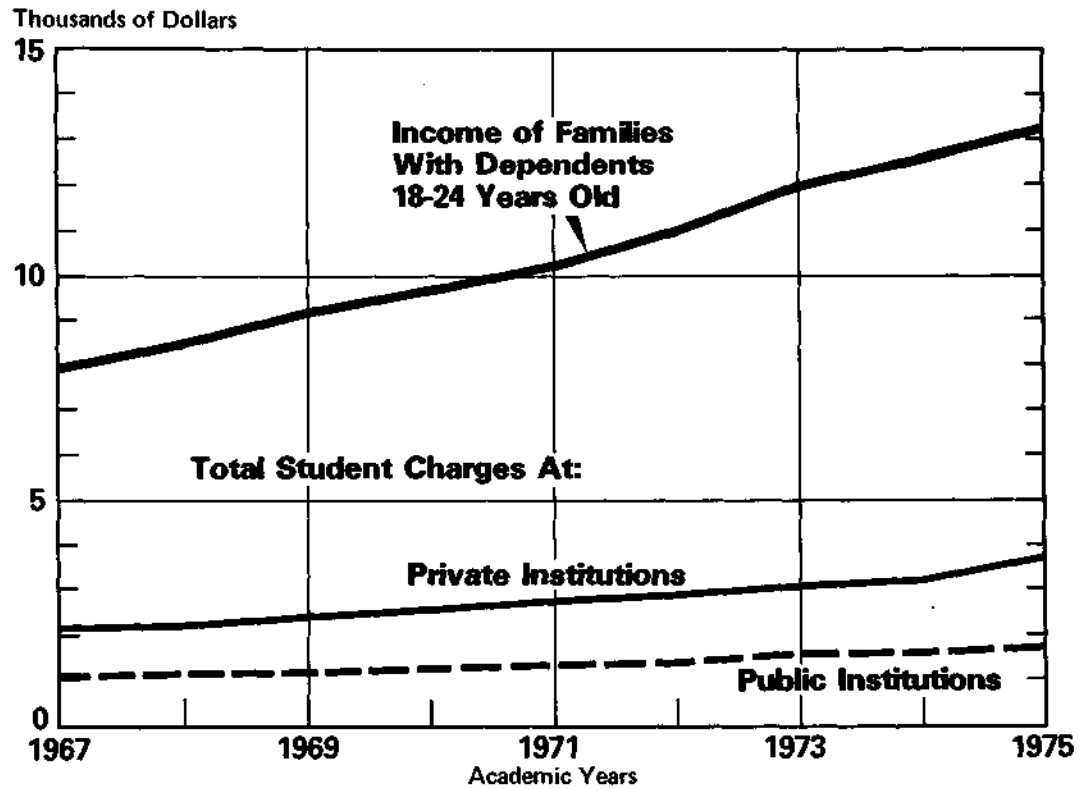


Source: Appendix Table A-5.

Family Income and College Costs

It is often noted that the costs of attending college are rising faster than inflation and, consequently, increasing in real terms (i.e., relative to other goods and services). While college costs have tended to rise faster than the consumer price index (the usual measure of "inflation"), they have not risen as rapidly as the family incomes from which most of those costs are paid until very recently. Figure 3 and Table 11 display median

Figure 3.
Family Income and Student Charges, 1967-1975



Student Charges as Percent of Income of Families With 18-24-Year-Old Dependents, 1967-1975

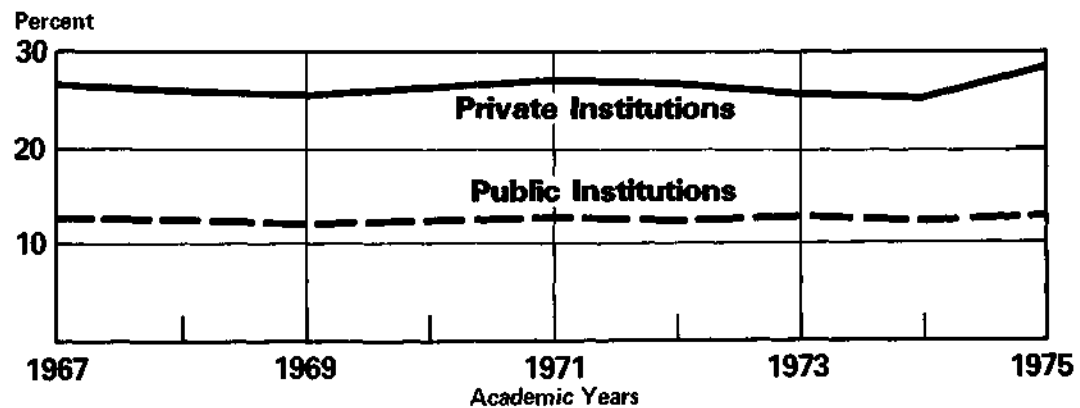


TABLE 11. FAMILY INCOME AND STUDENT CHARGES, 1967 AND 1975

	Median Family Income (in Dollars) <u>a/</u>		Student Charges (in Dollars)		Student Charges as Percent of Income	
	1967	1975	1967	1975	1967	1975
PUBLIC INSTITUTIONS			1,026	1,710		
All Families <u>b/</u>	6,811	11,505			15.6	14.9
Families with 18-24- year-old dependents	7,923	13,199			12.9	13.0
Families with 18-24- year-old dependents in college	9,816	16,784			10.5	10.2
PRIVATE INSTITUTIONS			2,124	3,744		
All Families	6,811	11,505			31.1	32.5
Families with 18-24- year-old dependents	7,923	13,199			26.8	28.4
Families with 18-24- year-old dependents in college	9,816	16,784			21.6	22.3

SOURCE: Bureau of the Census, Current Population Reports; and National Center for Education Statistics (NCES).

a/ Family incomes are those reported in the Bureau of the Census October Current Population Survey when other detailed questions about education are asked. The traditional and more comprehensive reporting of incomes is done in March of each year. The Bureau of the Census reports that, for the above period, October median family incomes ranged from 82 to 86 percent of the median family incomes reported in March.

b/ A census family is two or more persons related by blood, marriage or adoption and residing together. All such persons are considered members of the same family. A primary family includes a head of household (family designated) as one of its members. Excluded from the sample of primary families here are those in which the 18-24-year-old dependent is either the designated head, the wife, or married.

family incomes from 1967 to 1975 of primary families 1/ with dependent members 18-24 years old (the traditional college-age population); and total student charges (including tuition, fees, room and board) at public and private institutions during the same period. From 1967 to 1974, the median income of families with 18-24-year-old dependents rose 54.5 percent, while charges at public colleges rose 52.5 percent and at private institutions, 48.9 percent. For that median family, 1974 charges for one student--including room and board but before financial aid--represented about 12.5 percent of family income if the student attended a public college, and about 25.2 percent if the student attended a private college. In both cases, the figure was slightly less than in 1967. However, during the last year for which these data are available (Fall 1974 to Fall 1975), the median income of families with 18-24-year-old dependents rose only 5 percent while college-going costs continued their steep climb, increasing over 9 percent at public institutions and over 18 percent (NCES estimates) at private institutions. While some of the small rise in median family income may be attributed to increased joblessness resulting from the recession in 1975, it appears that, since academic year 1974-1975, college attendance expenses have risen faster than the family incomes from which they are financed.

These figures reflect increases in gross college costs before receipts of financial aid. Of even greater importance is the degree to which net college costs have changed relative to parental income during the past several years. No trend for any one income group can be assessed because data for even five years ago are not available by family income. However, trends in total federal commitment to student aid programs shed light on this question. While median family incomes have kept pace, by and large, with total college costs, student financial aid programs have increased dramatically. Between school years 1967-1968 and 1975-1976, when the

1/ See footnote b/ to Table 11.

median incomes of families with 18-24-year-old dependents rose 67 percent, public college costs rose 67 percent and private college costs rose 73 percent; appropriations for student aid programs rose 252 percent on a per full-time equivalent (FTE) student basis. These statistics indicate that, on average, net charges to students as a percent of family income have dropped considerably during the past nine years. Much of the increase in federal aid can be attributed to the Basic Grants program which is targeted toward students from low- and moderate-income families. The program most heavily utilized by students from middle-income families--Guaranteed Student Loans--grew 54 percent per FTE student during the same period; the average loan grew about 60 percent. In sum, taken together with the relationship between the growth in costs and median incomes, this information indicates that net charges faced by students from low- and moderate-income families have dropped as a percent of family income in the last nine years. The net charges as a percent of family income that students from middle-income families face have remained about the same.

EFFECTS OF FEDERAL PROGRAMS ON EASING FINANCIAL BURDENS

The potential effects of student assistance programs on financing burdens vary significantly among the programs. The principal variations result from the different subsidy patterns--among students by family income--created by the programs. These differences are illustrated in Table 12.

TABLE 12. AVERAGE STUDENT ASSISTANCE PER ENROLLED DEPENDENT STUDENT FOR FISCAL YEAR 1977, INCOMES IN THOUSANDS OF DOLLARS

Program	Family Income Levels					
	All Incomes	0-7.5	7.5-10	10-15	15-20	20 and up
Basic Grants	89	240	141	53	10	a/
Supplemental Grants	18	47	39	13	4	1
Direct Loans	25	37	33	22	19	6
College Work-Study	31	65	57	24	15	5
Guaranteed Loans	31	54	58	36	43	4
Average Student Assistance per Dependent Enrollee	194	443	428	148	91	16

SOURCE: CBO estimates.

a/ Less than \$1.

TAX CREDIT PLANS

Among the alternatives being considered to supplement current programs are tax credit plans. A wide variety of plans have been proposed which differ with respect to eligible population, maximum credit, income cutoffs, expenses covered, and operating characteristics (i.e., refundable or not). Most of the recent proposals are aimed at assisting middle-income and upper-income families who receive relatively less aid through current student assistance programs. However, those plans which subsidize a large portion of the student population (unlike student assistance programs) offer institutions the opportunity to raise charges (up to the maximum credit) without seriously jeopardizing enrollments.

One proposal is a nonrefundable tuition tax credit (becoming effective January 1, 1978) which may be claimed for each full-time dependent student. Under this proposal, a credit against taxes paid would be allowed equal to 100 percent of the first \$100 in tuition and fees paid for higher education during 1978, rising to \$150 in 1979, \$200 in 1980, and \$250 in 1981 and thereafter.

The tax expenditures (or revenue loss) generated by this proposal would be about \$550 million in the first fiscal year after it went into effect and would grow to about \$1.3 billion by the fourth year. 2/ Once the maximum credit levels off, then tax expenditures would closely follow enrollment fluctuations. (See Table 13.)

TABLE 13. ESTIMATED TAX EXPENDITURES UNDER TUITION TAX CREDIT PROPOSAL, a/ FISCAL YEARS 1978-1983

Fiscal Year	1978	1979	1980	1981	1982	1983
Maximum Tuition Credit		\$100	\$150	\$200	\$250	\$250
Tax Expenditure (In Millions of Dollars)	--	543	805	1,082	1,326	1,318

SOURCE: CBO estimates.

a/ Assuming an effective date of January 1, 1978.

The beneficiaries under this tax credit plan are distributed among income classes almost exactly as students are distributed, except that families with tax liabilities below the maximum credit (generally low-income families) will benefit only to the extent of their tax liability. The distribution of the subsidy is weighted toward middle- and upper-income families by (1) the fact that they are more likely to have enrolled dependents and (2) the fact that they can take full advantage of the subsidy. In fiscal year 1979, families with incomes over \$20,000 would receive 56 percent and those with incomes below \$9,000 would receive 11 percent of the tax credit benefit. By fiscal year 1983, these shares would become 78 percent and 6 percent, respectively, as family incomes grow. (For details, see Table 14.)

2/ Based on a CBO cost estimate.

TABLE 14. PROJECTED DISTRIBUTION OF TAX EXPENDITURES UNDER TUITION TAX CREDIT PROPOSAL BY INCOME, FISCAL YEARS 1979-1983, IN MILLIONS OF DOLLARS

Adjusted Gross Income	1979		1980		1981		1982		1983	
	\$	%	\$	%	\$	%	\$	%	\$	%
\$0- 9,000	60	11	67	8	75	7	78	6	67	5
9-15,000	90	17	106	14	126	12	110	8	96	7
15-20,000	90	17	143	16	150	14	169	13	123	9
20,000 and up	303	56	500	62	731	68	970	73	1,033	78
All Incomes	543	100	805	100	1,082	100	1,326	100	1,318	100

SOURCE: CBO estimate.

A few years ago, the incidence of financial distress appeared widespread as colleges and universities confronted a combination of recession-induced revenue declines, inflated costs, and uncertain levels of federal and state support. Currently, the financial condition of postsecondary institutions appears more solid, although not all studies agree on this point. Some colleges continue to experience financing problems; some states have decreased the rate of growth of their support for public institutions; and the expectations of stable (i.e., not growing) future enrollment have led some observers to predict a new round of financial distress. Federal programs can affect financial viability by providing institutions with direct support or by helping students pay tuitions and fees.

Three measures provide important guidelines for the development of federal policy toward institutional viability: (a) the financial conditions of different types of institutions; (b) enrollment patterns among different types of institutions; and (c) the pattern of federal financial support for different types of institutions. The first measure--financial condition--indicates the kinds of institutions, if any, that have funding difficulty. The second measure--enrollments--indicates the degree to which changes in the number of students are affecting the financial well-being of institutions and the potential for using student aid programs to help institutions. The third measure--federal support--suggests the impact that changes in emphasis among different federal programs (student assistance, institutional aid, and R&D) might have on different institutions of higher education.

RECENT STUDIES

Three recent independent studies of postsecondary institutions agree that, during 1972-1975, some institutions were losing ground financially and others

were on the verge of backsliding. 1/ A disproportionate number of these, according to a study sponsored by Change magazine, were private institutions. Among private institutions, both the Change study and Lanier/Anderson study reported that research universities were slipping more rapidly--mostly because of a loss of federal graduate and research support. The Bowen/Minter study reports some improvement in financial conditions during the end of this period and expresses some optimism for the four-year private institutions which the authors surveyed. No study reported that financial distress was restricted to any particular class of institutions and no study found that financial distress resulted primarily from any single factor.

The Bowen/Minter study concludes that between 1974 and 1975 the private four-year colleges not only held their own financially but increased in net worth by 5 percent and reduced their net debt burden. Bowen and Minter report that, of the approximately 100 institutions in their sample, 52 percent were holding steady and 26 percent were gaining ground between 1969 and 1974. The remaining 22 percent suffered some form of financial decline. Enrollment, overall, increased 1 percent during each of the last two years, while the rate of attrition remained essentially unchanged. Bowen and Minter conclude that "in the ability to attract and hold students, the private sector appears to be holding its own."

1/ The Bowen and Minter study (Second Annual Report on Financial and Educational Trends in the Private Sector of American Higher Education, 1976) relied on national data, survey responses, and institutional financial audits and concentrated on four-year private institutions. Two other studies, Lanier and Anderson's (A Study of the Financial Condition of Colleges and Universities: 1972-1975) and the Change magazine sponsored study (The Financial Condition of Higher Education) relied on institutionally reported financial data (Higher Education General Information Survey), but they used very different methodologies.

However, Bowen and Minter itemize some evidence of "weakness or potential deterioration" by noting that institutional revenues did not keep pace with inflation (using CPI as measure) and that this prevented schools from allocating funds for educational improvements or for salary increases. They also note that the proportion of the student bodies drawn from out of state appears to be declining slowly. The impact of this fact, Bowen and Minter observe, "varies widely among institutions depending on the traditional geographic sources of their students" but may disproportionately affect those private schools which depend on a national clientele. They further conclude that "most of the evidence of weakness is related to the unusual inflation of recent years."

Lanier and Anderson concentrate on the effects of inflation on expenditures. They employ several well-known price indexes for higher education, in contrast to Bowen and Minter, who rely upon the Consumer Price Index. They conclude that "the financial condition of higher education has been progressively deteriorating in recent years" 2/ and find that roughly one-third of all institutions face serious financial difficulties. The authors do not, however, specify the types or dimensions of the problems. Lanier and Anderson include private research universities in their examination and report a severe decline in expenditures per full-time student in those schools. This may explain why the Lanier/Anderson figure of one-third is somewhat greater than the 22 percent figure of "institutions losing ground" used by Bowen and Minter.

The Change-sponsored study 3/ is unique in several aspects. First, 2,163 institutions--almost the universe of higher education institutions--were examined, using

2/ As written by Hans Jenny in Higher Education and the Economy (American Association of Higher Education, 1976).

3/ Authored by Lupton, Augenblick and Heyison and published in September 1976.

their HEGIS-reported data. 4/ Second, the authors employ a comparative statistical technique 5/ to develop financial health indicators for institutions. The results present the most pessimistic view among the three studies, and the validity of the findings has been questioned widely. 6/ Using data for fiscal years 1972 through 1974, the authors rank 49 percent of all institutions as relatively unhealthy or unhealthy. Among privately controlled institutions, they characterize more than 65 percent as relatively unhealthy or unhealthy. For predominantly black institutions, this figure was 53 percent. Among schools that offer doctoral programs the authors report a significant number of small private colleges and universities to be relatively unhealthy or unhealthy. The time period of this study's data is slightly different from that of the other two and covers years when institutions overall were faring less well, which may be one reason for its more pessimistic findings.

Aside from the combined evidence presented by these three studies, the picture of institutional health is fairly static and there are almost no data on financial status for the academic year 1976-1977. Research in the field tells little about the past performance of institutions by which to judge whether or not they are worse off today; obviously, even less is known about future conditions. Recent declines in the rate of inflation may have ameliorated the expenditure difficulties which confronted all types of schools during the 1972-1975 period.

SHIFTS IN ENROLLMENT DISTRIBUTIONS

Student enrollments are the backbone of financial viability for most institutions. Among public institutions,

4/ Higher Education General Information Survey conducted annually by the National Center for Education Statistics.

5/ Discriminant analysis.

6/ Including by some of the researchers who helped to initially define the indicators of financial health utilized in the study.

state appropriations, which are often based on enrollment levels, amount to about 40 percent of total revenues. Tuition and fees provide almost 15 percent of revenues for public institutions. At private colleges, tuition and fees contribute over one-third of total revenues. Thus, enrollment changes can significantly influence the financial health of colleges and universities, individually and as a whole. ^{7/}

Between 1971 and 1975, full-time equivalent enrollments (FTE) of students in post secondary institutions increased 18.8 percent for all institutions. At public two-year colleges, enrollments rose 48.6 percent--the largest increase experienced by any type of institution during that period. About 22 percent more students (on an FTE basis) enrolled at all public institutions (universities, other four-year colleges and two-year schools) in the fall of 1975 than in 1971. Over the same time span, the influx at private institutions amounted to a 9.3 percent increase with private universities experiencing only a 3.3 percent increase. (See Table 15.)

TABLE 15. FULL-TIME EQUIVALENT ENROLLMENTS BY TYPE OF INSTITUTION, FALL 1971 AND 1975, IN THOUSANDS

Year	Public				Private				All
	Univer- sity	4-year	2-year	All	Univer- sity	4-year	2-year	All	All
1971	2,032	1,739	1,614	5,385	572	1,144	110	1,826	7,211
1975	2,263	1,913	2,397	6,574	590	1,288	118	1,996	8,570
Percent Increase 1971-1975	11.4	10.0	48.6	22.1	3.3	12.5	7.1	9.3	18.8

SOURCE: National Center for Education Statistics, published and unpublished figures.

^{7/} See National Center for Education Statistics, Current Funds Revenues, fiscal year 1975 (to be published).

PATTERNS OF FEDERAL SUPPORT TO INSTITUTIONS

About one-third of every federal student assistance dollar is channeled to private institutions and the other two-thirds to public colleges and universities. About 80 percent of federal research funds are received by public institutions (71 percent at the university level), while only 20 percent go to private colleges and universities. Table 16 displays estimated fiscal year 1977 outlays for student aid and research funds.

As noted earlier, if any one type of higher education institution can be clearly defined as experiencing financial difficulties during recent years, it is the private research university. ^{8/} These institutions, however, receive less than 10 percent of the funds from both student assistance programs and research and development efforts. Institutions with financial problems would not be well served by simple expansion of either student assistance or research programs, which dominate current federal activity; both forms of assistance are too widely distributed to reach troubled institutions. A targeted assistance program --similar to the Aid to Developing Institutions Program designed to aid minority institutions--would help research universities more efficiently.

^{8/} It should be noted, however, that not all or even a majority of these institutions are financially troubled.

TABLE 16. DISTRIBUTION OF MAJOR FEDERAL STUDENT ASSISTANCE AND RESEARCH FUNDS, a/
BY INSTITUTION TYPE AND CONTROL b/ FOR FISCAL YEAR 1977, IN MILLIONS OF DOLLARS

	Public					Private					All Schools
	All	Univer- sity	4- Year	2- Year	Voc.	All	Univer- sity	4- Year	2- Year	Voc./Pro- prietary <u>c/</u>	
Student Assist- ance Programs	\$1,637 % 64	974 38	252 10	396 15	16 1	930 36	286 11	425 17	61 2	165 6	2,572 100
Research Funds <u>d/</u>	\$3,527 % 80	3,130 71	265 6	132 3	-- --	882 20	441 10	353 8	44 1	-- --	4,409 100
Total Student Assistance and Research Funds	\$5,164 % 74	4,104 59	517 7	528 8	16 --	1,812 26	727 10	778 11	105 2	165 2	6,981 <u>e/</u> 100

SOURCE: CBO estimates based on Office of Education outlay data and National Science Foundation research support data.

a/ Estimated.

b/ Refers to public or private financial control of institutions.

c/ Privately funded institutions that provide training in profit-making skills.

d/ Research and other support including personnel training.

e/ Outlays for other 502 programs, social security benefits, veterans' benefits, and tax expenditures are not included.



FISCAL YEAR 1977 ISSUES

Before the Congress can tackle the fiscal year 1978 budget process, it must resolve some potential fiscal year 1977 funding issues. First, and most immediate, is the expected funding shortfall in the Basic Grants student assistance program. This shortfall is due to an unexpectedly large number of eligible applicants and will require additional funds--about \$200 million--to meet commitments during this academic year (1976-1977). Such funds may be transferred 1/ from the fiscal year 1977 continuing resolution to this program because the fiscal year 1977 budget target has not yet been exceeded. As of October 1, 1976, outlays for enacted legislation amounted to \$18.5 billion compared to the functional target of \$22.2 billion in outlays and \$24 billion in budget authority.

Second, since many higher education programs were not reauthorized before the fiscal year 1977 Labor-HEW appropriations bill was passed, they are now funded under a continuing resolution at their fiscal year 1976 levels. The programs affected include the Office of Education student and institutional assistance programs in subfunction 502, but not veterans' benefits, social security educational benefits, and most research programs (which have already been funded for fiscal year 1977). However, a combination of inflationary pressures, legislative pressures, and changes in participation rates could force a consideration of supplemental appropriations for some of these programs.

Supplemental requests probably will be made before the continuing resolution expires on March 31, 1977. Action is not required before that time because the relevant programs are all forward-funded (i.e., obligations can be made in

1/ The Administration has the authority to transfer these funds, with the understanding that a future supplemental request will restore them.

fiscal year 1977, but most outlays will occur in fiscal year 1978).

Four out of the five major student assistance programs will absorb most of the attention for supplemental requests to fiscal year 1977 budget authority. The Basic Grants (BEOG) program may require more funds (in addition to those necessary for school year 1976-1977) than currently appropriated because of possible increases in rates of participation. Supplemental appropriations may also be considered for the Supplemental Grants (SEOG), College Work-Study (CWS), and Direct Student Loans (NDSL) programs. Funding for Guaranteed Student Loans (GSL)--the fifth major student assistance program--contained in the fiscal year 1977 appropriations bill and the continuing resolution, is more than sufficient to cover subsidy requirements without additional appropriations.

Three options illustrate the range of possible fiscal year 1977 appropriations activity. 2/

Option I for 1977: No supplemental appropriations. Funding for programs remains at fiscal year 1976 levels.

Option II for 1977: Supplemental appropriations for BEOGs to fully fund awards at \$1,400 maximum. Continue campus-based student aid funds at fiscal year 1976 support levels.

Option III for 1977: Supplemental appropriations for BEOGs to fully fund awards at \$1,400 maximum and inflationary growth (9.6 percent) in funding for campus-based programs.

2/ These potential actions, which in some cases would require creating additional budget authority, can be accommodated by the \$24 billion target in the 1977 second budget resolution for function 500, since enacted legislation at the end of the session totalled only \$16.2 billion in budget authority.

Table 17 displays the funding patterns under these options.

TABLE 17. FISCAL YEAR 1977 SUPPLEMENTAL APPROPRIATION OPTIONS, IN MILLIONS OF DOLLARS

	Option I		Option II		Option III	
	Supp. Funds	Total Funds	Supp. Funds	Total Funds	Supp. Funds	Total Funds
BEOGs	\$ 0	\$1,326	\$275	\$1,600	\$275	\$1,600
SEOGs	0	240	0	240	20	260
CWS	0	390	0	390	40	430
NDSL	0	334	0	334	36	370
GSL	0	400	0	400	0	400
TOTAL	0	\$2,690	\$275	\$2,964	\$371	\$3,060

SOURCE: CBO estimates.

Option I for 1977 would provide \$1.3 billion for the equality of opportunity objective (aid to low- and moderate-income students) and \$2.7 billion in student aid that would reduce the financing burdens facing all students. Because of short-funding, the maximum BEOG award would be below \$1,400.

Option II for 1977 would add \$275 million to student aid appropriations and provide an additional \$149 million in support for low- and moderate-income students beyond that provided by Option I. Option III would provide \$370 million more for student aid and an additional \$192 million in assistance for low- and moderate-income students than Option I. The distribution of support for students under these options is given in Table 18.

TABLE 18. DISTRIBUTION OF STUDENT ASSISTANCE BY INCOME UNDER ILLUSTRATIVE FISCAL YEAR 1977 OPTIONS, IN MILLIONS OF DOLLARS

Incomes	Option I		Option II		Option III	
	Maintains Funding at 1976 Level		Full BEOGs with 1976 Level Campus-Based Aid		Full BEOGs with Inflated Campus-Based Aid	
	Dollars	Percent	Dollars	Percent	Dollars	Percent
Parental Income of Dependent Students						
\$ 0- 7,500	932	35	1,044	35	1,073	35
\$ 7,500-10,000	390	15	427	14	441	14
\$10,000-15,000	468	17	505	17	523	17
\$15,000-20,000	221	8	226	8	235	8
\$20,000 and up	74	3	75	3	82	3
Self-Supporting Students	606	23	687	23	707	23
All Students	2,690	100	2,964	100	3,060	100

SOURCE: CBO estimates.

The Distribution of support among students at different types of institutions is affected only slightly by these supplemental appropriation options. However, the amounts awarded to students in the various types of institutions would change. Option I for 1977 would provide \$786 million in assistance to students at private institutions. Options II and III would provide \$872 million and \$909 million, respectively. As shown in Table 19, other types of institutions would also be affected differentially.

TABLE 19. DISTRIBUTION OF STUDENT ASSISTANCE AMONG INSTITUTIONS
FOR FISCAL YEAR 1977 SUPPLEMENTAL APPROPRIATION OPTIONS, IN
MILLIONS OF DOLLARS

	Option I		Option II		Option III	
	Dollars	Percent	Dollars	Percent	Dollars	Percent
Public						
University	1,008	37.5	1,107	37.5	1,155	37.7
4-Year	273	10.1	298	10.1	304	9.9
2-Year	406	15.1	458	15.5	471	15.4
Vocational	17	0.6	18	0.6	19	0.6
Private						
University	292	10.9	319	10.8	333	10.9
4-Year	450	16.7	486	16.5	503	16.4
2-Year	63	2.3	70	2.4	71	2.3
Private Proprietary	183	6.8	199	6.7	203	6.6
Total Funds <u>a/</u>	2,690	100.0	2,955	100.0	3,060	100.0

SOURCE: CBO estimates based on Basic Grant applicant data, fiscal operations reports, and OGSL data.

a/ Totals may not add due to rounding.

FISCAL YEAR 1978 OPTIONS

After the fiscal year 1977 issues are resolved, the Congress can turn its attention to budget and appropriations choices for fiscal year 1978. Choices involving student aid and institutional assistance (including research support) will be made as the Congress develops the First Concurrent Resolution on the Budget. Much of the support provided by student assistance programs (e.g., social security and veterans' educational benefits) is relatively "uncontrollable." Consequently, more attention will be devoted to other grant, loan, and work-study programs.

Because research support decisions usually are made on grounds other than providing support for higher education, the following illustrative options for fiscal year 1978 do not include changes in research support. However, research funds can have a significant effect on the financial stability of some institutions and therefore are, in

fact, one aspect of overall federal policy on higher education. The illustrative budget options discussed below include several alternative higher education funding arrangements derived from the goal discussions in Chapters II through IV.

Essentially, there are dozens of higher education budget options that could place different emphases among the three federal objectives and allocate resources differently among federal programs. The following four options illustrate the differential effects that can be achieved within the limits of current authorizations for subfunction 502 programs.

- Option I for 1978: "Current policy"--maintain funding for higher education programs (subfunction 502) at current real levels (allowing adjustments for inflation). 3/
- Option II for 1978: Increased emphasis on equality of opportunity for low- and moderate-income students--increased support for programs targeted toward low- and moderate-income students (family incomes between \$0 and \$10,000).
- Option III for 1978: Increased emphasis on easing of financial burden for middle-income students--increased support for programs aiding middle-income students.
- Option IV for 1978: Combined emphasis on equality of opportunity and easing of financial burdens--increased support for programs which assist low-, moderate-, and middle-income students.

What are the likely effects of these budget options? They will certainly influence the distribution of support among the types of institutions and, as a result, affect the financial viability of the higher education system as a whole.

3/ Including the potential 1977 supplemental for Basic Grants.

Before assessing more specific effects, two aspects of these budget options should be noted. First, none is explicitly designed to increase emphasis on the financial condition of postsecondary institutions. 4/ Second, distribution estimates for increased funding of student assistance programs do not take into account possible changes in enrollment patterns.

Option I for 1978: Current Policy

This budget option involves funding most higher education programs (in subfunction 502) at constant real levels. Under this option, the BEOGs program would be short-funded, because the program's current policy funding level (\$1.65 billion) sets an effective maximum award at about \$1,200; it does not allow full funding at the expanded maximum award level of \$1,800. Support for the Guaranteed Student Loan Program would increase in real terms, because eligibility for subsidies was expanded to include students from families with adjusted family incomes of up to \$25,000. 5/ The total subfunction 502 budget authority for Option I for 1978 would be \$3.9 billion.

Of the \$3.3 billion that would go to students through major Office of Education (OE) programs, \$1.5 billion (46 percent) would go to low- and moderate-income students and \$529 million (16 percent) would go to middle-income students with family incomes of \$10,000-15,000. Public and private institutions would receive \$2.1 billion (63 percent) and \$1.2 billion respectively from the student and institutional assistance included in Option I for 1978.

4/ Current federal institutional aid programs are not well designed to target assistance toward institutions that face financial problems. Conceivably, increased support for research and development could ameliorate some of the institutions' specific problems, but decisions to increase support for these activities will be based on programmatic and scientific needs, not just higher education needs.

5/ This is equivalent to approximately \$31,000 in adjusted gross income.

Option II for 1978: Increased Emphasis on Equality of Opportunity for Low- and Moderate-Income Students

This option would involve increasing support beyond that provided in Option I for 1978, for programs that are targeted toward low- and moderate-income students (\$0-10,000 family incomes). Basic Grants program support would be increased beyond current policy levels up to the amount necessary to fund a \$1,400 maximum award (\$1.9 billion). Although the legislation authorizes an \$1,800 maximum for fiscal year 1978, this "short-funding" approach maintains the program's targeting on low- and moderate-income students. Support for Supplemental Grants would be increased from \$257 to \$443 million. This entails full funding the initial grant authorizations and renewal grant requests (approved by an Office of Education panel) at their fiscal year 1976 level. Funding for the Work-Study program would be substantially increased to \$480 million; Direct Loan funding would be increased to its maximum authorization limit of \$400 million. This option also would provide an additional \$100 million for special services for students from disadvantaged backgrounds.

The total cost of Option II for 1978 would be \$4.4 billion (for subfunction 503). Of the share of this budget going to major OE student assistance programs, about \$1.7 billion (44 percent of student assistance funds) would go to low- and moderate-income students. The average student aid award to low- and moderate-income dependent students would increase by approximately \$130 over the current policy level.

Option II for 1978 would not significantly alter the distribution of federal support among types of institutions from the current policy base. However, private colleges and universities would receive \$1.4 billion, compared with the \$1.2 billion they receive under the current policy option, and public institutions would receive \$2.4 billion in federal support under Option II, compared with \$2.1 billion under the current policy option.

Under Option II for 1978 and the following two options, three institutional aid programs--community college support, continuing education programs and facilities construction

programs--would receive an additional \$200 million under a newly enacted "trigger" mechanism. 6/

Option III for 1978: Increased Emphasis on Easing the Financial Burden for Middle-Income Students

This option provides full funding of Basic Grants (\$2.1 billion); cuts back Supplemental Grants, College Work-Study, and Direct Loans to current policy levels (\$1.0 billion total); maintains Guaranteed Loans at current policy level (\$.7 billion); and increases funding for the State Student Incentive Grants program (to \$0.1 billion). The total cost of this option would be about \$4.5 billion, and middle-income students would receive \$0.7 billion in student assistance--about \$0.2 billion more than under the current policy option. The average assistance to dependent college students with family incomes between \$10,000 and \$15,000 would be about \$150 more than under current policy.

Compared to the current policy option, Option III would direct an additional \$0.3 billion to public institutions and an additional \$0.2 billion to private institutions.

Option IV for 1978: Combined Emphasis on Equality of Opportunity and Easing the Financial Burden for Low-, Moderate-, and Middle-Income Students

Option IV, which combines the changes of Options II and III, would have a total budget of \$5.0 billion. Of this amount, \$4.1 billion would be earmarked for student assistance--\$1.7 billion for low-income/moderate-income students and \$0.8 billion for middle-income students.

6/ The "trigger" mechanism requires that, for every two dollars above a "trigger" level appropriated for four student assistance programs--Basic Grants, Supplemental Grants, College Work-Study and Direct Loans--one dollar must be appropriated for these three institutional aid programs up to a maximum of \$215 million. The "trigger" level in fiscal year 1978 is the greater of the sum of fiscal year 1977 appropriations for the four student assistance programs or \$2.8 billion.

Under this option, support to public institutions would increase by \$0.5 billion (24 percent) over the current policy base; support to private institutions would increase by \$0.3 billion (19 percent).

Tables 20, 21, and 22 detail the budgets and funding patterns created by the four illustrative budget options.

Five-Year Cost Implications of 1978 Budget Options

The net growth in costs over five years under these options will be relatively modest--ranging between 6 and 11 percent. Option I (the current policy option) will grow by 8 percent between fiscal years 1978 and 1982, from \$3.9 billion to \$4.2 billion. Option II will increase the most--10.7 percent--to \$5.2 billion. Option III will increase the least--6.3 percent--to \$4.8 billion. Option IV, which combines the program changes of Options II and III, will grow from \$5.0 billion to \$5.4 billion, a 9.2 percent increase. (See Table 23 for details.)

These modest cost increases result from the offsetting pattern of growth between the Basic Grants program and other student assistance programs. Since higher incomes reduce grant eligibility, requirements for Basic Grants will fall as real incomes rise. 7/

7/ Assuming no change in the contribution schedule over the five-year period.

TABLE 20. PROGRAM REQUIREMENTS UNDER ALTERNATIVE FISCAL YEAR
1978 BUDGET OPTIONS, IN MILLIONS OF DOLLARS

Programs	Option I	Option II	Option III	Option IV
Basic Grants	1,648 <u>a/</u>	1,889 <u>b/</u>	2,096 <u>c/</u>	2,096 <u>c/</u>
Supplemental Grants	257	443 <u>d/</u>	257	443 <u>d/</u>
College Work-Study	418	480	418	480
Direct Loans	358	400	358	400
Guaranteed Loans <u>e/</u>	652	652	652	652
Sub-Total for Major Student Assistance	(3,333)	(3,864)	(3,781)	(4,071)
State Incentive Grants	47	47	100	100
Special Services	75	175	75	175
Developing Institutions	120	120	120	120
Other Institutional Support	141	333 <u>f/</u>	292 <u>f/</u>	342 <u>f/</u>
Other 502 Programs	163	163	163	163
Total, 502 Programs	3,879	4,702	4,531	4,971

SOURCE: CBO estimates.

a/ Inflates a 1977 appropriation of \$1,326 million plus a supplemental of \$211 million.

b/ CBO estimate for reduced version of \$1,800 BEOG program with effective maximum equal to \$1,400 at 85 percent participation.

c/ CBO estimates at 85 percent participation of \$1,800 fully funded.

d/ Allows for funding of initial awards at authorization limit and continuing awards at their fiscal year 1976 panel-recommended funding level inflated (to \$243 million).

e/ CBO estimates of funding requirements with new special allowance rate provisions and \$25,000 subsidy eligibility limit, assuming full availability and use of additional capital.

f/ See footnote 6/ in this chapter.

TABLE 21. DISTRIBUTION OF MAJOR STUDENT ASSISTANCE, BY INCOME LEVEL,
FOR FISCAL YEAR 1978 BUDGET OPTIONS, IN MILLIONS OF DOLLARS

Income	Option I		Option II		Option III		Option IV	
	Dol- lars	Per- cent	Dol- lars	Per- cent	Dol- lars	Per- cent	Dol- lars	Per- cent
Parental Income of Dependent Students								
\$ 0 - 7,500	1,083	32.5	1,097	28.4	1,042	27.6	1,142	28.1
\$ 7,500 - 10,000	451	13.5	603	15.6	535	14.1	383	14.3
\$10,000 - 15,000	529	15.9	695	10.2	736	19.5	787	19.3
\$15,000 - 20,000	237	7.1	287	7.4	299	7.9	318	7.8
\$20,000 and up	313	9.4	325	8.4	318	8.4	327	8.0
Self-Supporting Students	717	21.5	852	22.0	850	22.5	914	22.5
All Students	3,333	100.0	3,864	100.0	3,781	100.0	4,071	100.0

SOURCE: CBO Estimate.

TABLE 22. DISTRIBUTION OF MAJOR STUDENT ASSISTANCE PROGRAMS ^{a/},
BY INSTITUTION TYPE AND CONTROL ^{b/} FOR FISCAL YEAR 1978
BUDGET OPTIONS, IN MILLIONS OF DOLLARS

Income	Option I		Option II		Option III		Option IV	
	Dol- lars	Per- cent	Dol- lars	Per- cent	Dol- lars	Per- cent	Dol- lars	Per- cent
All Institutions	\$3,333	100	3,864	100	3,781	100	4,071	100
Public	2,090	62.7	2,446	63.3	2,416	63.9	2,597	63.8
University	1,228	36.8	1,441	37.3	1,425	37.7	1,527	37.5
Other 4-Year	354	10.6	394	10.2	393	10.4	415	10.2
2-Year	489	14.7	583	15.1	590	15.6	631	15.5
Vocational	21	0.6	23	0.6	23	0.6	24	0.6
Private	1,238	37.1	1,414	36.6	1,361	36.0	1,470	36.1
University	349	10.5	410	10.6	393	10.4	432	10.6
Other 4-Year	567	17.0	645	16.7	616	16.3	668	16.4
2-Year	76	2.3	89	2.3	87	2.3	94	2.3
Voc./Proprietary ^{c/}	252	7.6	274	7.1	272	7.2	285	7.0

SOURCE: CBO estimates.

^{a/} Estimated.

^{b/} Refers to public or private financial control of institutions.

^{c/} Privately funded institutions that provide training in profit-making skills.

TABLE 23. FIVE-YEAR COST PROJECTIONS UNDER FISCAL YEAR 1978
OPTIONS, IN MILLIONS OF DOLLARS

	<u>Option I</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
Total	\$3,879	\$3,961	\$4,060	\$4,118	\$4,188
Major Student Assistance	(3,333)	(3,379)	(3,441)	(3,455)	(3,477)
Other 502 Programs	(546)	(581)	(628)	(663)	(712)
	<u>Option II</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
Total	\$4,702	\$4,878	\$4,991	\$5,086	\$5,206
Major Student Assistance	(3,864)	3,986	4,040	4,070	4,114
Other 502 Programs	(838)	(892)	(951)	(1,016)	(1,092)
	<u>Option III</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
Total	\$4,531	\$4,603	\$4,703	\$4,749	\$4,815
Major Student Assistance	(3,781)	(3,804)	(3,852)	(3,839)	(3,837)
Other 502 Programs	(750)	(799)	(851)	(910)	(978)
	<u>Option IV</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
Total	\$4,971	\$5,135	\$5,240	\$5,320	\$5,428
Major Student Assistance	(4,071)	(4,176)	(4,218)	(4,228)	(4,255)
Other 502 Programs	(900)	(959)	(1,022)	(1,092)	(1,173)

1 2 3 4 5 6 7 8 9 10 11 12

1 2 3 4 5 6 7 8 9 10 11 12

APPENDIX

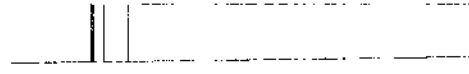


TABLE A-1. PERCENT OF PLAN FULFILLMENT FOR HIGH SCHOOL SENIORS,
BY SOCIOECONOMIC STATUS ^{a/} (SES) AND TYPE OF SCHOOL, 1972

Plans in Spring 1972	Activity in October 1972				
	Voc-Tech School	2-Year College	4-Year College	Other Activities	All Activities
HIGH (SES)					
Voc-Tech School	49.7	15.5	3.3	31.5	100.0
2-Year College	3.5	68.8	14.0	13.8	100.0
4-Year College	1.0	5.4	87.4	6.2	100.0
Other Plans	7.0	9.6	9.6	73.8	100.0
All Plans	5.0	18.0	56.8	20.1	100.0
MIDDLE (SES)					
Voc-Tech School	52.1	9.0	1.3	37.6	100.0
2-Year College	6.1	61.8	8.3	23.7	100.0
4-Year College	7.3	9.0	79.1	9.5	100.0
Other Plans	5.2	6.4	3.0	85.3	100.0
All Plans	8.8	17.3	27.9	46.0	100.0
LOW (SES)					
Voc-Tech School	42.7	7.5	3.2	46.6	100.0
2-Year College	6.3	58.5	7.3	28.0	100.0
4-Year College	2.8	8.2	71.2	17.7	100.0
Other Plans	5.4	2.8	1.9	89.8	100.0
All Plans	9.3	10.9	16.5	63.3	100.0

SOURCE: National Longitudinal Study of the High School Class of 1972:
Planning and Activity States Analyses. Prepared for the
National Center for Education Statistics by the Research
Triangle Institute, September 1975.

^{a/} Socioeconomic status is an index comprised of five components:
(1) father's education; (2) mother's education; (3) parental
income; (4) father's occupation; (5) household items.

TABLE A-2 PERCENTAGE OF FISCAL YEAR 1977 OUTLAYS IN EACH MAJOR FEDERAL STUDENT ASSISTANCE PROGRAM, BY INCOME CLASS

Income	PROGRAM					Total
	Basic Grants	Supple-mental Grants	Direct Loans	Work-Study	Guaran-teeed Loans a/	
Parental Income for Dependent Students						
\$ 0 - 7,500	41	39	22	31	26	35
7,500 - 10,000	14	18	11	16	16	14
10,000 - 15,000	14	17	20	18	27	17
15,000 - 20,000	2	4	14	9	26	8
20,000 and up	b/	1	9	6	4	3
Self-Supporting Students	30	22	24	20		23
TOTAL	100	100	100	100	100	100

SOURCE: CBO estimates based on Basic Grants applicant data, fiscal operations reports, and OGSL data.

a/ Includes some self-supporting students.

b/ Less than 1 percent.

TABLE A-3 DISTRIBUTION OF STUDENT ASSISTANCE BY INCOME, UNDER ILLUSTRATIVE FISCAL YEAR 1977 OPTIONS, IN MILLIONS OF DOLLARS

Income	Option I for 1977					Option II for 1977					Option III for 1977				
	Maintains Funding at 1976 Level					Full BEOGs with 1976 Level Campus-Based Aid					Full BEOGs with Inflated Campus-Based Aid				
	BEOG	SEOG	NDSL	CWS	GSL	BEOG	SEOG	NDSL	CWS	GSL	BEOG	SEOG	NDSL	CWS	GSL
Parental Income of Dependent Students															
\$ 0-7,500	541	92	73	121	105	653	92	73	121	105	653	100	81	134	105
\$ 7,500-10,000	182	43	38	62	65	219	43	38	62	65	219	47	42	68	65
\$10,000-15,000	182	40	66	70	110	219	40	66	70	110	219	43	74	77	110
\$15,000-20,000	27	10	46	35	103	32	10	46	35	103	32	11	51	38	103
\$20,000 and up	1	2	30	23	18	2	2	30	23	18	2	2	34	26	18
Self-Supporting Students	394	53	80	79	a/	475	57	88	87	a/	356	53	80	79	a/
All Students	1,326	240	334	390	400	1,600	240	334	390	400	1,600	260	370	430	400

SOURCE: CBO estimates.

a/Included in above distribution.

TABLE A-4 FAMILY INCOME AND STUDENT CHARGES, 1967-1975

Year	Median Family Income a/ with			Total Student Charges (School year ending spring of year indicated)		Student Charges as a Per- cent of Income of Families with 18-24 yr. Dependents	
	All Families (1)	18-24 yr. Dependents (2)	with 18-24 yr. Dep. in College (3)	Public (4)	Private (5)	Public (4)/(2)	Private (5)/(2)
1967	\$6,811	\$7,923	\$ 9,816	\$1,026	\$2,124	12.9%	26.8%
1968	7,189	8,469	10,452	1,064	2,204	12.6	26.0
1969	7,770	9,123	11,295	1,117	2,321	12.2	25.4
1970	8,268	9,624	12,063	1,205	2,533	12.5	26.3
1971	8,681	10,095	12,727	1,288	2,740	12.8	27.1
1972	9,276	10,900	13,392	1,357	2,917	12.4	26.8
1973	10,273	11,897	14,679	1,530	3,035	12.9	25.5
1974	11,025	12,561	16,005	1,566	3,163	12.5	25.2
1975	11,505	13,199	16,784	1,710	3,744	13.0	28.4
Percent Change 1967 - 1975		+66.6		+66.7	+73.3	+0.8	+6.0

SOURCE: Bureau of the Census Current Population Reports and National Center for Education Statistics data.

a/ Family incomes are those reported in the Bureau of the Census October Current Population Survey when other detailed questions about education are asked. The traditional and more comprehensive reporting of incomes is done in March of each year. The Bureau of the Census reports that for the above period October median family incomes ranged from 82 to 86 percent of the median family incomes reported in March.

b/ A census family is two or more persons related by blood, marriage, or adoption, and residing together. All such persons are considered members of the same family. Columns (2) and (3) are incomes of primary families. A primary family includes a head of the household (family designated) as one of its members. Excluded from the sample of primary families here are those in which the 18-24-year-old dependent is either the designated head, the wife, or married. Only those in which the 18-24-year-old dependent is attending college full time are included in Column (3).

TABLE A-5 POPULATION 18-24 YEARS OLD IN PRIMARY FAMILIES AND PERCENT ENROLLED
 FULL TIME AND PART TIME IN COLLEGE, BY FAMILY INCOME, 1970-1975,
 CIVILIAN NONINSTITUTIONAL POPULATION IN THOUSANDS

	Family Income (1975 dollars)							TOTAL
	Less than 6,000	6,000- 8,999	9,000- 11,999	12,000- 14,999	15,000- 19,999	20,000 or more	No Response	
Population 18-24								
Years Old								
1970	3,347	3,383	3,734	2,868	3,115	3,074	1,403	20,631
1971	3,721	3,526	3,656	2,683	3,310	3,310	1,426	21,613
1972	3,904	3,594	3,194	2,706	3,727	3,549	1,477	22,160
1973	3,630	3,585	3,021	3,089	3,810	3,713	1,674	22,522
1974	3,650	3,650	3,492	3,244	3,109	3,785	1,595	22,530
1975	4,041	3,421	3,858	3,169	2,914	3,766	1,800	22,959
Percent of Population Enrolled								
Full Time:								
1970	11.0	13.4	15.5	20.8	30.9	46.3		22.5
1971	13.3	13.8	15.5	19.2	27.7	46.2		22.5
1972	12.7	12.1	14.5	20.2	26.5	44.4		22.0
1973	10.9	10.4	12.3	16.1	26.8	41.8		20.7
1974	11.3	10.7	12.9	17.4	23.4	43.0		20.3
1975	12.5	11.5	15.1	19.7	29.7	44.5		22.3
Part Time:								
1970	1.3	2.5	3.3	4.6	4.7	3.6		3.2
1971	1.6	3.8	2.8	3.1	5.2	4.7		3.5
1972	1.7	3.4	2.7	2.7	5.0	4.4		3.3
1973	2.0	2.4	2.9	3.1	4.9	3.8		3.2
1974	2.2	3.2	3.1	4.0	4.0	5.6		3.6
1975	2.7	3.2	3.1	4.7	4.7	5.3		3.8
Percent of Increase (+) or Decrease (-) in Participation 1970-1975								
Full Time:								
	+13.6	-14.2	-2.6	-5.3	-3.9	-3.9		-0.9
Part Time:								
	+107.7	+28.0	-6.1	+2.2	0.0	+47.2		+18.8

SOURCE: CBO estimates based on U.S. Bureau of the Census data.