

tial needs of institutions of higher education differ from those aided under this act.

After an analysis of the British system of block grants, Professor William G. Bowen concluded:

The greatest appeal of the . . . block grant system . . . is that it provides universities with general-purpose support. Thus, the British system explicitly recognizes that research and teaching go together and that the science side of a university can flourish best if the humanities are also being adequately financed. I believe that the U. S. has erred in tying such large proportion of its government contributions exclusively to scientific research, and I would welcome somewhat more emphasis on broader-purpose government grants.¹³

This comment was written in 1962, but it probably applies as well to the specific types of aid making up the new programs of assistance to higher education.¹⁴

While proposals for an untied grant to institutions of higher education have attracted little discussion or support in this country (largely because of the constitutional problem of aid to church-supported institutions), another type of general aid to student education — a tax credit for basic student charges — has received considerable attention.

The Tax Credit Proposal. Numerous proposals have been made for tax credits or deductions for certain higher education charges.¹⁵ Senator Ribicoff, supported by a number of Congressmen of both parties, has introduced a bill which has received perhaps the most widespread support.

The essentials of his proposal are to provide a credit against individual income tax on the first \$1,500 of tuition, fees, books and supplies. The credit would be on a sliding scale, as follows:

75% of the first \$200 of expenses

25% of the next \$300 of expenses

10% of the next \$1,000 of expenses

for a maximum of \$325 per student per year. The credit, it should be noted, is a direct offset against the income tax, not a deduction from income subject to tax. The credit would be available to anyone who pays for these expenditures — the student, his parents, or other persons. However, the credit would be reduced by one percent of the amount by which the taxpayer's adjusted gross income exceeds \$25,000.

The design of this credit is intended to offset the criticism that it would benefit the wealthier student and the wealthier states more than low-income families and states. A maximum credit of \$325 would be a smaller benefit relative to total costs for students attending expensive private institutions as compared with those attending public institutions. However, at levels of tuition and fees prevailing in 1964, the credit at many state universities and colleges would be less than the maximum, according to estimates presented by Senator Ribicoff.¹⁶

A tax credit would make it easier for institutions to raise their tuition levels and thus finance rising costs of student education. But to the extent that a tax credit is converted into tuition increases, it would do little to enlarge educational

13. *Economic Aspects of Education, Three Essays*, Industrial Relations Section, Princeton University, 1964, pp. 79-80.

14. Further discussion of this issue can be found in Rivlin, *op. cit.*, pp. 160-165.

15. For an analysis of various bills and their history and relative merits, see Roger Freeman, *Crisis in College Finance?* Institute for Social Science Research, Washington, D. C., 1965, Chapter 10.

16. *Congressional Record*, January 6, 1965, pp. 192, 193.

opportunities for the lowest income groups — except as colleges used part of the additional funds for scholarships.

A tax credit would also be scaled downward for those whose income tax liability was smaller than the allowable credit. Under present tax rates, a four-person-family with an income of \$3,000 would pay no income tax at all. Unless some provision was made for carry-over of the credit to future years, the credit would have little or no value for the lowest income groups.

It is argued, on the other hand, that a tax credit would have substantial value for middle-income groups. The credit would give some relief to those who support students at private institutions at the same time that they support public institutions through taxes. A tax credit would minimize the dangers of governmental control or influence that may go with direct aid programs to institutions or aids to students for particular kinds of educational activity. It would also minimize administrative expense.

One disadvantage of a tax credit is that an indefinite amount of funds — potential revenue — would be committed for this purpose. A tax credit also tends to hide the costs and thus make it difficult for Congress to weigh the costs and merits of alternative uses of funds.

The amount of funds involved in a tax credit would reach a large total even though the average amount is small. If the tax credit averaged \$200 per year per student, the annual total involved for an enrollment of five million students (approximately the current level) would be \$1 billion. At prospective enrollment levels of 1970, the annual total would be more than \$2 billion. This is much in excess of the pros-

pective Federal contribution to *student higher education* costs under the Higher Education Act of 1965. A substantial part of the funds under this act will go for functions other than student higher education — public services and to a smaller degree research. It would be surprising if the total annual Federal contribution to student higher education rose to as much as \$1 billion under present legislation by 1970.

Depreciation Allowance for Education. A somewhat different range of issues has been raised by Richard Goode's proposal for depreciation allowances for investment in education. He argues that those who invest in education are discriminated against as compared with those who invest little in education as well as with investors in physical assets.¹⁷

He points out that present law and regulations do not permit deductions either for general educational purposes or for education undertaken primarily for the purpose of obtaining a new position or making a substantial advancement in position. Deductions are allowed only for education necessary for improving skills required in the taxpayer's present position or for meeting express requirements of the employer.

Under Goode's plan, part of the personal costs of college, professional, technical, and vocational education would be capitalized and written off over a period of ten to twenty years or more. The deduction would be taken by the student rather than his parents or other individuals who may have contributed to his personal expenses. However, "the privilege of writing off the value of gifts in the form of education probably should not extend to scholarships and

17. Richard B. Goode, *The Individual Income Tax*, The Brookings Institution, Washington, D. C., 1964, p. 82.

other aid received from educational institutions, governments, corporations, or other organized bodies."

He would include in deductible costs only money outlays for tuition, fees, books, and supplies, and travel. He would exclude any additional living expenses of the student and earnings foregone while studying. The deduction would be limited to "earned income."

Such a provision would have little effect on total investment in education, since the tax benefits would be a small part of the costs of education to the student.¹⁸ The major part of these costs, foregone earnings, would not be affected. Such a plan, however, would help to stimulate better credit facilities for financing education beyond the high school.

This plan is essentially a refinement of the income tax to improve its equity and to minimize distorting effects. It is in a different category from the proposal for a tax credit for educational expenses, designed primarily as a subsidy for student higher education. The major question to be raised is whether the improvement in equity and economic effects would be worth the substantial complications it would add to an already complicated income tax.

Federal versus State-Local Support. Additional Federal aid to higher education is supported on several grounds. One group of arguments is based on the nationwide benefits derived from higher education: the large mobility of college graduates, the national defense needs for specialized skills and knowledge, the promotion of national economic growth.

These arguments emphasize the "external" benefits of higher education — external not only to the individual, but also to localities, states, and even regions covering several states.

The external benefit argument, though widely accepted, can easily be carried too far, as Professor Robbins once pointed out:

... important as this argument may be in particular cases, it is easy to see how frightfully it may be abused as a justification for general paternalism. There is scarcely anything which I can do outside the privacy of my home which has not some overtone of indiscriminate benefit or detriment. The clothes I wear, the shows I frequent, the flowers that I plant in my garden, all directly, or through the mysterious influence of fashion, influence the enjoyments and satisfactions of others. Even what is done remote from the perception of others can be conceived to have this aspect. The fact that other people lead a way of life different from my own, that they like and buy pictures and books of which I disapprove, and give private banquets of sacred meats and forbidden wines, can clearly be the occasion to me of most intense mortification. Is this to be included in the calculus of external economies and diseconomies? I can think of few forms of totalitarian regimentation of consumption which could not find some formal justification by appeal to this analysis.¹⁹

Another type of argument is that state-local resources are inadequate to provide the additional support needed for higher education. As projected above, the prospective demands for higher education indicate that total government support of higher education will be on the order of \$9½ billion in 1969-70, if

18. At the 1959-1960 level of student expenditures, Goode estimated the ultimate annual revenue loss at approximately \$320 million after ten or twenty years. He also projected deductible expenditures for 1969-70 at \$3.1 billion with no allowance for price changes. The ultimate annual income loss at this level of expenditure would be about \$600 million. *Ibid.*, p. 84.

19. Lionel Robbins, *The Economics Problem in Peace and War*, 1947, pp. 20-21, quoted by Maurice Peston, "The Theory of Spillovers and Its Connection with Education," paper delivered at the International Institute of Public Finance, Paris, 1965.

these demands are met. Of this amount about \$2½ billion will consist of Federal funds for research. Unless Federal support of other higher education functions is expanded far beyond levels likely under present legislation, most of the \$7 billion remainder will come from state and local sources. Under present legislation Federal support of functions other than research does not seem likely to exceed \$1 billion by 1970. However, a tax credit of the kind proposed by Senator Ribicoff would, in effect, involve a Federal contribution of something like \$2 billion in 1970.

Nation-wide, it appears that state and local governments could without tremendous difficulty raise additional funds for higher education on the order of \$4 billion between 1962 and 1970 as indicated by the projections in Table 3. In the eight year period 1954 to 1962, state and local governments raised their expenditures on higher education from \$1.4 billion to \$4 billion at the same time that expenditures for local schools rose by about \$10 billion. From 1962 to 1970 expenditures for local schools are likely to rise by less than half the rate at which they rose in the previous eight-year period. Thus the additional burden for higher education will be mitigated to some extent by the reduced pressures for financing the growth of public school expenditures. As discussed further below, there is also likely to be some offsetting of burdens for capital outlay.

It is argued that if additional educa-

tional tax burdens are left mainly to the states, undesirable inequalities of educational opportunities among states and regions will continue and perhaps grow. The wealthier states will be able to finance education more fully than poorer states. The present tendency in public institutions is to discriminate further against out-of-state students.

It is also argued that to meet such burdens state-local tax rates must continue to rise. Federal tax rates, however, can go down while yielding larger revenues as national income rises. Such contrasting trends, it is said, will have the disadvantage of shifting part of the total tax burden from the Federal tax system to the state-local system, and thus from a generally "better" to a generally "poorer" set of taxes.

These arguments are used not only in relation to education but also concerning other functions and responsibilities of state and local governments. They are central considerations in the debate over sharing of Federal revenues with state governments through general purpose grants.²⁰

A final consideration, one not frequently called to public attention, is that state-local aid, as a practical matter, will go entirely, or almost so, to governmental institutions. Federal aid, however, has been developed in ways which benefit students and researchers in both private and public institutions. Obviously, issues extending beyond the scope of this study are involved.

20. For further discussion of these problems, see Tax Foundation, *Proceedings of a Conference on "The New Economics: Implications for Business,"* pp. 53-61.

VI.

State-Local Financing Of Higher Education

The rapid current and prospective expansion in state expenditures for higher education was briefly examined above. This chapter reviews in more detail selected policy issues relating to future sources of funds.

Size of the Financing Problem

In the fiscal year 1964 state and local governments spent \$5.5 billion on higher education, or about one-fifth of all state-local expenditures for education (Table 10). Ten years earlier higher education accounted for only 13 percent of all state and local expenditures for education. By 1970, higher education will probably account for about one-third of state-local expenditures for education.

Mushkin and McLoone's projections indicate that state and local government expenditures for higher education would reach \$12 billion by 1970, including \$3.5 billion for capital outlay.

Total current expenditures — excluding capital outlays — of public and private institutions of higher education for educational and general purposes would reach about \$16½ billion in 1970 (as projected in Table 1 above). Governmental sources of current funds for educational and general purposes would amount to about \$9.5 billion as com-

pared with \$4.5 billion in 1963-64. The share of state-local government, on the assumptions discussed earlier, would rise from \$2.4 billion in 1963-64 to about \$6 billion in 1970. This would mean an increase in the state-local contribution from about 0.5 percent of personal income in 1963-64 to about 0.9 percent of personal income in 1970.

These figures do not include the tax-supported share of capital outlay. Estimates of this portion of the tax burden for higher education are subject to still wider margins of error than those for current expenditures. Projections of capital outlay depend in part on the extent to which one assumes that obsolete buildings will be replaced, as well as on a wide range of possible variations in capital outlay that will be needed for additional enrollment.

The Office of Education projections of capital outlay are somewhat lower than Mushkin and McLoone's. While the Office of Education estimated a substantial increase in capital outlay in 1965-66 and continuing to 1970, thereafter a lower level was indicated — amounting to \$2.4 billion per year (in 1963-64 prices) from 1970 to 1975. By contrast, Mushkin and McLoone included capital outlays¹ amounting to

1. This capital outlay figure was based on a special survey by Mr. W. R. Bokelman. It assumes that obsolete buildings will be replaced, that substantial renovations will be made, and that construction costs will rise at a rate of 3.1 percent per year. For further discussion of the estimates, see Mushkin and McLoone, *op. cit.*, pp. 27-34.

Table 10
State and Local Government Expenditures for Education
Fiscal Years 1954-1964
(Millions)

Year	Total	Higher education				Local schools		
		Total	State	Local	State & local capital outlay	Total	Capital outlay	Other
1954	\$10,557	\$1,418	\$1,324	\$ 94	\$ 262	\$ 8,947	\$2,256	\$192
1955	11,907	1,570	1,468	102	312	10,129	2,739	210
1956	13,220	1,814	1,678	136	387	11,165	2,786	241
1957	14,134	2,206	1,958	248	514	11,657	2,715	272
1958	15,919	2,582	2,305	277	653	13,032	2,868	305
1959	17,283	2,920	2,614	306	784	14,034	2,981	329
1960	18,719	3,202	2,856	346	759	15,166	2,903	351
1961	20,574	3,570	3,170	400	790	16,608	3,031	396
1962	22,216	4,043	3,634	408	949	17,739	3,026	434
1963	23,965	4,702	4,228	478	1,154	18,759	2,866	504
1964	26,533	5,525	4,895	630	1,465	20,399	3,042	609

Source: U. S. Bureau of the Census.

\$3.5 billion in 1970. This figure, however, assumes a rise in construction costs of 3.1 percent per year.

The Office of Education projections serve to emphasize the differences between the expected trend of higher education expenditures and of public school expenditures. The rate of increase in public school expenditures over the next decade is expected to be only half that of institutions of higher education.

The Office of Education projected a decline in capital outlays for public schools after 1965, and in fact such outlays have remained relatively constant from 1955 to 1965 (see Table 10 above). This reflects the fact shown in Chart 1 that the most rapid increase in elementary school age children occurred before 1960; the increase in high school age groups will taper off rapidly after 1965; while the greatest increase in the 18-21

year age group will occur in years 1964-67.

Thus some of the tax cost of increased capital outlays for higher education may be offset by a decline of such outlays for public schools.

Figures for the nation as a whole do not, of course, reveal a fact of great importance, the wide variation in projected enrollment from state to state. As shown by Chart 2, the projected increase in enrollments in public institutions varies from more than 200 percent in Massachusetts to less than 50 percent in most of the states in the Northwest. Moreover, there will apparently be little relationship between increases in enrollment in public institutions by state and the expected increase in total personal income by state. The states of the East, which in the past have relied heavily on private institutions of higher education, will have the greatest rela-

Table 11
Constant Dollar Expenditures for Education, Public Schools and Public Institutions
of Higher Education

Selected School Years 1954-1965 Actual, 1966-1975 Projected
(Billions of 1963-64 dollars^a)

School Year	Total	Public schools			Public institutions of higher education			GNP ^c
		Total ^b	Current expenditures	Capital outlay	Total	Current expenditures	Capital outlay	
1954-55	\$ 14.8	\$ 12.2	\$ 8.9	\$ 3.1	\$ 2.6	\$ 2.0	\$ 0.6	\$459.1
1961-62	24.3	19.1	15.3	3.2	5.2	3.8	1.4	561.2
1964-65	29.8	23.0	18.9	3.4	6.8	5.4	1.4	639.4
1966-67	33.6	25.2	21.2	3.1	8.4	6.7	1.7	700.6
1969-70	38.8	28.8	24.7	3.1	10.0	8.3	1.7	787.7
1971-72	41.6	30.7	26.5	3.1	10.9	9.4	1.5	855.1
1973-74	44.9	32.8	28.6	3.0	12.1	10.6	1.5	931.0
1974-75	46.6	33.9	29.6	3.0	12.7	11.2	1.5	972.3
Percent increase:								
1954-55 to 1964-65	101	89	112	10	162	170	133	39
1964-65 to 1974-75	56	47	57	12	87	107	7	52

a. Current expenditures were deflated by the consumer price index and capital outlay by an index of construction prices.

b. Total also includes interest which is not shown separately above.

c. GNP projections are averages of the two calendar years in which the academic year falls. They are expressed in 1964 prices.

Source: U. S. Office of Education, *Projections of Educational Statistics to 1974-75*, 1965 Edition, pp. 44, 45.

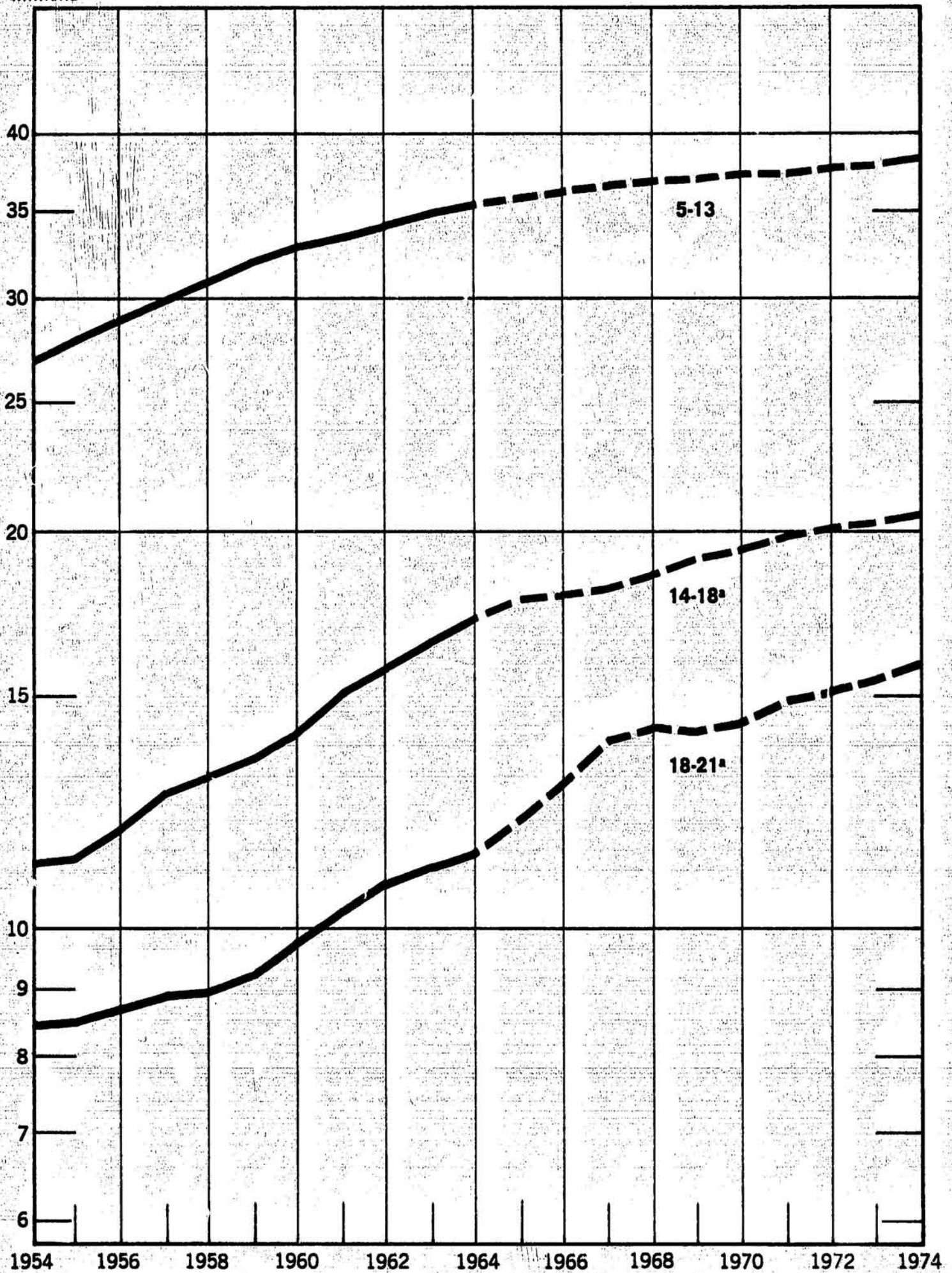
GNP projections: N.P.A. Center for Economic Projections, *Short- and Long-Term Economic Expansion: Annual Estimates of Major Indicators 1963-75*, Report No. 64-4, p. 14.

GNP 1954-64: U. S. Department of Commerce, *Survey of Current Business*, August 1965, pp. 27, 53.

Chart 1

U.S. Population in Selected Age Groups, 1954-1974

Millions

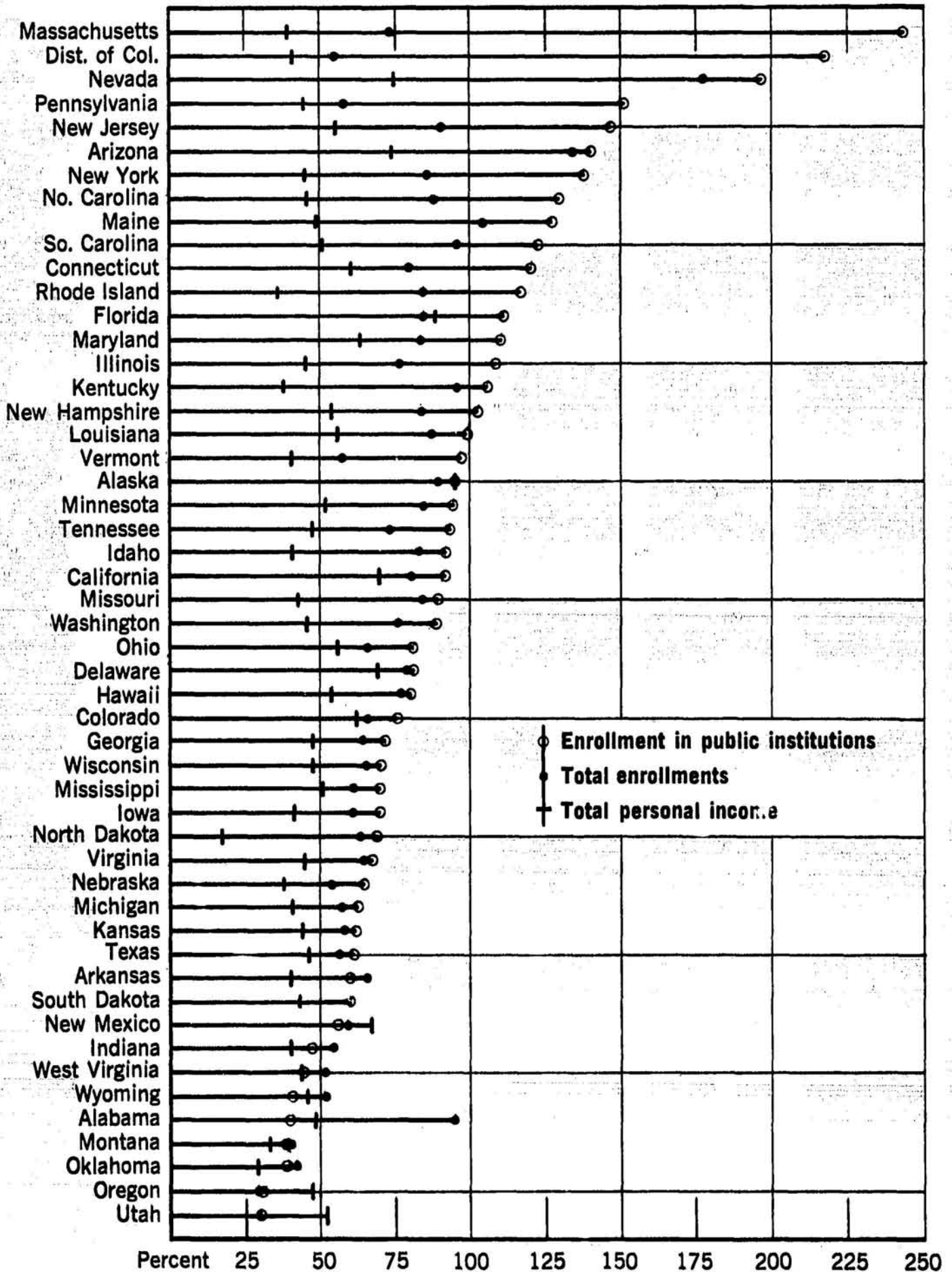


a. 18-year olds included in both groups.

Source: Bureau of the Census and Office of Education.

Chart 2

**Projected Percent Increase in Degree-Credit Enrollment in Higher Education
Compared with Projected Increase in Total Personal Income by State
1963-1970^a**



a. Increase in personal income is 1962-70.

Source: Selma J. Mushkin and E. P. McLoone, *Public Spending for Higher Education, 1970*, Council of State Governments, Chicago, 1965.

tive increases in future tax burdens for public higher education.

Tuition

The case for and against higher tuition has been argued extensively.² Under today's circumstances, the justification for higher tuition appears to be stronger than in the past. In any case tuition rates have increased at public as well as private institutions of higher education.

A low- or no-tuition policy is a general state subsidy from all state-local taxpayers for higher education. Such a policy enables all enrollees to obtain higher education through a partial shifting of costs to the taxpayer. It reflects the view that there are large social benefits involved beyond the private benefits to the individuals concerned. The argument for keeping tuition and fees low has been expressed as follows:

... if a democratic society is to preserve itself, it must educate itself. Therefore, education is a social responsibility, not a private privilege. ... it follows from the nature of this responsibility that the economic support of education at all levels is not a matter of personal desire but of social need.³

• • •

The only valid reason for the support of education out of public treasury is that an important general public benefit is produced. This is the theory on which rests the support of the entire public school system in the United States. . . . In these times there should be no question whatever that education beyond the high school for a great many young people is as essential to the public welfare and security as education of elementary or secondary level. To impose barriers to continued

attendance, in the form of tuition fees, at the time of high school graduation is as unsound as it would be to impose such barriers at the end of the elementary school or at the end of the fourth grade.⁴

Apart from the argument that higher education is a necessity for a democratic society, a low-tuition policy appears to imply that private returns on investment in education are relatively slight. If private returns were small, while social returns were large, a good case would exist for the low-tuition policy. The taxpayer would foot most of the bill and also receive most of the benefits. Such a view of the returns of education was probably realistic when public institutions concentrated on educating school teachers. However, the state teachers colleges have been rapidly converted to general colleges of liberal arts, sciences, and engineering. College training has become a requisite to far more of the jobs in industry and business than was true a generation ago. Thus, higher education is no longer designed primarily for those who make some special contribution to society which is not reflected in their subsequent salaries or incomes.

The research discussed earlier on returns to investment in education has concentrated on private returns. Little has been accomplished in estimating social returns.⁵ Becker's results indicate that the private returns are substantial and would justify private investment of funds for long periods with interest rates comparable to those earned on other forms of investment. There is no evidence as yet of a decline in the yield from investment in higher education.

2. See for example, "Is Higher Tuition the Answer?" "Yes" by Seymour Harris, "No" by John D. Russell, in *Financing Higher Education*, No. 4 in a Series, Southern Regional Education Board (1959).

3. Eugene B. Power, "Public Higher Education and the Low-Tuition Principle," *Michigan Quarterly Review*, Vol. 1, No. 2, April 1962.

4. John D. Russell, *loc. cit.*, p. 4.

5. See discussion above, pp. 19, 20.

Since private returns are substantial, the individual who receives the benefits may appropriately bear a large share of the costs. If more people are attending college because of the expected returns in future income, it seems reasonable to ask them to pay a larger portion of the cost.

If the barriers to the flow of funds into this form of investment were reduced (e.g., by improved facilities for loan financing), the case for increased general taxpayer subsidy through free or low tuition would be weakened. Indeed, it is hardly fair for the general taxpayer to subsidize expenditure that will raise further the incomes of those whose incomes are, or will be, well above the average. This would amount to using governmental finance to increase the inequality in the distribution of income.

The case for increased tuition becomes stronger when one considers the large tax funds that will be involved in the future and the possible alternative uses of such funds. To illustrate: with an enrollment of, say, 5 million in public institutions in 1970, a \$200 increase in average tuition would mean additional gross revenues of \$1 billion. Part of such an increase would presumably be offset by additional scholarship aids.

Generally, tuition costs are a relatively small part of the total costs of student higher education. In public institutions typical dormitory charges for the academic year in 1963-64 were \$210 and 7-day board for the academic year cost \$389 (median figures), as compared with \$191 for tuition.⁶ In addition there are costs for books, clothing, and inci-

dentals. Tuition and required fees in 1962-63 amounted to only 13 percent of the estimated cost of attending college at public institutions.⁷ To subsidize higher education through a free or low-tuition policy thus singles out only one portion of costs.

In part tuition policy in public institutions depends on the kind of objective considered paramount. To the extent that expanding educational opportunities to low income groups is a major public policy goal, a given amount of public funds can go much further through the use of scholarships related to need rather than through maintenance of low tuition rates for everyone. A policy of low tuition rates, like that of a tax credit for basic student charges, reduces costs for all enrollees and does not concentrate on providing opportunities for those who might not otherwise attend college.

Even after the increases of recent years (noted below), current tuition rates in most public institutions are very low. In 1963-64 tuition and fees exceeded \$350 per year in only one-tenth of public institutions, and in 35 percent of these institutions tuition and fees were less than \$108 per year. The median figure was \$191.⁸ The typical tuition and fees vary substantially by type of institution. At state universities tuition and fees are larger than at state colleges. Although tuition is free in state liberal arts colleges in California, tuition and fees amounted to \$208 per year at the University of California (Los Angeles) in 1963-64.

One study of 196 representative institutions⁹ showed that from 1949 to

6. U. S. Office of Education, *Higher Education Basic Student Charges 1963-64*, pp. 7, 14, 15.

7. Keppel testimony, *loc. cit.*, Exhibit 10.

8. U. S. Office of Education, *Higher Education Basic Student Charges 1963-64*, Washington 1963, p. 7.

9. Commonwealth of Massachusetts, Report submitted by the Legislative Research Council Relative to State Scholarship and Loan Programs for Higher Education, Senate Report No. 764, January 1964, p. 22.

1961 average tuition and fees at public institutions increased approximately in proportion to median income of families in middle age groups;¹⁰ in private institutions the increase was substantially larger. The increases were relatively greater in the more recent years of this period than earlier. From 1955 to 1961 the average tuition and fees at public institutions rose by 47 percent, and in private institutions by 64 percent. Over the same period, the consumer price index rose by 11 percent, and the median income of families in middle age groups rose by 33 percent. In 1961 the average of tuition and fees in the public institutions in this sample was \$216; in the private institutions, the average was \$1,045. This widening tuition gap is one of the reasons for the more rapid growth of enrollments in public institutions.

Student Loans

Although some private institutions have offered loans to students for many years, government loans for students are a relatively new development. Four states now have direct loan programs. Loan guaranty programs have been authorized in at least 16 states.¹¹ Student loans can potentially provide a large amount of assistance for a small net outlay.

The amount of strictly private loans (not state guaranteed) outstanding is not known. However, one such program, the United Student Aid Program, has about \$56 million of outstanding loans.

State appropriations for student loans for the fiscal year 1965 amounted to \$12.4 million, of which \$8.1 million was

estimated to be for servicing loans to students at private institutions.¹² The significance of these figures is greater than the small dollar amounts suggest because in most cases the appropriations increased an existing fund which is being used to guarantee loans up to ten or fifteen times the amount of the fund itself. The concentration of these appropriations is indicated by the fact that New York State accounted for two-thirds of the total for 1965.

The volume of state-guaranteed loans approved, less repayments and defaulted loans, at the end of June, 1965 was \$164 million, of which \$122 million was in New York State. Up to the end of June, 1965, defaults had amounted to about 0.8 percent of loans approved (Table 12).

The first loan guaranty program was established in 1956 in Massachusetts. A Massachusetts Higher Education Assistance Corporation was set up to raise funds with which to guarantee the repayment of 80 percent of loans made to resident students by Massachusetts banks. Loans are limited to \$500 in an academic year and the cumulative amount of the loan may not exceed \$1,500. The loan is to be repaid within three years of graduation. Through June 1965 the corporation had approved 25,000 loans totaling \$11.9 million. New York State's plan is more generous. The New York Higher Education Assistance Corporation pays the interest charges on all loans while the student is enrolled full-time and, in addition, pays interest charges in excess of 3 percent. The maximum guarantees are larger and six years are allowed for repayment.

10. Families whose heads were 35 to 54 years of age.

11. *Student Loans—Need for a State Supported Program in Oregon*, Report of the Legislature Fiscal Committee, September 1964, p. 15.

12. *The Legislature and Higher Education in New York State*, A report by the Legislature's Consultant on Higher Education (Herman B. Wells), December 1964, Appendix D, p. 51.

Table 12
Student Loan Operations Under State Guaranty Programs
 (Data are cumulative to June 30, 1965)

State	Date of start of loan operations	Total number of		Amount of		
		Loans approved	Borrowers	Loans approved	Repayments	Defaulted loans
Connecticut ^a	Jan. 1962	2,845	1,000 (est.)	\$ 1,494,088	—	—
Louisiana	Aug. 1964	3,273	3,194	1,741,282	\$ 18,109	—
Maine	April 1957	5,129	3,411	2,320,699	735,333	\$ 16,544
Massachusetts	March 1957	24,953	17,395	11,942,238	4,753,463	83,132
Michigan	Nov. 1962	3,047	—	1,963,238	79,120	4,800
New Hampshire	Aug. 1962	876	725	450,729	28,881	500
New Jersey	Sept. 1960	12,422	—	9,799,468	331,272	49,971
New York ^b	July 1958	175,521	96,243	134,723,347	11,415,179	1,283,852
Ohio	July 1962	7,258	—	6,363,449	320,589	7,236
Pennsylvania	June 1964	6,549	—	5,160,651	9,325	1,600
Rhode Island	Aug. 1960	3,699	—	2,315,558	417,980	4,408
Tennessee	Aug. 1963	1,845	—	1,466,802	48,025	—
Vermont ^a	July 1964	194	194	140,946	—	—
Virginia	July 1961	7,942	4,536	4,519,908	646,362	5,476
Total		255,553		\$184,402,403	\$18,803,638	\$1,457,519

a. For the period through December 31, 1964.

b. For the period ending March 31, 1965.

Source: U. S. Office of Education. Summarized from reports of the respective State Higher Education Assistance authorities, commissions, corporations, and foundations.

Table 13
Student Loan Activity Under National Defense Education Act
Fiscal Years 1959-1965

Year	Number of institutions participating	Number of loans	Average loan per borrower	Total amount of loans made (Millions)
1959	1,181	24,831	\$383	\$ 9.5
1960	1,357	115,450	438	50.2
1961	1,410	151,068	470	71.0
1962	1,468	186,465	478	89.1
1963	1,526	216,930	478	103.7
1964 ^a	1,574	246,840	484	119.5
1965 ^a	1,569	319,075	522	166.6

^a. Preliminary estimate.
Source: U. S. Office of Education.

Student loan programs administered by institutions of higher education got a stimulus from the National Defense Education Act of 1958. The more than 1500 institutions with such programs had 319,000 loans averaging \$522 per student in the fiscal year 1965 (Table 13).

The arguments for raising tuition rates apply also to the expansion of student loan programs. This is a means of tying the benefits received to the cost of education. If the private benefits are substantial enough to justify increased tuition, they also justify use of loans.

Student loan programs also are one way in which states can support higher education through both public and private institutions, whereas a low tuition policy discriminates in favor of those using public institutions.

Putting interest rates on these loans below market rates is a form of subsidy which relates the aid in part to financial need — assuming that the extent of borrowing is a rough index of need.

Loan programs appear to have been successful. This is indicated by the

growth in the number of loans and the amounts outstanding as well as by the low number of defaults under state programs which have been in operation for some time.

Scholarships

State scholarship programs are generally meager, reflecting in part the free or low tuition policy of most public institutions of higher education.

Total state appropriations for scholarships in the 1964-65 fiscal year amounted to about \$70 million, of which New York State accounted for \$50 million. Twenty-one states had scholarship programs at the beginning of the 1964-65 school year.

The New York State program is unusual not only in size but also in the types of scholarships offered. The long established "Regents scholarships" (now 17,400 annually) are for four years of undergraduate study with annual stipends varying from \$250 to \$700 depending on financial need. These scholarships are designed for students with outstanding talent. In 1962 the State estab-

lished a new program of "scholarship incentive awards" to provide assistance to every college student who has the ability to complete college. The awards amount to \$100 to \$300 depending on need, and are granted to students attending any college within the State where annual tuition is \$200 or more. Special scholarship awards are also made to nursing students and to children of disabled and deceased veterans. Graduate scholarships and teaching fellowships are awarded on the basis of competitive examinations. The State University also has a scholarship fund designed to help students of limited financial resources who would otherwise suffer hardship as a result of the adoption of uniform tuition charges at State colleges.

In existing scholarship programs, financial need is not a primary determinant of selection—indeed, the term "scholarship" implies exceptional academic ability or accomplishments. According to one recent report:

Evidence . . . suggests that scholarship funds are going to children of families with income substantially above that of average for families in the United States. This may be due to the fact that high-income families are more apt to seek education and seek higher-priced education, which usually is found in institutions with large scholarship funds. Whatever the reason, lower economic classes are not favored by scholarship funds proportional to their numbers, abilities, or economic status.¹³

The Federal scholarship program under the Higher Education Act of 1965 will offer more opportunities for scholarship aid to students of low income families but with less emphasis on educational achievement. The program will provide a geographical spread of schol-

arships favoring states with concentrations of "poor" families. Under the allocation formula, one-third of the funds (outside of a special apportionment for Puerto Rico, Guam, Samoa and the Virgin Islands) would be apportioned among the states on the basis of full-time enrollment in higher education, one-third on the basis of secondary school graduates, and one-third on the basis of "the number of related children under eighteen . . . living in families with annual incomes of less than \$3,000."

Even with these new Federal programs there is clearly much room for expansion of state supported scholarship programs. An increase in scholarship funds, as well as in state loan programs, would logically accompany increased tuition rates.

State Studies of Higher Education

Over the past five years most states have appointed commissions or study groups to examine their problems of higher education. Many of these groups have recommended that the states establish permanent advisory councils on higher education with staffs adequate to do research on needs, costs and financing.

An examination of the reports of such commissions shows a concentration on problems of determining "needs"—usually in terms of projected enrollments and costs per student—and on the administrative problems of the organization of public institutions of higher education and their relations to state governments.

In most reports little consideration is given to problems of financing the increased costs. Indeed, the terms of reference of many of these commissions or

13. Elmer D. West, *Financial Aid to the Undergraduate—Issues and Implications*, American Council on Education, Washington, D. C., 1963, p. 96. The conclusion quoted above is admittedly based on incomplete evidence.

study groups specifically excluded the problems of financing.

Some state studies, however, have specifically considered the financing problem. The framework is usually the "ability of the state to finance higher education," and consists of a projection of personal income and of the tax resources of the state with some attention to other expenditures of state governments.

Thus the Heald Committee report, *Meeting the Increasing Demand for Higher Education in New York State*, (1960), estimated that higher education teaching costs would rise to a little more than 1 percent of total personal income in the state in 1975 as compared with $\frac{2}{3}$ of a percent at the time of the report. The Committee concluded that "...State responsibilities for higher education should be realigned . . . all to the end that education facilities and well-trained faculties are made available to every type of student, at every income level and to meet all reasonable academic and technical needs." (p. 15)

The recent report by Mr. Herman Wells, *The Legislature and Higher Education in New York State* (1964), concluded that the earlier report substantially underestimated enrollments and projected a tripling of higher education by 1975, but it gave little explicit consideration to alternative methods of financing. The projected level of state expenditures assumed that "tuition rates will not be raised except as might be required to finance increased costs of the presently projected capital program, and that the present formulas for the support of community colleges and the

City University of New York will continue." (p. 44)

A study of higher education in Idaho noted that "It is not within the scope of this study to suggest how state revenues for general expenditures can be increased, but it appears inevitable that more money than traditionally has been forthcoming from state sources will be needed if the growth in demand for higher education is to be satisfied."¹⁴

A Report of the Governor's Committee on Education beyond the High School in Texas (*Education: Texas Resources for Tomorrow*, 1964) concluded:

It is the prerogative of the Governor and the Legislature . . . to suggest the ways and means by which the cost of the program . . . may be financed.

It is obvious to the Committee . . . that if we are to achieve excellence in education in Texas and obtain the financing required to achieve the goals set out herein, it will be necessary either to place all institutions of education beyond the high school . . . in a priority category in the state's budget, or in the alternative, procure the required funds through a dedicated tax. (p. 62)

A Michigan study concentrated mainly on the question of whether tuition should be increased or not but without drawing specific conclusions.¹⁵

In a relatively few states, studies of higher education have specifically taken up the question of alternative ways of financing increases in costs. The Illinois Master Plan Committee in 1963 made a detailed report on financing, and illustrated the great variety of views on the appropriate roles of tuition and other student charges, Federal aid, and state

14. Stanford Research Institute, *Long Range Planning for Higher Education in Idaho*, (1963), p. 14.

15. *Alternative Courses for the Provision of Higher Education in Michigan and Their Potential Results in Terms of Services and Costs*, prepared for the Citizens Committee on Higher Education by the Citizens Research Council of Michigan, November 1964, (mimeo).

financing. Its recommendations, with some dissents by members of the committee, included increased Federal aid, an increase in tuition costs to between 10 and 20 percent of undergraduate instructional costs, a broadened scholarship program, expansion of the state-guaranteed loan program, and state provision of at least half of capital and operating costs of community colleges.

A report by an advisory panel to the Kansas Board of Regents (Alvin C. Eurich, Chairman), *Kansas Plans for the Next Generation* (1962), concluded that: (1) "Part of the increased costs can be expected to be financed out of the increased personal income of the people of the States." (2) "An additional portion of the increased costs can be met if the auxiliary enterprise operations . . . are placed more fully on a self-supporting basis, including amortization of building costs. Also a broader base for financing higher education which includes increased federal aid, private financing, gifts and bequests must be thoroughly developed to help meet the higher costs in the years ahead." (3) "An additional portion of the increased cost can be met by moderate increases in tuition rates." (4) "The remainder of the increased cost will have to come from [state] tax increases." (p. 19.)

This report noted that tax increases could be held to a minimum if the State could: (1) plan to educate a larger percentage of students in junior colleges, (2) establish a priority in higher education expenditures, and (3) use private financing to provide a substantial part of the dormitory construction needed in the future. The report noted that among the highest priorities for the next five

years were higher faculty salaries and increased financial "underpinning" of the junior colleges. These needs are "far ahead of the need for more construction."

Increased Efficiency

In the past decade there has been considerable discussion of the possibilities of providing higher education more cheaply and presumably without deterioration of quality.¹⁶ Arithmetical calculations certainly seem to indicate the substantial possibilities of reduced costs in higher education through increased student-teacher ratios, narrowing or consolidation of course offerings, fuller utilization of space, regional cooperation in use of facilities and staff particularly for graduate and other specialized work, more reliance on community colleges, greater use of teacher aids, use of less expensive physical facilities, and adoption of the tri-semester system.

Some of the state studies of higher education have emphasized the possibilities of savings in higher education. The 1962 report of an advisory panel to the Board of Regents in Kansas (cited above) included a chapter on eliminating waste and duplication. The report stated that:

. . . the greatest waste in higher education in Kansas (and in a number of other states too) is caused by:

(1) The failure of universities and colleges to use time, space, personnel, and financial resources as effectively as possible; and to use the available resources to adapt instruction more fully to individual learning rates. . . .

(2) The failure of existing institutions to establish cooperative arrangements for the use of facilities and personnel.

16. For example, Beardsley Ruml and Donald H. Morrison, *Memo to a College Trustee*, Fund for the Advancement of Education, 1959; Millard Roberts, "A Profitable College," *Michigan Business Review*, November 1954; Alvin C. Eurich, "Increasing Productivity in Higher Education," *The Review of Economics and Statistics*, Supplement, Part 2, August 1960, pp. 185-89.

(3) The practice of enrolling in the state universities many undergraduate students who have not demonstrated their capacity for high quality academic study (p. 22).

The large differences in expenditures per student in different types of public institutions suggests that future public costs per student may be held down by greater reliance on the two-year community or "junior" college. The differences in expenditures per student in 1959-60 were as follows:

	Educational and General Expendi- tures per Student
All public institutions . .	\$1,396
Universities	2,143
Liberal arts colleges . .	764
Teachers	732
Technological schools .	2,657
Junior colleges	470

Source: U. S. Office of Education, *Financial Statistics of Higher Education, 1959-60*, p. 50.

However, even though enrollment at junior colleges increased 77 percent from 1959 to 1964 as compared with 60 percent for all public institutions, the two-year institutions make up too small a part of the total for this difference in rates of growth to have much effect on total expenditures for the country as a whole. Enrollment in two-year institutions accounted for 17 percent of the total for all public institutions in 1959 and 22 percent in 1964.

The relative importance of other types of institutions, as indicated by the percentage of total enrollments, has changed little in recent years.

More significant possibilities for greater efficiency in the use of physical and human resources may lie in the spread of the tri-semester and similar systems. In a recent article Mr. John Gardner suggested that:

. . . Virtually every institution [of higher education] is going to have to go into year-round operation through adoption of the quarter system, the tri-semester system, or some comparable arrangement. Less than 20 percent of our colleges and universities have faced up to that reform.¹⁷

Long-range Planning

Most of the state reports on higher education emphasized that to secure greater efficiency—minimize costs while improving quality—as well as to meet rapidly growing needs in this area, it is essential that master plans be developed and implemented not only by institutions but also by states and even regions. Many reports recommended permanent advisory committees to state legislatures and professional staffs to deal with problems of higher education.

The possibilities of improving educational policies and services through inter-regional cooperation are being explored by such organizations as the Southern Regional Board of Higher Education, the New England Board of Higher Education, and the Western Interstate Commission for Higher Education. In his book, *Shaping Educational Policy* (New York 1964), Dr. James B. Conant has emphasized the potential developments in interstate relations, in part as a means of avoiding excessive influence on higher education by the Federal Government.

17. John W. Gardner, "Agenda for the Colleges and Universities," *Journal of Higher Education*, Vol. 36, No. 7, October 1965, p. 361.