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ABSTRACT

Current proposals to assist middle-income groups with college costs and estimates of the burden to parents in different income groups are considered. Reasons for discontant by mildle-income and upper-income groups regarding college costs are considered in relation to the following issues: the demographic squeeze, the temptation to choose high-cost alternatives, other sociological and economic factors, current contribution schedules and inflation, and political reality and government objectives. Estimates are presented of the costs of education, burdens by family income group, and the distribution of aid to students. Additionally, attendance patterns by income group are analyzed. The proposed legislation for the \$250 refundable tax credit is evaluated and compared to the Carter Administration proposal. The estimated costs of both proposals and their benefits by income group are summarized. The Administration proposal consists of three parts: (1) a minimum grant of \$250 to be distributed to students in families with adjusted gross incomes below \$25,000 a year: (2) a \$165 million increase in the College Work-Study appropriation; and (3) an increase of the eligibility ceiling of the Guaranteed Loan Program to \$45 thousand adjusted gross income. It would provide benefits to full-time undergraduates and to some part-time and graduate students. The Administration proposal will cost \$1.2 billion, and the \$250 refundable tax credit will cost \$1.6 billion. The tax credit proposal will distribute 29 percent of the benefits to persons with incomes over \$25,000 in 1978. The Administration proposal limits this share to 11 percent. The Administration proposal is recommended because it keeps the subsidy visible, rather than embedding it into the tax system, and it costs about \$400 million less than the tax credit. (SW)

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EXECUTIVE SUMMARY

There are several reasons who must pareum of college students, regardless of income, are worried about the present level of college bills. The foremer reason is inflation. As prices went up, so did college costs, and the average cost of supporting a mild in college is likely to be \$3,800 in \$10,779, a formicable sum. Inflation is also largely responsible for the eluctance of some more affluent parent to meet college costs by lightly are financing their assets. Since the stock market is depressed and interest rates are high they resent having to sell off their stacks or re-mortalize metr home.

Furthermore relicio-di parents whose culturen might never have qualified for the most expensive trivate or public schools are increasingly tempted to seud meir chalter it such schools are mission standards have been inwered. However, they are uncertain the high cost of these schools is justified, in the light of the poor job prospects facing many college graduates. Hence they jump to the possibly unwarranted conclusion that their increase a substry just like those granted to children from expensive like weak families.

It is difficult to make a consultating college cation of children from families with above-average income. The costs of education have not risen faster man these families incomes. Moreover, students from middle-income amilies, those with incomes in the \$15 to \$25 thousand range, increasingly benefit of federal campus-base and state-sponsored aid programs.

Nevertheless, relief for mode-income parents, either through a tax credit or through special grants proposed by the Ammistration, is now being considered seriously by Impress. In this connection, the Educational Policy Research Center or high. Education has prepared an analysis of both alternatives, and that it to the overall context of college student finances.

This study presents our new and more accurate estimates of the costs of education, burdens by family moore group, the distribution of aid to students and an analysis of arrestance patterns by income group.

The paper concludes with an evaluation of the proposed legislation for the \$250 refundable tax credit, and compares it to the current Administration proposal.

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The estimated costs of both proposals, and their benefits by income group are summarized in Table 11 on page 33. The \$250 refundable tax credit will cost \$1.6 billion, and the Administration proposal \$1.2 billion. The striking difference between the two proposals besides their cost is the distribution of benefits to persons in different income groups. The tax credit proposal distributes 29 per cent of the benefits to persons with incomes over \$25 thousand in 1978. The Administration proposal limits this share to 11 per cent.

Another advantage of the Administration proposal is that, despite its lower estimated cost, it distributes \$141 million more to students in the \$15-\$25 thousand income bracket, the target population believed to need relief.

Both proposals have serious flaws. They fail to address two important gaps in the present aid system. The first of these is the urgent need to increase funds to students from poor families who attend expensive schools. The second is the desirability of giving significant relief to parents who have unusually high college costs. Both the tax credit and the Administration proposal can be considered as gestures of sympathy for students faced with college bills.

On balance, the Administration proposal must be preferred for two reasons: (1) it keeps the subsidy visible, rather than embedding it into the tax system, and (2) it costs some \$400 million less than the tax credit.



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1.

The paper of some stations possible ways of alleviating the burden of college costs. The papers who are not currently aided by public programs. In order and some of the current proposals in context, a brief analysis of oscille reasons for the relief of middle-income families is presented. College costs and the burden borne by parents in different income groups are men estimated, using new data. Finally, we present a brief evaluation a current proposals to assist middle-income groups.

REASONS TOR THE DISCONTENT

The nost liter cited figure in connection with the burden of college costs. The forty-five per cent increase in resident student charges whic localized between 1969/70 and 1975/76. This increase resulted from itemer charges both for tuition, which escalated some 50 per cent during a speriod, and for room and board, which rose between 35 and 40 per cent. By 1976/77, average school-year costs amounted 50 \$3,400. In 1973/7 with inflation abating only slightly, it is quite likely that the average tuition and maintenance of college students for an academic year will be close to \$3,800. In

These are truly staggering amounts to finance out of post-



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estimates indicate that in the face of post increases of some \$1,100 per full-time dependent student between 1000 70 and 1975/76, parental contributions increased by many \$246, so that the share of college costs borne by parents octually beclined by another per cent. By contrast, the share of grants are loans increased some even per cent during this period. In other the much of the moreover in college costs was met by government-street programs designed for this very purpose. 2

While on groups have benefited substantially from government aid, others have that they were left out. The middle- and upper-income groups have resultly been most all in complaining about the high cost of colume. One of the reast or their increased concern are summarized selow

The emographic squeeze. The mid-1970's have witnessed a "demographic squeeze," i.e., the bunching up of college-eligible students in families with incomes above the median. The number of families with four members increased by a million. The number of families of this size in the top forty per cent of the income distribution increased by half a million. By contrast, families with five and six members have declined in number (especially those with six members).

Families with more than one dependent in full-time college have increased from 13.1 per cent of the total of families with any children in college to 15.5 per cent, i.e., from roughly one in eight to one in seven. One in five families with incomes over \$25 thousand per household had



more than one dependent in college.³ One of four college students is a member of a family with more than one member enrolled in some post-secondary course.

The demographic squeeze has been accentuated by the decime in the support of graduate students. An increasing number of well-to-families support students who attend graduate school. Five or ten years ago, these students would have benefited from high graduate student stipends and would no longer have tapped family resources.

While, undoubtedly, there will still be families with incluiple students in college, their number is likely to decline in the next five years. The crest of the baby boom has passed through the college, and the next generation of students is more widely spaced than the one enrolled in postsecondary schools today.

The temptation to choose high-cost alternatives. The burder of college costs can be substantial for parents in the upper-income brackets whose children gain admission to the most expensive private colleges.

Their expected contribution is subject to the highly progressive CEEB schedule. By contrast, parents in the same income bracket whose children attend public or inexpensive private institutions are likely to spend less on college than the amounts suggested by the CEEB.

In the 1960's, when there was a shortage of college places, the mere fact that a child was admitted to an exclusive private college was a badge of honor for which parents were expected to pay. Today, with a



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surplus of private college spars parents whose children are less gifted suddenly have the opportunity and them to more expensive private schools. The temptation is there for some prestige still attaches to private education, but the desire to sacrifice the standard of living attained while children were attending free public secondary school is absent.

As the state universities' flagship schools gain in prestige, compared to the less distinguished private schools, students in the higher reaches of the income distribution are likely to opt for the cheaper state alternative. The financial sacrifice that would be required for the more expensive school does not seem to be worthwhile.

The extent to which the tuition gap, the difference between the cost of attending a private college and the cost of a public college, influences parents and students has not been documented. We are certain only that the percentage of full-time students attending private institutions has changed very little in the course of the past five years. Either these schools have become more democratic and attract students from lower-income groups, or, despite all its complaints, the upper-middle class is still willing to pay, albeit begrudgingly, for the extra cost of a private education.

Other sociological and economic factors. The pressure from the middle class to obtain some subsidy for its children's college education may have any number of other causes. The most likely explanation is the conscious or subconscious resentment against having to sacrifice

either its standard of living or its savings to pay for what they believe the poor get for free. Politically, there is always pressure to nationalize whatever services are provided to the poor at little or no cost, and which the rich can also buy. The parallel between higher education and healthcare should not escape Congress-watchers.

Another possible reason for the pressure to introduce direct subsidies is the aversion against debt among the upper-middle class and also among some middle-class families with strong European ethnic values. Anecdotal accounts of the effect of increased loan ceilings indicate that there was no great rush for loans on the part of families in the higher income brackets. Parents whose incomes were in the higher income ranges did not use borrowing to reduce the strain on their cash flow.

The willingness of students from these families to saddle themselves with debt may well be decreased by recent developments in the job opportunities for college graduates. While the average college graduate still lands a job at a higher rate of pay than does a young person with less education, a substantial minority of graduates have been placed in jobs formerly filled by persons with less impressive educational credentials. The chancy outcome of a college education, especially for persons not likely to complete the full course, is probably adding to the reluctance to borrow. As long as upper-middle income parents believe it is important



for their children to attend college, they are forced to foot the bill, and have loud complaints on the subject.

Current contribution schedules and inflation. Parents become eligible for aid from BEOG or institutionally administered funds after having contributed a pre-determined portion of their income and an additional sum which is to be levied from their assets. It has been argued that the contribution of assets puts too high a burden on some parents.

asset is the equity in their housing. However, they do not consider the inflated value of the house bought years ago as part of their disposable assets. The cost of alternative housing has risen as much as, or more, than the value of their homes. If parents declare the current value of their residence, the amount of aid they are entitled to is reduced. If they cheat, and report the original price less mortgage, there is no ready way to prove them wrong. The incentives for shading the truth are great, especially since current mortgage rates are high and the cost of refinancing a house is extremely onerous. The cost of second mortgages is higher still, and double-digit interest rates appear prohibitive. Hence parents who cheat feel guilty, and those who do not, feel cheated.

Parents who saved for their children's college education have suffered from inflation as well. Those with bank accounts saw the value of their savings and interest decrease in real terms. Those who invested in fixed income securities fared worse, since interest rates rose



as expectations of inflation depressed the price of bonds. Investors in equities were hurt worst, as the stock market failed to reflect underlying values and stocks declined as well. Speculative stocks which were favored by young investors and even growth stocks have declined most in value. Caught in the poor market, many parents are loathe to part with their liquid assets at currently depressed prices.

If inflation were a way of life for Americans, these developments would have been anticipated. But they could not be, since this country has enjoyed long years of relatively stable prices. People are accustomed to dollars buying a certain amount of goods, and parents of college students may be said to suffer from a money illusion in decrying the high cost of college. While college costs have not risen any faster than other prices, the resentment about the overall price rise spills over to college costs.

Political reality and government objectives. In political circles, the impression persists that parents with incomes between \$15 and \$35 thousand a year are the most agitated about the costs of sending their offspring to college. It is quite possible that the unease about college costs extends even beyond this level. At any rate, lawmakers are contemplating some relief to households with dependents in college, irrespective of income.

The Administration does not view these developments with sympathy. Until now, their policies for student support have always



emphasized student aid as the means to facilitate access for the economically weak, especially at low-cost institutions. Currently, political forces are pushing them to rethink this policy, since the electorate believes that (a) the contribution schedule is too steep, and (b) perhaps more attention should be paid to households which incur higher-than-average costs.

These pressures are occurring at the worst possible time, since we are faced with a surplus of college-educated persons in relation to jobs formerly believed suitable for persons with their level of education. Social returns and benefits from investment in postsecondary education are likely to decline. Under these circumstances, it would make sense for the government to put more stress on loans as a means to finance education. Only by making students more conscious of costs are we likely to restore the balance between demand and supply.

Social policy and political reality are thus likely to crash headon. Social policy must emphasize the full cost, with reliance on subsidized borrowing. Political pressures are likely to require outright subsidies, especially to parents with high bills for education.

COSTS OF COLLEGE ATTENDANCE

This paper presents the first national estimates of cost of attendance and parental contributions by the level of the income of parents with full-time dependent students in college. Until now the distribution of college costs by income level was based on estimates of family incomes,



which included the earnings of relatives living with a given head; relatives who, under existing regulations, are not obligated to support the college costs of others in the family.

More importantly, the figures which are used most often for this purpose are inaccurate. They are derived from the October Current Population Survey, which is acknowledged by the U.S. Census Bureau to underestimate family incomes by some 20 to 25 per cent. We were fortunate to have the opportunity to analyze the data collected by the Survey of Income and Education conducted in 1976. This survey collected more accurate information about the income of persons in the United States. We have used the information in the Survey to estimate both the family and the parental incomes of full-time dependent students, and have derived a new set of figures to estimate burdens for dependent students. The analysis below is based on these new data.

Students by income. Table 1 compares estimates of the distribution of full-time students aged 18-24 by income group from (1) the October Survey, (2) that survey adjusted with the help of the March results, and (3) the estimates obtained from the Survey of Income and Education. The differences between the three estimates are quite significant. In 1975 the October CPS estimated that 20.8 per cent of all students came from families with incomes under \$10 thousand, and the adjusted figures reduced this proportion to 16.1 per cent. The Survey of Income and Education estimates placed the share of enrollment of students from families



TABLE 1

ESTIMATED DISTRIBUTION OF FULL-TIME DEPENDENT UNDERGRADUATES AGED 18-24 BY FAMILY INCOME AND BY PARENTS' INCOME IN 1975

(in per cent)

| | CPR, P-20 Family | CPR, P-20 Adjusted By CPR, P-60 Family | SIE Family | SIE Parents |
|-------------------|---------------------|---|------------|-------------|
| \$0-\$5,000 | 6.8 | 4.9 | 3.7 | 8.8 |
| \$5,000-\$10,000 | 14.0 | 11.2 | 9.5 | 13.1 |
| \$10,000-\$15,000 | 20.9 | 15.6 | 13.1 | 16.1 |
| \$15,000-\$20,000 | 19.7 | 18.3 | 16.8 | 18.2 |
| \$20,000-\$25,000 | 15.1 | 17.4 | 17.0 | 16.8 |
| \$25,000+ | 23.3 | 32.5 | 39.9 | 27.0 |
| All | 100.0 | 100.0 | 100.0 | 100.0 |

Sources: CPR, P-20, #303, p. 38. CPR, P-60, #105, p. 2.

Special tabulations of 1976 Survey of Income and Education.

Methodological note on P-20 adjusted by P-60: see Appendix. Totals may not add up to 100.0 due to rounding.



with incomes of less than \$10 thousand at 13.2 per cent. (Table 1)

The extent to which the incomes of family members other than the head play a part in the income of economically weak families is highlighted in the last column of Table 1. This shows that 21.9 per cent of all students had parents whose incomes were below \$10 thousand, about half as many again as was estimated when the incomes of all members of the family were reported. Our analysis for dependent students is based whenever possible upon the income of parents.

The distribution of students by income for full-time undergraduate dependent and independent students of all ages in 1976 appears in Table 2. The income distribution of dependent students does not change significantly from that of Table 1, since most of these students, some 90 per cent or more, are under age 25.

Costs of attendance, by income. The costs of attendance below were estimated using the SIE income distribution of full-time dependent students, and a special analysis of student budgets conducted by the U.S. Bureau of the Census in October 1973.

The most striking finding is that in 1976-77, on the average, parents with incomes under \$7,500 did not need to contribute anything to the academic and living costs of their dependents. Parents with incomes between \$7,500 and \$12,000 contributed an average of \$748, less than a quarter of the cost of the academic year. The contributions of parents with



TABLE 2

DISTRIBUTION OF FULL-TIME UNDERGRADUATES BY INCOME GROUP, 1976/1977

(in thousands)

| | Full-Time Dependent | Full-Time Independent | Total |
|-------------------|------------------------|--------------------------|-------|
| \$0-\$7,499 | 671 | 1,161 | 1,832 |
| \$7,500-\$11,999 | 561 | 450 | 1,011 |
| \$12,000-\$14,999 | 413 | 240 | 653 |
| \$15,000-\$19,999 | 729 | 270 | 999 |
| \$20,000-\$24,999 | 740 | 141 | 881 |
| \$25,000 or more | 1,191 | 153 | 1,344 |
| | 4,305 | 2,415 | 6,720 |

Source: Special tabulations of 1976 SIE, adjusted for income changes 1975 to 1976.



incomes, between \$12 and \$15 thousand increased to \$1,096, between \$15 to \$20 thousand, \$1,905, and those with incomes over \$25 thousand a year averaged \$2,672. (Table 3)

The estimated contributions of parents were calculated as a residual after other sources of funds were subtracted. Work by students, either under the College Work-Study program or procured independently, played an important role in student finances. So did borrowing, especially among students from families with parental incomes of \$12 to \$15 thousand, who borrowed as much as 15 per cent of the cost of college. Other students in all but the highest income brackets borrowed 10 per cent or less of the estimated annual outlays. Recent increases in the income ceilings of the GSL program are likely to increase borrowing by students whose parents have incomes in the \$25 to \$35 thousand bracket. Preliminary estimates indicate that the borrowing by these students has quadrupled since 1975/76.

Important shifts in college aid have taken place in the past three years. As BEOG's have taken care of an increasing share of the needs of lower-income students, other aid, such as Supplemental Educational Opportunity Grants, state-funded aid, and College Work-Study, has been channelled to students with parents in higher income groups. Thus, dependent students whose parents had incomes of \$15,000 or more (in 1976/77 dollars) received little in the way of SEOG's or college work-study grants in 1974/75. By 1976/77, however, the same group



TABLE 3

SOURCES OF FINANCING ACADEMIC YEAR EDUCATIONAL AND LIVING EXPENSES OF ALL FULL-TIME DEPENDENT UNDERGRADUATES BY FAMILY INCOME IN 1976/77 (dollars per capita)

| | Number (000's) | Cost | Grants 1 | Government Loans ² | College Work-Study | Other Work | <u>Transfers</u> ³ | Total | Parents |
|-------------------|----------------|-------|----------|-------------------------------|-----------------------|---------------|-------------------------------|-------|---------|
| \$0-\$7,499 | 671 | 2,818 | 1,016 | 317 | 197 | 648 | 640 | 2,818 | - |
| \$7,500-\$11,999 | 561 | 3,005 | 560 | 260 | 153 | 926 | 358 | 2,257 | 748 |
| \$12,000-\$14,999 | 413 | 3,320 | 341 | 508 | 186 | 949 | 240 | 2,224 | 1,096 |
| \$15,000-\$19,999 | 729 | 3,475 | 249 | 349 | 73 | 1,105 | 140 | 1,916 | 1,559 |
| \$20,000-\$24,999 | 740 | 3,575 | 205 | 235 | • | 1,130 | 104 | 1,470 | 2,105 |
| \$25,000 or more | 1,191 | 3,788 | 75 | - | • | 971 | 70 | 1,160 | 2,672 |

Source: Special tabulations of 1976 SIE. See Appendix.



¹Grants = BEOG, SEOG, State Grants. ²Loans = NDSL, GSL, State GSL. ³Transfers = VA, Social Security.

of students claimed \$70 million of SEOG and CWS monies, representing 8.9 per cent of all SEOG's and 15.4 per cent of all CWS grants to dependent students.⁴

Aggregate figures of aid per dependent student do not indicate that there is a violent crisis in the financing of college costs. However, there are such wide variations in college costs that the averages tend to mask vast differences. Roughly one-third of all students whose parents had incomes under \$12 thousand in 1976/77 had costs of less than \$2,200. Above the \$25,000 level the proportion of students in low-cost schools declined to 15 per cent. At the other end of the spectrum, between one of five dependent students whose parents had incomes under \$12,000 a year had costs of more than \$4,400. The proportion increased to one out of four for students in households with incomes between \$12 and \$25 thousand, and rose to 38 per cent for students whose parents' incomes exceeded \$25 thousand. (Table 4)

Within each group, except the very poorest, parental contributions for some parents were somewhat below what could be expected from the CEEB contribution standards. At the same time, a minority of parents in all income groups were contributing substantial portions of their income to pay for the college costs of their children. Among the most affluent, the CEEB schedule expects contributions to college costs to escalate quite steeply, and it is only natural that this group is responsible for considerable pressure on Congress for some relief from college costs.



TABLE 4

DISTRIBUTION OF COSTS FOR FULL-TIME DEPENDENT STUDENTS IN 1976/77 BY PARENTAL INCOMES

(in percentages)

| | Less Than \$2,200 | \$2,201- \$3,300 | \$3,301- \$4,400 | \$4,400+ | Total |
|-------------------|-------------------|---------------------|---------------------|----------|-------|
| \$0-\$7,500 | 36 | 30 | 21 | 13 | 100.0 |
| \$7,501-\$12,000 | 35 | 27 | 20 | 18 | 100.0 |
| \$12,001-\$15,000 | 27 | 27 . | 20 | 26 | 100.0 |
| \$15,001-\$25,000 | 25 | 26 | 21 | 28 | 100.0 |
| \$25,000+ | 15 | 25 | 22 | 38 | 100.0 |
| Total | 28 | 27 | 21 | 24 | 100.0 |

Source: 1973 CPS.

1976 SIE.

Costs and incomes inflated to 1976/77.



Burdens of college costs per family. The burden of college costs for the average family is some 15 to 25 per cent higher than the parental contributions reproduced in Table 3. This difference is caused by the fact that some families have more than one dependent enrolled in postsecondary education. Table 5 shows the adjusted burdens per family as a percentage of both the pre- and post-tax income. All families with incomes between \$7,500 and \$25,000 contribute between 10 and 12 per cent of parents' post-tax income, with the share increasing slightly as the income of parents becomes larger.

A good argument can be marshalled that there is no reason to fine tune these programs to equalize average contribution between income groups. As long as costs to parents vary within the same income groups, an orderly progression of contribution rates is not very meaningful.

A more detailed examination of college costs, taking into account the proportion of various types of students attending schools with different levels of costs and tuition, indicates that perhaps 20 per cent of the parents in the \$15-\$20 thousand income bracket shoulder extremely high costs. As many as half of the parents in the \$25 to \$35 thousand income group may also be in the same boat. (Table 6)

A preliminary analysis, based on simulated data, indicates that the fairest way to introduce relief to upper-level income parents is to offer selective aid to those with exceptionally high college outlays. The



TABLE 5
FAMILY CONTRIBUTION AS PER CENT OF AVERAGE INCOME

| Income Bracket | Pre-Tax | Post-Tax |
|-------------------|-------------|----------|
| \$7,500-\$12,000 | 9 .2 | 10.1 |
| \$12,000-\$15,000 | 9.8 | 11.0 |
| \$15,000-\$20,000 | 10.6 | 12.1 |
| \$20,000-\$25,000 | 10.6 | 12.2 |
| \$25,000 or more | 8.9 | 10.4 |

Source: SIE; IRS: Selected income tax by size of adjusted gross income, adjusted for number of postsecondary students in families with different parental incomes.



TABLE 6

ILLUSTRATIVE FINANCING OF POSTSECONDARY COSTS BY DIFFERENT LEVELS
OF COLLEGE COSTS BY INCOME GROUPS, 1976/77

(dollars per capita)

| Level of Costs | Less Than \$10,000 | \$10,000-\$15,000 | \$15,000-\$25,000 | \$25,000+ |
|--------------------------|--------------------|-------------------|-------------------|-----------|
| Twenty-Fifth Percentile | 1,650 | 1,700 | 2,100 | 2,600 |
| Parents | 150 | 550 | 930 | 1,620 |
| Loans | 165 | 10 | 10 | 10 |
| Grants | 385 | 20 | 10 | 10 |
| Work | 950 | 1,120 | 1,150 | 970 |
| Fiftieth Percentile | 2,400 | 2,500 | 3,000 | 3,500 5 |
| Parents | 150 | 1,200 | 1,600 | 2,520 |
| Loans | 240 | 80 | 100 | 10 |
| Grants | 1,060 | 100 | 150 | 10 |
| Work | 950 | 1,120 | 1,150 | 970 |
| Seventy-Fifth Percentile | 3,400 | 3,800 | 4,200 | 4,600 |
| Parents | 150 | 1,300 | 1,850 | 3,250 |
| Loans | 340 | 600 | 500 | 10 |
| Grants | 1,960 | 780 | 700 | 370 |
| Work | 950 | 1,120 | 1,150 | 970 |
| Eighty-Fifth Percentile | 3,700 | 4,300 | 4,700 | 5,200 |
| Parents | 150 | 1,400 | 2,200 | 3,800 |
| Loans | 370 | 1,200 | 550 | 30 |
| Gran 3 | 2,230 | 1,580 | 800 | 400 |
| Work | 950 | 1,120 | 1,150 | 970 |



rationale for this selective aid is obvious, once one examines per capita subsidies to students from various income groups who have different levels of costs. For students whose families have incomes under \$10,000 a year, the subsidy rises steeply with the cost of education. For those with incomes in the middle range, i.e., between \$10 and \$15 thousand a year, the subsidies are highest at both ends of the cost range. In the \$15 to \$25 thousand group, the subsidies vary least between cheap or expensive schools. For students from households with incomes of \$25 thousand and over, however, the subsidies decline quite steeply over most of the range. High-income families that send their children to average-cost public institutions are subsidized to the tune of nearly \$2,200, but the subsidy declines to \$1,000 for children who attend poorly-endowed private schools. Therefore, a subsidy plan which took high college costs into account would be defensible on the grounds of equity. (Table 7)

Incomes and enrollment rates. The argument that college costs put an excessive burden on parents with moderate incomes is often heard. This argument has been buttressed by statistics purporting to show that the proportion of dependent children who attend college is lower in households above the poverty level than in those below that level.

This argument is fallacious because these figures (1) exclude non-degree students enrolled in vocational programs, and (2) do not take into account the exodus of dependents from poor families. Once non-degree students are taken into consideration, the proportion of full-time



TABLE 7
SUBSIDIES BY DIFFERENT LEVELS OF COLLEGE COSTS BY INCOME GROUPS, 1976/77
(per capita)

| Level of Costs | Less Than \$10,000 | \$10,000-\$15,000 | \$15,000-\$25,000 | \$25,000+ |
|--------------------------|--------------------|-------------------|-------------------|-----------|
| Twenty-Fifth Percentile | | | | |
| Total | 2,333 | 2, 050 | 2,075 | 2,190 |
| Income Tax | 88 | 179 | 213 | 328 |
| Loans | 20 | ĺ | 2 | 2 |
| Institutional | 1,850 | 1,850 | 1,850 | 1,850 |
| Direct Aid | 385 | 20 | 10 | 10 |
| | | | | 21 |
| Fiftieth Percentile | 4 704 | 1 504 | 1.704 | 1 055 |
| Total | 3,084 | 1,594 | 1,694 | 1,355 |
| Income Tax | 145 | 191 | 235 | 328 |
| Loans | 29 | 10 | 16 | 2 |
| Institutional | 1,850 | 1,293 | 1,293 | 1,015 |
| Direct Aid | 1,060 | 100 | 150 | 10 |
| Seventy-Fifth Percentile | | | | |
| Total | 3,237 | 1,882 | 1,834 | 1,024 |
| Income Tax | 221 | 293 | 317 | 472 |
| Loans | 41 | 72 | 80 | 2 |
| Institutional | 1,015 | 737 | 737 | 180 |
| Direct Aid | 1,960 | 780 | 700 | 370 |

TABLE 7 (Cont'd)

SUBSIDIES BY DIFFERENT LEVELS OF COLLEGE COSTS BY INCOME GROUPS, 1976/77

(per capita)

| Level of Costs | Less Than \$10,000 | \$10,000-\$15,000 | \$15,000-\$25,000 | \$25,000+ |
|-------------------------|--------------------|-------------------|-------------------|-----------|
| Eighty-Fifth Percentile | | ···· • · · · | : -4 | 4 000 |
| Total | 3,256 | 2,317 | 1,531 | 1,329 |
| Income Tax | 245 | 413 | 332 | 484 |
| Loans | 44 | 144 | _88 | 5 |
| Institutional | 737 | 180 | 310 | 440 2 |
| Direct Aid | 2,230 | 1,580 | 800 | 400 |

dependent students increases slightly as family incomes grow from the poverty level to roughly \$20 thousand in 1975. Above that level, it increases much more steeply. While a fifth to a quarter of all dependents 18-24 in families with incomes of less than \$20 thousand are likely to be enrolled in college full-time, this proportion rises to 29 per cent for dependents 18-24 in families with incomes of \$20-\$25 thousand, and jumps another eight per cent, to 37 per cent, among dependents in families with incomes over \$25 thousand. (Table 8)

Our analysis indicates that the likelihood of persons 18 to 24 continuing to live with their parents is inversly proportional to the income of the household. For example, two-thirds of the dependents 18-24 whose parents have incomes under \$10 thousand become independent, as contrasted to one in eight of dependents in families with incomes over \$25 thousand a year. Once this exodus is taken into consideration, the proportion of dependents in school full-time as a percentage of potential dependents rises even more steeply, as is shown in the last line of Table 8.

The true college attendance rates of students by the income group of their parents is impossible to estimate today. Roughly one-third of all full-time undergraduate students declare themselves independent of their parents. The proportion of independent students has been growing apace during the past few years. So far, there are only conjectures as to the social origins of these students.

A preliminary analysis of students two years out of high school,



TABLE 8

POTENTIAL AND ACTUAL DISTRIBUTION OF DEPENDENTS AGED 18-24 AND OF FULL-TIME STUDENTS 18-24 IN 1975 BY FAMILY INCOME

| Family Income | Less Than \$5,000 | \$5,000- \$10,000 | \$10,000- \$15,000 | \$15,000- \$20,000 | \$20,000- \$25,000 | \$25,000+ | Total |
|---|----------------------|----------------------|-----------------------|-----------------------|-----------------------|-----------|--------|
| Dependents 18-24 (in thousands) Potential | 2,486 | 4,450 | 5,570 | 5,325 | 4,048 | 5,056 | 26,935 |
| Actual | 765 | 1,742 | 2,217 | 2,772 | 2,386 | 4,402 | 14,287 |
| Actual/Potential | .308 | . 392 | .398 | .521 | .589 | .871 | .530 |
| Full-Time Students 18-24/Actual | .061 | . 087 | .096 | .129 | .171 | .322 | .152 % |
| Full-Time Students 18-24/Potential | .197 | . 223 | .241 | .247 | . 291 | .370 | .286 |

Sources: CPR, P-60, #105, p. 92, 158.

Methodology: The distribution of 14-15 year olds (assumed all to be dependent) was "grown" by 7 per cent (to account for the greater earnings of parents of 18-24 year olds, assumed to grow at 1 per cent per year) and then applied to all 18-24 year olds. This is the potential distribution. The actual distribution is on p. 158.



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enrolled in college, showed that in the middle and upper socio-economic groups roughly the same proportion were living away from home and receiving less than \$600 in parental support in 1974. Present aid regulations encourage students to choose an independent status in those cases in which they decide to re-enroll after having dropped out of college.⁵

Changes in incomes and ability to pay. Much of the discussion about parents' ability to pay for college is muddied either by comparing gross incomes in a given year with the level of college costs or, even worse, the pattern of outlays by parents in a given income group with that of the same income group a number of years in the past. The parents of dependent college students are generally richer than the average, and the perceived burden of college costs depends, in fact, on the expected and actual incomes of persons who pay college bills.

While aggregate statistics indicate that persons in the higher-income brackets had incomes which kept up with the cost-of-living index, their net incomes lagged behind this index by some 8-10 per cent. The gap was greatest among the richest.

With dollars not being what they used to be, i.e., depreciating by nearly a third in the course of the last five years, our concept of what is middle income has needed considerable updating. Those truly in the middle-income category, i.e., with incomes between the 40th and 60th percentile, earned an average of \$9,361 in 1969 and \$13,681 in 1975. This income group bracketed persons with incomes between \$8-\$10.8



thousand in 1969 and \$11.5-\$16 thousand in 1975.6

As we pointed out in our analysis of student financing, the costs of students in families with yearly incomes below \$15 thousand are met by existing federal and state grants, by work, and by loan programs. In our opinion, the resentment against the burden of college costs is concentrated among the middle and upper income range, and possibly only the upper range, of parents with children in college. According to our estimates, more than half of dependent full-time students in college are from families with incomes of over \$20,000 a year in 1975. They are the ones who benefit from little or no direct subsidy for college costs. Furthermore, this group is most likely to attend high-cost institutions. Hence, no one should be surprised that their vocal, politically-involved parents feel that some subsidy is owed to them.

\$250 REFUNDABLE CREDIT

Tax credits and deductions against income have received a great deal of attention lately. The one considered most seriously is a \$250 refundable credit proposed by Senator Roth.

An analysis of the advantages and shortcomings of tax credits and tax deductions was published recently by the Congressional Budget Office. The pros and cons of tax credits are discussed in detail there.

It will suffice to state here that most economists are opposed to the tax credit or the deduction of all or part of college costs from taxable income. A minority of these economists, with whom we side, argue



that the tax credit is not likely to benefit its recipients. This assertion is based on the belief that institutions of higher education will raise their tuition to offset the full tax credit. The latest research on the effect of tuition and fees upon enrollment (RAND, SRI, Kohn, Mundell and Manski) has convinced most academic administrators that changes in cost will not affect overall enrollment. Our examination of recent trends in enrollment leads us to believe that the width of the tuition gap has little effect on decisions to choose public rather than private institutions. Thus, both public and private institutions will be tempted to raise their charges, and wide-ranging tax credits or tax deductions are likely to end up as indirect subsidies to colleges, with merely psychological side-effects for the recipients.

Another important shortcoming of most tax relief measures is that they limit the benefits of the remission to a few hundred dollars.

Thus, they subsidize equally those with minimal costs and those with high costs. This scatter-shot approach results in high costs and low benefits.

The regressivity of the tax credit or the tax deduction approach is illustrated in Table 9. The calculations in this table, based upon 1978 income data, assume that a \$250 refundable credit is limited to full-time undergraduates, whose expenses for tuition, fees and books and supplies exceed the allowance used to calculate eligibility for the tax credit or deduction. If the tax credit were to apply to fiscal 1978/79, the 28 per cent benefits would accrue to students whose parents earn over \$25 thousand



TABLE 9

DISTRIBUTION OF BENEFITS BY 1978 INCOME GROUP, AND TOTAL COST OF REFUNDABLE \$250 TAX CREDIT LIMITED TO FULL-TIME UNDERGRADUATES, 1978/79

(per cent)

| | Parental Income Group | | | Family Income Group | | | |
|-----------------------|-----------------------|-------------|---------|---------------------|-------------|---------|--|
| Income Group | Dependent | Independent | Total | Dependent | Independent | Total | |
| Less Than \$10,000 | 18.3 | 55.7 | 31.9 | 9.8 | 54.4 | 26.0 | |
| \$10,000-\$15,000 | 12.8 | 16.3 | 14.1 | 10.6 | 15.8 | 12.5 | |
| \$15,000-\$20,000 | 15.0 | , 12.0 | 13.9 | 12.3 | 12.6 | 12.4 | |
| \$20,000-\$25,000 | 14.7 | 7.4 | 12.0 | 13.8 | 7.8 | 11.6 % | |
| \$25,000-\$35,000 | 21.9 | 6.1 | 16.2 | 26.9 | 6.6 | 19.5 | |
| \$35,000+ | 17.3 | 2.5 | 11.9 | 26.6 | 2.9 | 18.0 | |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | |
| Cost (%) | 64.0 | 36.0 | 100.0 | 64.0 | 36.0 | 100.0 | |
| (millions of dollars) | \$1,021 | \$574 | \$1,595 | \$1,021 | \$574 | \$1,595 | |

Source: 1976 SIE.

Assumption: Incidence of tuition, books, and fees being under \$250 are proportional among income groups. This assumption will cause a slight overestimate of the progressivity of this bill. Note that only full-time undergraduates are eligible for the credit. Estimate of total cost assumes 95 per cent eligibility.



a year. If total family incomes are used to estimate its distribution, benefits are skewed to even higher income families. Our estimates place the share of the benefits for families with incomes over \$25 thousand as of 1977/78 at 37.5 per cent a year.

THE ADMINISTRATION PROPOSAL

Disturbed by the high proportion of benefits which the tax credit would distribute to students ir families with incomes over \$25 thousand a year, the Administration has proposed an alternative package to relieve middle-income families that have children in college. The proposal, priced at \$1.2 billion, is over and above the incremental amounts provided for student aid in the 1979 budget. It would provide benefits to full-time undergraduates, just as the tax credit, and also extend them to some part-time and graduate students.

The Administration's middle-income plan consists of three parts:

- (1) a minimum grant of \$250 to be distributed to students in families with adjusted gross incomes below \$25 thousand a year. These benefits are limited to undergraduates, and are estimated to cost \$867 million in 1978/79,
- (2) a \$165 million increase in the College Work-Study appropriation. All but \$10 million of this amount is likely to benefit undergraduates, and,
- (3) an increase of the eligibility ceiling of the Guaranteed Loan Program to \$45 thousand adjusted gross income, which we estimate will be worth \$130 million in subsidies to this year's undergraduates. Some of the benefits will also accrue to graduate students.



Our estimates of the cost and the distribution of the benefits by income differ from those presented by the Administration. Our allocation of the benefits of the \$250 grant was derived from projections of the income distribution of students in 1978 based on SIE data. The grants under the College Work-Study programs were allocated by income in accordance with the pattern in 1976/77. Less than a fifth of the money is expected to benefit students in families with incomes over \$15 thousand. The Administration, by contrast, made the assumption that the lion's share of the grants would go to middle-income students. This assumption is not warranted, inasmuch as the grants are distributed by financial aid officers in different institutions, and the federal bureaucracy has no control over their distribution to students with different incomes. Finally, all the benefits for the loans were allocated to the \$25 thousand and over group, because lower-income families were already eligible under the existing program. (Table 10)

The Administration package limits the benefit to students in families with incomes over \$25 thousand a year to 11 per cent. The income group spanning \$15 to \$25 thousand a year benefits from roughly half of the program. The balance of the money, roughly 40 per cent, goes to lower-income groups.

COMPARISON OF THE ADMINISTRATION PROPOSAL AND THE TAX CREDIT

Probably the most crucial difference between the two proposals is the cost. The Administration proposal will cost \$433 million less than



TABLE 10

DISTRIBUTION OF BENEFITS BY INCOME GROUP,
ADMINISTRATION PROPOSAL, 1978/79

(millions of dollars)

| | \$250 Grant | College Work-Study* | Loan | Total | Per Cent** |
|-------------------|-------------|------------------------|------|------------|------------|
| \$0-\$9,999 | 191 | 79 | - | 270 | 23 |
| \$10,000-\$14,999 | 167 | 31 | - | 198 | 17 |
| \$15,000-\$19,999 | 259 | 45 | - | 304 | 26 |
| \$20,000-\$24,999 | 250 | - | - | 250 | 22 |
| \$25,000+ | | <u>-</u> | 130 | <u>130</u> | 11 |
| | 867 | 155 | 130 | 1152 | 100 |



^{*\$10} million is assumed to be distributed to graduate students.

^{**}Does not add to 100 per cent due to rounding.

the tax credit. The savings result from channeling \$239 million less to students from families with less than \$10 thousand a year, and from an additional \$318 million that the tax credit would distribute to students from families with incomes over \$25 thousand a year. Under the Administration proposal, beneficiaries in the \$10 to \$25 thousand income group will receive more money than under the tax credit. (See Table 11) It is the Administration's contention that increases in the Basic Opportunity Grants ceilings to \$1,800 will go a long way to meet the needs of students in lower-income families.

An objective evaluation of the two proposals shows little to commend one over the other with respect to the relief of middle-income families with high college costs. Only those students who do not benefit from institutional aid dispensed under College Entrance Examination Board or American College Testing formulae will be better off if either the tax credit or the Administration package is enacted. Those families incurring higher costs and requiring aid, i.e., roughly half of the students in families with incomes between \$15 and \$25 thousand, are likely to have the tax credit or the grant of \$250 deducted from the aid which would otherwise be offered to them.

Neither proposal is without its problems, and both have some desirable features, inasmuch as they give evidence of interest in the financial problems of middle-income families. The advantages of the tax credit are (1) it is simpler to administer, (2) there is no abrupt, and hence



TABLE 11

COMPARISON OF TAX CREDIT AND ADMINISTRATION PROPOSAL

| | Tax Credit | | Administration Proposal | |
|-------------------|---------------------|----------|-------------------------|-----------|
| | Millions of Dollars | Per Cent | Millions of Dollars | Per Cent |
| \$0-\$9,999 | 509 | 32 | 270 | 23 |
| \$10,000-\$14,999 | 225 | 14 | 198 | 17 |
| \$15,000-\$19,999 | 222 | 14 | 304 | 26 |
| \$20,000-\$24,999 | 191 | 12 | 250 | 22 |
| \$25,000 plus | 448 | 28 | 130 | <u>11</u> |
| | 1595 | 100 | 1152 | 100 |



possibly inequitable cut-off at the \$25 thousand income level, (3) it channels more money than the Administration proposal to lower-income students.

The Administration proposal has the following virtues: (1) it costs less, (2) it does not use the tax system to distribute student aid, which protects the integrity of the tax system and also keeps the subsidy visible and more easily controllable, (3) the program benefits a wider constituency, not only full-time undergraduates but also some part-time and graduate students, and (4) it channels loans to the highest-income families, and grants to those in lower-income brackets.

As the lesser of the two evils, the Administration proposal should probably be favored by Congress. Unfortunately, neither proposal addresses two burning and unsolved issues in student aid. As poor students are increasingly concentrated in low-cost schools, how can a financially strapped student be given a greater choice between institutions? And as a minority of parents are asked to contribute as much as a third or a fourth of their post-tax income to pay college bills for their children, how can these parents obtain substantial relief from unusually high college costs? Time pressure and political necessity have forced both Congress and the Administration to sweep these issues under the rug. One can only hope that they will be discussed and examined carefully in the process of re-authorizing the Higher Education Act.



FOOTNOTES

- 1 National Center for Education Statistics, Projections of Education Statistics to 1985-86, by Martin M. Frankel and Forrest W. Harrison (Washington, D.C.: Government Printing Office, 1977), pp. 86-87.
- ²Special Analyses, Budget of the United States Government: Fiscal Year 1979 (Washington, D.C.: G.P.O., 1978), pp. 213-227.
- ³U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 206, "School Enrollment--Social and Economic Characteristics of Students: October, 1969," (Washington, D.C.: G.P.O., 1970), p. 31.
- U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 303, "School Enrollment--Social and Economic Characteristics of Students: October, 1976," (Washington, D.C.: G.P.O., 1976), p.38.
- ⁴Frank J. Atelsek and Irene L. Gomberg, Estimated Numbers of Student Aid Recipients, 1976-77, Higher Education Panel Reports, Number 36 (Washington, D.C.: American Council on Education, 1977), p. 14.
- ⁵Preliminary tabulations of the first and second follow-up of the 1972 National Longitudinal Study of the High School Class of 1972.
- ⁶U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 105, "Money Income in 1975 of Families and Persons in the United States," (Washington, D.C.: G.P.O., 1977), p. 58.
- ⁷Congressional Budget Office, Federal Aid to Postsecondary Students: Tax Allowances and Alternative Subsidies (Washington, D.C.: C.B.O., 1978).



STATISTICAL NOTE

Attendance status: The Survey of Income and Education did not collect information on full-time/part-time attendance. These data were imputed. Male college students who worked 35 hours or more per week were classified as attending part-time. Female college students who worked 35 hours or more per week, or who worked at all and had children under 18 years of age living with them, were also classified as attending part-time.

Income projections: The distribution of students by income in 1978 was estimated by inflating the distribution of students by income in 1975 by 1.22, our estimate of the change in the average wages over that three-year period.

Costs of college by income group: Estimates in the report are for the academic-year costs. They are based on special tabulations of a survey of student budgets conducted by the Census Bureau in 1973. Only respondents who answered all questions were used to derive the estimates. The estimated costs were raised to 1976/77, in line with NCES estimates of increases in average costs reported by U.S. D.H.E.W., National Center for Education Statistics.

CPR P-20 adjusted by CPR P-60 (p. 10): The P-20 series substantially underreports average family incomes, since the October survey does not include detailed questions on income by source, and respondents tend to underreport their income. The P-60 series, based on the March survey, is more accurate, since detailed questions about different types of income are asked that month. Therefore, a reasonable method of estimating the distribution of students



by family income is to adjust the P-20 data by the P-60 data. The total number of families in the P-20 series (No. 303, p. 38) is 99.5 per cent of the total in the P-60 series (No. 105, p. 2). If one assumes that the underreporting in the P-20 series is uniform, it is a simple matter to compare incomes of all families in the P-20 series with that in the P-60 series income distribution and estimate a new distribution of dependent students by income.

Calculation of impact of proposals by income. The U.S.

O.E. Basic Opportunity Grants Estimating model was run using S.I.E.

data. The number of full-time students not eligible for a minimum BEOG grant was calculated by income level to produce the
income distribution for the \$250 middle income grant. The proportion of part-time students attending half-time or more was
estimated from past applications for BEOG's by part-time students.

