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ABSTRACT
The financial crisis for institutions of higher efucation is deepening. Higher tuition rates may be one of the answers, but this would exclude oven more youna people from attendina college because of inability to pay, at a time when qreater equality of odoortanity in higher education has become an important goal. Federal support has hel ped rut not alleviated the serious situation. The establishment of a Higher education loan pool (4EL?) coula helv hoth institutions and stueunts. The pool should be administered by a nonorofit, government-chartered corpuration that would be authorizen to nake three types of loans: (1) contingent repayment loans to stufents up to $\$ 15,000$, which the stulent would repay with a flat-rate personal income tal. for 60 years after graduntion, with the rate related to the original amount borroved; (2) fixed repayment loans to students which would be comparable to present National Defense Education Act loans, but sore liberal: and (3) colleae facllities loans which vould allov colleaes to borrow the full cost of bulldiny facilities with revayment over 50 years. Since ability to pay seems to be a far more effective barrier to colloae education than ability to learn, the contingent loans will especially helo the poor and female students, who previously may have derlined to borrow because of the heavy indebtedness incurred right after college, regardless of incure earned. (P)

by<br>Charles C. Killingswortr

## I

Two items from a conference of college and university administrators last fall illustrate a present dilemm of higher education in the United States. A report to the conference stated that about three-quarters of the students in public institutions are paying higher tuition and other fees than the year before, and that in some colleges the cost increases were as much as 20 per cent. A speaker at the same conference argued that that what the country really needs, if it is to move toward equality of educational opportunity, is free tuition at all colleges.

Thus, we have a considerable gup between the ifsal and the reality-and the gap is growing.*

Ho one in this audience, I assume, would challenge the statement that higher education today is badly in need of more adequate financial support, There ere a few fortunate exceptions, but most colleges and universities today are understaffed, their feculties are underpaid, and their facilities are inadequate. Tc the pleas of the public institutiors for larger oppropriations, governors and legislators liove generally responded that part of the remedy must be found in higher tuftivn rates. Many influential educators have resisted that remedy on the ground that

[^0]every increase in tuition prices out of the market a few more able but impoverished students. The outcome has been that tuition rates have steadily risen, in public as well as private institutions, but by considerably less than enough to fill the gap between the financial needs of the institutions and revenues from other sources, including appropriations.

Many private colleges and universities, with little income other than that from tuition, have been unable to raise their charges by enough to avold figaneial crises, bccause tuition rates in the public sector are much lower than theirs. Consequently, in recent years a significant number of formerly private institutions have been forced to "go public," and it seems likely thet cuen mare will be forced to follow that course in the next few years. Scine spokesmen for the private sector argue that this trend is weakening an important source of diversity und innovation in higher education. Whatever the merits of that argument, the trend undeniably increases the burden on the public purse.

The resistance to higher tuition rates has undoubtedly contributed to the inadequacy of financial support for colleges and univeraities; but because this resistance had been only partially suecessful, the cost of going to college still excludes from higher education many youngsters of higher ability ihan some of those whose parents cun pay the cost. Thus, the simultaneous pursuit of the two goals of more adequate financial support and greater equality of oppontunity has appeared to impede the achievement of either goal.

In the past few years, the federal government has greatly increased its support for both the institutions and the students of higher education. The institutional support is mainly in the form of loans and grants for buildings. This federal support is undoubtedly helping to alleviate an acute shortage of space, and is making it possible for the colleges to accept more new students than they possibly could take otherwise.

It is not belitting this new federal contribution to say that it has by no means soived the financial problems of higher education. At my own institution, Michigan State University, the appropriation increase recommended by the governor thio year is insufficient even to heat, light and maintain the new buildings built with federal assistance, plus other fixed cost increases; as matters now stand, we face the prospect of a tuition increase which way be the largest in the history of the university simpiy to avold drastic cutbacks in rrograms. I know that all or you face similar problems in your own colleges and universities, and we all know that California's higher education system--long a model for other states-now faces a grave financial crisis.

Again, we can all applaud the federal loan, scholarship and work-study progratis for college students, but we must also recognize that ve still fall far short of the goal of equal opportunity for higher education. The federal guaranteed-loan program in particular, which the Adalnisiration regarded as the program most likely to help the largest number of students, has been a disappointment thus far.

Four years ago, I proposed a new approach to the financing of higher education.. This proposal, I belleve, would help to resolve the apparent conflict between equality of educational opportunity and adequate financial support for the colleges and universities. In essence, my proposal was to set up new arrangements under which massive amounts of long-term credit on attractive terms would be avallable to students and to institutions. This proposal ron som's supporters in Congress and within the Johnson Administration in 1963. The reaction which prevalled in that year, however, was that this approach was "too new," and the decision was made to cry to make progress toward solving the prob?ems of higher education with the more corventional approaches that were incorporated in the Higher Education Act of 1965.

Since 1963, other economists have proposed plans sorewhat aimilar to mine, and the general approach has been discussed at several conferences, notably one which was convened by the American Council on Education in 1965. In recent months, as reported in the press, the Johnson Administration has taken a renewed interest in this approach. There are aven published rumors that a Presidential Nescage to Congress on the subject is under consideration. Therefore, it has seemed appropriate to discusa with the members of the Economics Society of Michigan the provisions, the operations and the potential of this new answer to the old question of how to pay for higher edtcations.

The aim of my proposal is to make it as easy for an individual to finance a college education as it is to finarice the purchase of a car or a house. To that end, I propose that the federal government establish a Higher Education Loan Pool.* The Pool should be administered by a non. prorit, government-chartered corporation like the Federal Deposit Insurance Corporation. This corporation would be alichorized to make three main types of loans. The first type would be contingent repayment loans to students. The eligible student could borrow as much as the full cost of four yeare in college, including both subsistence and tuition, up to a maximum of (say) $\$ 25,000$. In return, the student would agree to pay a flat-rate personal income tax for forty years after graduation with the rate related to the total amount borrowed. Some estimates of mine suggest that this contribution rate would be approximately $1 / 3$ of $1 \%$ for each $\$ 1,000$ borrowed, or a maximum of approximately $5 \%$ for the maximum loan of $\$ 25,000$. Collection of this contribution would be tied to the income tax like the social security tax for the self-employed.

The second type would be fixed repayment loans to students. They Would be comparable to these presently provided under the National Defense Education Act, but on more liberal terms. The maximum loan should be the same as under the contingent repayment plan, $\$ 15,000$. The repayment period should be up to 15 years. The NDEA requires that about $10 \%$ of

[^1]the loan funds be provided by the participating colleges, and directs that special consideration be given to students with background or special capacities in teaching, science, mathematics, erigineering, and modern foreign languages; I would urge that these limitations be dropped in an expanded program. A student would be permitted to receive both contingent and fixed repayment loans in any combination as long as total borrowilig did not exceed the euggested maximum.

The third type would be college facilities loans. These would also zepresent the literalization of a present program. Colleges should be permitted to borrow the full cost of building instructional facilities, such as classrooms, laboratories, faculty offices and dormitories. The repayment of sucl. loans should be apread over a period of 50 yesrs, and should te secured by the earmarking of an appropriate amount of student fees for each $\$ 1,00,000$ borrowed.

In time, the repayment income of the Higher Education Loan Pool could be expected to balance the outlays for new loans. for a number of yesis, however, advances would exceed repayments. To finance the operation, the HFLP Corporation should be authorized to sell bonds to banks and to private investors. The federal governasht bhould pledge its full faith and credit . to the repayment of the bonds, and this would insure a low rate of interest.. perhaps around 4\%. I believe that the federal government should also undertake to pay about half of the interest costs involved in recognition of the values of higher education to society in general. It should also pay the costs of administering the corporation, which I think would be nominal. As under NDEA, the responsibility for granting loans to individual students
arould be delegated to the participating colleges. Policy guidence for the HELP Corporation should be provided by a Board of Trustees composed of government representatives, educational administrators, and representatives of the genercl public und the rinancial community.

## III

The three types of loans complement each other in ways that may not be entirely obvious. Letine begin the explanation by considering the nature of some of the problems to be solved.

Virtually all present-day discussions of the financing of higher education concentrate on the problems of the colleges and neglect the problems of the student-oor, more accurately, the would-be students. I do not mioimize the colleges' financial problems, but $I$ believe that the financial husdles confronting the would se students constitute an even graver problem for a democratic society.

For the great majority of youngsters considering college attendance, meeting aubsistence costs is a much more difficult problem than meeting tuition costs. In Michigan's major state-supported universities, tuition presently comes to about $\$ 350$ per year, while room and board cost about $\$ 1,000$ per year. The costs are roughly comparable at wost other yublic universities and are much higher at private institutions. In consequence, we have a kind of double screening of potential college students. Our present rinancing system has the effect of first eliminating most of those who lack the ability to pay; then, of those that remain, the colleges make
a selection mainly on the besis of ability to learn. Th. ability-to-pay screening is far more rigorus and effective than the ability-to-learn screening,

A recent government study of college attendance and non-attendance by a representative sample of the nearly $2,000,000 \mathrm{high}$ school graduates of 1960 illustrated the point. Thirty per cent of the graduates came from families with annul incomes of less than $\$ 4,000$, and only 13 per cent of this group went on to college. At the other end of the scale, another 308 of the graduates came from families with annual incomes of $\$ 7,500$ and over, and $46.5 \%$ of these graduates went to college. If ability to learn were closely related to the family's ability to pay, these attendance figures would not te especially alarming; but we know that this is not the case. The combined effects of ability-towpay and ability-to-learn screening khow up clearly in the following table from the study.

OULLEOE ATTENDANCE OF 1960 HIGH SCHOOL GRADUATES ACCORDINO TO SCHOLASTIC STANDING AND PARENT'S OCCUPATION

| Scholastic Standing in Oraduating Class | ```Percentage Enrolled in College by Occupation of Household HeadNone``` |
| :---: | :---: |
| Upper half | 76.7 41.8 |
| Lower half | 44.417 .5 |

Note tinat, of the upper half of the high school class of 2960 , nearly twice as large a proportion of "white collar" childrer went to college as "other" children; and, more alarming, a larger percentage of "white collar" childreil in the lower half of their class went to college than the percentage of "other" children in the ppper half of their class. This siudy is one of a multiture which show that the occupation and income of the parent are more important determinants of college attendance than most of the usual measures of the ability of the student.

Obviously, lack of money is not the sole factor which prevents able students from attending college. Probably some of them would not choose to spend four years in collegn under any circumstances. But we do rot really kncy the extent to which what we call "lack of motivation" reflects simply a life-long acceptance by the children of the poor of the fact that college education is far bejand their financial ability. The lack of motivation may result in some degree from a lack of expectations.

Present $l o a n$ and scholarship programs do little to remedy this economic screening. Typically, neither loans nor scholarships cover more than a small iraction of the total out-of-pocket cost of a college education, The average loan under the NDEA is about $\$ 500$. The average scholarship at Harvard io a recent year was $\$ 723$, and the average at most larger atate universities was from $\$ 250$ to $\$ 200$. Such modest sums obviousiy cover only a small froction of the cost of attending college. In consequence, neither loans nor scholarships offer adequate assistance to the student from a really poor family. Most present-day loans and scholerships, in fact, go to students from middle-income fanilies who can afford several thousand
additional dollars from their own pockets. The extremely bright student and the outstanding athlete from poor families can usually get adequate financial assistance to meet college costs; the $B$ or $B=$ student from the poor family is much less likely to get such substantial assistance, and all too of ten he finds it impossible to go to college.

Even if conventional loans were available in amounts sufficient to cover most of the full cost of attending college, the repayment terms are usually frightening to the prospective student from a low-income family. Typically, repayment is required in a maximum of ten equal annual install. ments, starting within a year of graduation. Loans from private sources generally carry an interest rate of at least $6 \%$. The student who borrows $\$ 6,000$--probably the ininimum cost of a four-year course at a state university --faces the prospect of paying perhaps $\$ 70$ or $\$ 80$ per month on his loan for ten years, starting immediately after graduation. The $\$ 70$ or $\$ 80$ may be 15\% of his total monthly income when he is first getting started. And the first ten years of the man's career, when the loan must be repaid, are generally the years of lowcst earning power. For girls, the prospect is even more distasteful. If they contemplate marriage soon after graduation (and most do), the loan becomes a kind of "negaitive dowry." Botia male and female borrowers must usually have a co-signer who will assume the burden of repayment in case of death, disability or default of the borrower, and of ten life insurance premiums must be puid on both the borrower and co-signer.

The basic idea of the contingent repayment loans is that the borrower should pledge a fraction of his future income-however large or however small--in return for this type of loan. The transaction between the individual and the HELP Corporation might be compared to the sale of shares of common stock by a private corporation; or the percentage contribution rate to which the individual would commit himself might be compared to the social security tax. It is important to anderstand that some individuals would necessarily repay more than the exact amount advanced by the KELP Corporaiion (plus interest), and some would necessarily repay less. Some people will object to the fact that very few individuals would repay exnctly what they borrowed. But virtually all kinds of insurance require unequal payments for the same benefits; one man pays life insurance premiums for a year, dies, and his widow collects many times the amount he has paid, while others pay in more than the amount ultimately collected. Ald some holders of insurance (for example, automobile collision insurance) pay large premiums without ever collecting anything. The contingent repayment $p^{\prime}$. mbodies an adaptation of insurance principles.

The basic principle of insurance is "spreading the risk." No individual knows how long he is going to live, and no one can predict his lifetime income. Even the 18-jear-old who thinks inat he knows approximately what annual income he will achieve at age 25,35 , or 45 cannot know whether he will live that long. It is possible, though, to predict both mortality rates $\{$ average incomes for large numbers of individuals. This predict-
ability of averages makes it possible for the members of a particular age group to insure each other against the risks of early death and belowaverage lifetime earnings. But--to reiterate--this kind of insurance is possible only if some members of the group pay more into the pool than those who die young or earn less than the average.

Spreading the contributions over 40 years would be comparable to amortizing the cost of an investment over most of its uscful life. This would keep the percentage of income committed relatively low. Some people may feel that such an arrangement would be equivalent to a lifelong "indenture." But the enrollee would be completely free to change employers, occupation, or residence; for that matter, he would be free not to wnrk at all. The concept of servitude cannoi justifiably be stretched to cover an obligation to remit a small percentage of whatever earnings one may have, especially when that obligation has been voluntarily assumed in return for substantial benefits.

Most college loan plans are unattractive to female students. The average female college graduate must expect considerably less lifetime income than her male counterpart because she will spend only part of her mature years in the labor force. Particular women will earn substantially more than the average male; but obviously we cannot foresee winich individuals will be career women and which will be housewives. Many girls are reluctant to incur debts for education because, as stated above, such debts become a "negative dowry" in case of marriage. The average girl is Gearful (and often her parents are too) that this kind of liability would
hurt her marriage chances.* It seems to me that the most reasonable and forthright way to meet this problem is simply to set the basic contribution rate for both men and women high enough to offset the lower average earnings of the latter. If this were done, women would pay only on the basis of their persor:al earnings.

The price that the males would have to pay to permit equal treatment of females is not ver, high. The contribution rate for males and females combined would be about a third higher than the rate for males alone. A separate rate for women, based on about half a lifetime in the labor lace, would be quite unfair to the career woman who holds a job all her life. Although I prefer the same rate for men and women, and payment only on the basis of personal earnings, a somewhat different approach would not be seriously incompatible with the basic plan. For example, husbands might be required to pay some fraction of the unemployed wife's contribution rate--with perhaps a substantial exemption for young children.

A uniform contribution rate for everyone would make the plan virtually neutral with regard to the borrower's occupational choice. Those who enter low-paying occupations would contribute less, those who choose highly-paid careers would contribute more. The conventional loan plan tends to influence the student to shun low-paid callings regardless of their social worth and compatibility with the student's interests.

Preparing a reasonably accurate estimate of the lifetime earnings of

[^2]each year's crop of college graduates would be a difficult and crucial operation. But I think that the difficulties are not insuperable. There is one fundamental error which it would be essential to avoid. This error is well illustrated by the earnings estimates which have been made regularly since 1935 to provide a basis for decisions concerning the financing of old-age insurance under the Social Security Act. These estimates have conststently assumed "level" earnings-i.e., current earnings data have been projected many years into the future without any allowance for the general and persistent rise in income levels which has characterized our entire economic history. Consequently, the Social Security estimates have necessarily been revised again and again, and each estimate has been substantlally higher than the one it replaced. The Social Security authorities have argued in effect, that this policy of consistently and consciously underestimating future earnings provides desirable leeway for the upward adjustment of the promised old-age benefits each time the actuaries announce that their estimates have been rendered obsolete by another rise in income levels.

The orientation of the HELP program would have to be quite different. It would be Social Security in reverse. The participant would collect his benefits first, and then pay his contirbution over many years. In additior, participation would be voluntary. A gross underestimate of future earnings would lead to a contribution rate so high as to deter a grec.t many prospects from participation, and those who signed up for the program vould be overcharged.

It is essential, therefore, to recognize that average incomes at all
ages will rise in the future as they have throughout our history. In preparing my own rough estimates, I have assumed an annual growth factor of $3 \%$ per year. A simple comparison graphically demonstrates the importance of the growth factor. A level projection of average incomes as of 1958 of white male college graduates yields an estimate of about $\$ 387,000$ for average earnings from age 25 to 64 . Inclusion of a $3 \%$ annual growth rate increases the estimate to about $\$ 700,000$ (or nearly double) for the same group over the 40 -year span.* The $3 \%$ growth rate is probably an excessively conservative assumption; the actual increase in average annual money income for white male college graduates 25 or older between 1949 and 1958 was $4.5 \%$ compounded annually. Use of the $3 \%$ figure in my estimates therefore results in a large allowance for adverse selection and other . . uncertain factors. Actual experience under the plan might justify estimates that would result in lower contribution rates in the futre, and dividends for early enrolless.

The attractiveneness of the contingent loan program could be enhanced by including a "buy-out" provision. Allen M. Cartter has suggested an ingenious formulation of such a provision. Give the borrower the right at any time to convert his contingent loan to a fixed repayment type and pay it off immediately; provided that when he does so, interest at the rate of $6 \%$ must be calculated retroactive to the date the loan was made. The 6\%

[^3]interest rate is not out of line with the charge presently made for commercial loans in individuals, and it seems to be a reasonable premium to pay for such a conversion of the contingent obligation. In practice, very few borrsiwers would find it worthwhile to choose this option. Unless his income was extremely high, the borrower would find it more advantageous to continue the contingent payment. It will be necessary to investigate fur. ther the effects of the buy-out option on the financing of the plan; but preliminary estimates suggest that the effect would be small.

The eligibility requirements for contingent repayment loans should be minimal. The primary requirement would be acceptance of the student by an accredited four-year college or university, and his commitment to enroll as a full-time degree candidate. The choice of college would of course be left completely to the student. A requirement of American citizenship would probably be necessary to insure collection of the per-centage-of-income repayment, and a health examination might be needed to exclude those with drastically limited life expectancy. An upper age limit, or a reduced repayment period with higher rates for those above 25, would be necessary. The average lifetime income estimate would have taken into account normal mortality and disability, and it would have been constructed in such a way as to obviate any need to screen applicants on the basis of sex, race, color, religion, high school grades, I.Q. scores, athletic ability, family income, or any of the other factors now sometimes considered relevant in awarding scholarships and making loans. The selection of students should be left entirely to the colleges. If the number of potential loan applicants (plus those privately financed) exceed the
capacity of the nation's colleges, the college admissions offices wnuld decide who was to attend and be eligible for loans. The loan plan would simply eliminate the automatic ability-to-pay screening which today denies a college educacion to scores of thousands of promising youngsters

Extension of the contingent repayment loan plan to various special groups--postgraduate students, community college students, college dropouts-would involve special problems. The discussion of these special problems and possible solutions to them would unduly burden this already lengthy discussion. I he 13 , hat I may run over them with no more than the dogmatically stated conclusion that adaptations of the basic plan could be developed to meet the needs of these special groups.

Details of administration must also be given short shrift here. Loan applications should be handled by the colleges, but collections by the U.S. Treasury (with the aid of the electronic computers of the Internal Revenue Service). Students should receive their locn funds in monthly installments which would stop immediately if the student were expelled or if he dropped out of college. The student could negotiate a new loan for each semester, and could divide his borrowings as he saw fit between the fixed repayment plan and the contingent repayment plan. I assume that the nstion's high schools would willingly provide their students with full infomation about the loan plans and the financial returns on investment in conser erncxinn.

The two other facets of the Higher Education Loan Pool can be discussed much more briefly. They represent mainly expansion and liberalization of existing programs, with one important distinction: the necessary funds (except for half of the interest costs and whatever grants were made for buildings) would not come from the federal treasury, but from the sale of bonds by the HELP Corporation.

The fixed repayment loans would not be very different from the present NDEA loans. The maximum amount available should be $\$ 15,000$; the maximum repayment period should be 15 years; the interest rate should be $2 \%$, with the federal government paying the difference to equal the rate on contingent repayment loans; no means test or "special consideration" for certain fields should be included; and participating colleges should not be required to provide any part of the loan funds. The availability of the contingont repayment loans would do much to meet the need which the present NDEA "forgiveness" feature seeks to meet; but forgiveness of a part of the fixed repayment loan, as at present, would be entirely feasible if Congress continued to be willing to bear the full cost of this provision.

Loans on these terms would be more attractive than any now available. I do not belleve, however, that they would meet the need that the contingent repayment loans are intended to meet. The fixed repayment loan would still place a heavy burden on the years of lowest earning power and thus deter some able students from lcw-income families from borrowing to attend college. Nevertheless, a substantial minority of students may be sanguine
enough to prefer (for at least part of their borrowings) the large, but limited liability instead of the contingent liability which they would assume under the other plan. It seems to me a matter of considerable importance to give the student this freedom of rhoice. Limiting the student's choice would impair the fairness of the whole plan.

The college educational facilities loan program might absorb the present federal programs with similar objectives. The present provisions for partial grants for buildings could be continued. In addition, under my proposal colleges would be granted 50 -year loans at $2 \alpha^{4}$ interest to finance the construction of necessary educational facilities such as classrooms, office juildings and dormitories. Repayment of the loans should be secured by the pledging of an appropriate amount from student fees for the 50 -year period. The amount of money that could be made available by such an arrangement may startle some. An institution with 30,000 students could borrow about $\$ 1,000,000$ for each $\$ 2.06$ per year per student that it pledged. If we assume a total nation-wide enroliment of 6,000000 students in the near future then all institutions combined could borrow one billion dollars for each $\$ 5.30$ per student per year that they pledged. (Increased enroliments in the future would reduce the repayment period.) The point is that quite nominal increases in the tuition or fees charged students could finance building programs of substantial magnitude.

Some institutions have made extensive use of revenue bonds to finance revenue-producing buildings, such as dormitories, student apartments, and football stadiums. I can see no significant difference in principle between pledging the revenue from football ticket sales to secure a loan to build a
stadium and pledging the revenue from a $\$ 5$ per student per year additional tuition charge to build a new library. The 50 -year repayment period seems reasonable since most college buildings last much longer than that. And surely tuition fees are as dependable a source of revenue as board and room fees or football ticket sales. So far as I know, the revenue bond technique has been used very little to finance such facilities as libraries and class. rooms--largely, I suppose, because educators generally hive been reluctant to give pledges of tuition fees as security. Most educational administrators especially those in public institutions, regard any measure which would result in an increase in tuition costs as a long step in the wrong direction. We turn now to an examination of that position.

I have already referred to the view that higher education, like gremmar school and high school education, skould be free to ali. But free tuition is clearly only a means to an end; the goal is equality of educational opportunity. Yet in the century since the founding of the land grant college system the reality has fallen farther and farther behind the ideals of free higher education and equality of opportunity.

There is some danger of semantic confusion in speaking of "free" education. Unless teachers work lor nothing and hold classes in the open air, education cannot be literally "free." Souebody must pay the bills. When we advocate "free" education, we are really saying that society in general should pay the bills. Very few proponents of "free" education have ever advocated however, that society should pay the subsistence as well as the tuition ccsts of college students. Hence, although we have reduced somewhat the relative importance of the ability-to-pay factor in
college attendance in the past century, we have never eveia approached eliminating it.* We have placed college education within the reach of the middle as well as the upper income groups, but we still effectively exclude most of the lower income group. At the same time, we have developed state and local tax systems which, because of their marked regressivity, place a disproportionately large share of the taxation burden on the lower income groups. Hence, when we ask "society" to provide more adequately for public higher education, we are in effect asking that a major share of the financial burden be assumed by the group in society whose children are largely excluded from college by the ability-to-pay screening described earlier in this discussion. It is not surprising that the lower Income groups resist the higher state and local taxes which would be necessary to provide more adequate financing of higher education.

The case for "free" or quite low tuition is further undermined by the conspicuous affluence of considerable numbers of present-day students. Even at Michigan State University, a pioneer exponent of the land-grant philosophy and education for the "common man." $40 \%$ of the students drive cars on campus; and one student in ten expends an average of more than $\$ 4,000$ per year (only $\$ 350$ of which is for tuition:. It is unquestionably true that shciety in general. benefits from higher education; but the benefits are not equaily spread. Public subsidies for higher education to a distressing degree benefit the well-to-do at the expense of the poor.

[^4]I believe that public institutions must accept the inevitability of further inc:eases in tuition rates. He should recognize that, whatever the merits of the arguments for "free" higher education, we have been moving farther and farther away from that ideal. Nothing in the present political situation provides any basis for expecting that resistance to higher tuition rates will be any more successful in the future than in the past. The poor but able students who never get to college have no lobby, and the students who are admitted and who drive cars to classes are far more visible to legislators and taxpayers. Most important of all, even if the goal of free tuition vare suddenly achieved subsistence cost, 3 would still be an insur. montable barrier to college attendance for large numbers of otherwise qualified students.

We must also recognize that free or low tuition is but a means to an end, and that the ultimate end is equality of educational opportunity. I do not suggest the abandnnment of that ultimate end. But I believe that the loan plan proposed herein promises more real equality of educational opportunity than could possibly be achieved through low tuition rates.

With the contingent loan plan, increases in tuition rates need not price prospective students out of the market. An increase of $\$ 100$ per year in tuition rates (i.e. $\$ 400$ for four years) would increase the student'a 40 -year contibution rate by approximately one-eigth of one percent. If all of this increase in tuition were plodged for building loans, the nation's colleges could borrow about 19 billion dollars. That is undoubtediy more then they would want to spend on buildirgs in the next few years, but these figures help to illustrate the effects of the plan. There is another way of lroking at the matter. If all of the state appro-
priations for buildings were diverted to current operating expenses, the latter could be increased by roughly 25 without.any overall increase in state outlays for higher education.

An increase of $25 \%$ in operating funds would provide a breathing spell for our public colleges and iversities. Then the educational authorities and the appropriating authorities could resume their ancient struggle over the proper level of public support for higher education. Perhaps the educailonal authorities would be weakened in this struggle by the availability of ample credit to qualified students to pay higher tultion as well as their subsistence costs. Perhaps, on the other hand, the educators could persuade Congress to include in the HELP legislation some kind of "maintenance of existing effort" clause to insure that present levels of support are at least maintained. In any event, I. see far more good than bad in the fact that the poor but able student would no longer be a pawn in the unending struggle between educators and legislators.

The argument here does not rest on a denial of the proposition that society in general benefits from higher education. I do suggest that we take a more realistic view of the natter of social benefits compared with individual benefits. Highways also benefit society in general, ... , fncluaing many individuals who rarely use them; but for a long time we have placed rajor reliance on user taxes to finance them. Society in general has provided higher education with a piysical plant which has a current replacement value of more than 20 billion dollars. Undoubtedly state and local governuents, as well as private donors, will continue to contribute many millions of dollars to the annual operating costs of
colleges and universities. I propose that the federal government pay half of the interest costs and all of the administrative expenses involved in operating the Higher Education Loan Pool, which would ultimately mean a federal contribution of several. hundred million dollars per year to the cause of higner education.* In view of these social contributions, is it unreasonable to ask the college student to contribute a fraction of one percent of his future earrings to meet some part of the rising costs of higher education? I think not--provided that we set up a credit mechanism which permits the student to pay his contribution as he receives those future earnings.

## VII

Adoption of the suggested plan would undoubtedly result in substantial increases in the number of college applicants, even above present high profections. Because of the time required to add to the limited physical facilities now avallable, there would be (at least during a tranaition period) a great increase in the competition among students for admission to college. The immediate difference that HELP would make would be that college attendance yould be based almost entirely on ability to learn, with ability to pay largely eliminf.ted as a screening factor. Consequently,

[^5]manv applicants coming from the bottom half of their high school scholastic list who would be admitted today would undoubtedly be crowded out by applicants from the upper half of the class who today lack the requisite ability to pay. Most educators would welcome this kind of substitution, at least for the short run. Some good students who attend a local institution to save the cost of board and room would leave home for college, thus improving their educational experience and possibly putting some pressure on the local institutions to improve their offerings in order to hold some of their better students.

In the long run, the colleges and universities would undoubtediy enroll a considerably larger percentage of college-age youth than today. Achleving neaily universal college attendance by the top half of each high achool grefuating class while maintaining the percentage presentiy drawn from the lower half woild undoubtediy raise academic atandards. A more fundamental coneideration is that the removal of economic barriers to college attendance could have a major lmpact on the motivation of high school studenta, wany of whom today know that college is out of the question fre them. Conceivably the attitudes of large numbers of college students might also be affected by the consciousness that education is not a free good but a cost. ly comodity which they would have contracted to pay for themsel.ves.

## VIII

Economists have come to think of education as a form of investment in human beings. Most studies have concluded that this kind of investment
pays good dividends, even when we consider only the pecuniary aspect. Given the strong demand today for almost every kind of highly-trained manpower, how much investment in higher education is the "right" amount? Surely no one will claim that we have a rational process today for deciding that important question. We can only guess what motivates the decisions of private donors, legislators and parents, who together provide most of the resources for higher education. Wouldn't it be more rational to rake the flow of resources into colleges and universities dependent on the decisions of students about how much education they want? That could be moving higher education into the market economy, which is where most investment decisions are made today. Economists have written hundreds of volumes about the virtues of the market as a decision-making mechanism, Educators may perceive come hazards in this kind of system. I belleve that it be a great improvement over the basically political decision-making mechanism on which we now rely. The number of places-that is, the level of opara-tion--in colleges and universities would depend on the decisions of students about whether attendance was worthwhile. Oiven the present power structure in higher education, especially the jealousy with which faculties guard liheir prerogatives, I see littie likelihood that students would control what is taught and how it is taught.

The way to move higher education into the market econom is to make avallable to students and institutions massive amounts of long-term credit. Much of the fentastic success of the autombile industry rests on credit, not only to build factories and buy tool.s but also to finance consumer purchases. Many motorists are making payments on a car most of their
adult lives; and many cars are mortgaged from the dealer's showroom to the junk yard. The total amount of consumer credit outstaning today exceeds 90 bllion dollars. We have learned to accept this magnitude of credit because the key to mass purchase of 'big uicket" items is mass credit. If we are to make education as freely avallable to qualified students as automobiles, we must turn to dass credit. Surely the future earning power of high-talent manpower is as good security for loans as autcmobiles.

The greatest barrier to the use of credit to finance the student's expenditures for higher education is the unsuitability of mortgage-type loatis for this purpose. the automobile purchaser generally knows fairly well that his income ind his otrar obligationo will be while he is paying off his loan. The 18- or 19-year-old student usually has not even closen his vocation and cannot know what proportion of his future income he is compitting when he negotiates a conventional loan to pay for a college education. From his standpoint, equity-type financing--the pledging of a specific percentage of future income-would be far preferable to the fixed absolute obligation of mortgage-type financing.

What is needed is an intermediary which could provide to lenders the security of mortgage financing while providing to borrowers the flexibility of equity financing. The intermediary could achieve this transmutation of terms by applying some basic principles of social insurance, particularly the spreading of the risks involved over large numbers of boarowers. Repayment on the basia of a percentage of income vould cost some borrovers more than others, but insurance always involves great differences in payments in relation to benefits as between particular individuals. Those
borrowers who did not wish to pool their risks could atill assume the fixed obligation of a mortgage-type loan, and it would be possible to hedge by dividing one's borrowings between the two plans. Thus, ample credit would be readily available on very reasonable terms to every student admitted to college, Under these circumstances, requiring students to underwrite some part of the increasing costs of higher education would not conflict with our ideal of equality of educational opportunity, Rather, with this : ? approach, we might move appreciably closer than we now are to the attainment of that ideal.

Only government, I think, could manage a credit operation of the scope that I have outlined. But in the long run this plan would mean far less government participation in higher education than any other proposal I have seen. This pian would move education closer to the private sphere of our economy than to the public sphere. We would provide the resources for the growth of education more through the market mechanism than through the political mechanism.

Our political leaders have of ten said that one of our notional goals must be to make it economically possible for each indivadual th get as much education as he can absorb. This plan would rake that poseible. Now is the time to find out whether we are really serious about that goal.


[^0]:    *Presidential. Address at Economics Society or Michigan, Ann Arbor, Varch 17, 1967. This 18 a revised version of a paper originally presented to the United States Senate Subcomalttee on Fmployment and Manpover on September 20, 1963.

[^1]:    *The acronym, HBLP, is olready in use in Vacsachusetts for $c$ modest "Higher Education Loan Plan." i propose that the nation borrow the initials from Massachusetts.

[^2]:    * Homen have participated in the IDEA loan program at about the same rate as men. But the "forgiveness" feature of these loans, which cancels as much as $50 \%$ of the loan for those who spend 5 years in teaching, makes them especially attractive to women.

[^3]:    *The corresponding estimates for women and non-whites are considerably lower, of course, although the increasing labor force participation rates of college-educated women and the lessening of racial discrimination are factors which would give these groups a higher growth rate than that appropriate for white males.

[^4]:    *There are a few limited exceptions: the beneficiaries of the G.I. Bills and those enrolled in the municipal colleges of New York City are examples.

[^5]:    *Some readers may object to any conlribution by the federal government. They should consider the fact that the average college graduate earns about twice as much as the average high school graduate; and increasing the number of college graduates oy the kind of nominal subsidy proposed here would undoubtedly increase federal income tax collections in the long run by a large multiple of the governmental outlays involved.

