This paper explores some questions about the use of income for determining repayment of educational loans. The plans generally call for a level of repayment to cover the initial advances, plus interest for a college graduate with average income, but would require less than full repayment for the students with low income, and over full repayment for students with high income. The recommendations from the Zacharias Report are reviewed, one of which is a buy-out feature whereby the successful student can minimize excess payments by opting at any time for repayment on a straight loan, 6% compound interest, basis. The question that must be answered is: where on the continuum of loan plans, from the straight bank loan to the pure contingency loan, do we want to be? To address this problem, the question of income as a good measure of liability is examined, including that of nonworking wives with education loans, and the conclusion is reached that an income tax on successful borrowers, as a means of covering losses of the loan fund, appears less fair than a general tax. Some implications of a contingency loan fund are examined in terms of the size of the loans, and some questions are asked that must be answered before a definite policy decision is made. (AF)
Contingent Repayment Education Loans Related to Income

By Gerard M. Brannon *

The discussion relates to the general idea of basing repayment of college education loans on the student's subsequent income. In one form this notion was advanced by Friedman, Vickery, and Killingsworth, et al. as a fundamental revision of the way of paying for higher education. Government could be a co-investor in the project of the student's education and share in the later income. More recently an advisory panel has proposed a specific contingent repayment plan which involves a proposed Educational Opportunity Bank which would make large loans to be repaid over thirty years under a formula like one-third of 1 percent of income for each $1,000 of loan. 

I assume that at this point in our discussion the general issues involved in contingent repayment education loans are known. I shall explore some detailed questions about the use of income for determining repayment which will lead to some broader comments on the role of contingent repayment education loans.

There Are Two Sides to Relating Repayment to Income

The heart of the contingent loan repayment plan is the assertion that additional earning capacity due to college education is an appropriate index of the student's liability for payment on loans which will cover a large part of the cost of higher education. The plans generally

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contemplate a level of repayment to cover the initial advances, plus interest, for a college graduate with average income but would require less than full repayment for the student with low income and over full repayment for the students with high income.

This objective ought to be analyzed separately for the high-income and the low-income cases.

For above average incomes, it is significant that many supporters of the original idea have weakened in their enthusiasm for the conception of allowing the student to sell equity shares in the economic venture of his education. The Zacharias Report includes a recommendation for a buy-out feature whereby the successful student can minimize excess payments by opting at any time, for repayment on a straight loan, 6 percent compound interest, basis. This seems to be a ceiling on repayment. The borrower could decide to opt out of the contingency when the payments already made were the equivalent of a "straight six." The "profit" to the Educational Opportunity Bank on these cases would be the difference between its borrowing rate plus its expenses and the 6 percent ceiling.
The Zacharias Report appears optimistic in putting the bank's borrowing rate at 4 percent. If the bank is to break even, the buy-out rate undoubtedly has to be higher than 6 percent; but raising the buy-out rate would increase the element of adverse selection.

The other part of income contingency is the feature of less than full repayment for the unsuccessful student. This is in one sense a substitute for the feature of our present college loan program, which encourages financial institutions to make education loans by a guarantee to the institution against loss. This guarantee covers, in a very informal way, the eventuality that the borrower will earn little income. The guarantee comes into play when the borrower decides repayment is so burdensome that he will make collection so difficult for the bank that they will write the loan off as uncollectible. Compared to this informality, a procedure that specified just how much a financially unsuccessful borrower should pay on his debt is attractive in principle but possibly expensive.

These comments serve to reinforce the not very surprising point that there is a continuum of education loan repayment plans stretching from a traditional bank loan to pure contingency. Our present guaranteed loan program has some provision for contingency, and the Zacharias Report has considerable provision for non-contingency.

Where in the continuum of loan plans do we want to be? Should repayment be loosely or closely connected with subsequent income?
Is Income a Good Measure of Liability?

To address this question, we may start by observing that the original concept calls for earned income not property income. In the income brackets above $10,000 AGI from which most of the repayment would come, about 15 percent is from the profit share of unincorporated business. This is a category where division into earned and property concepts is particularly difficult, and recourse must be had to fairly arbitrary formulas. I suggest that in this 15 percent area any earned income formula that we might apply is not materially better than allocating the burden to general taxation.

In the area of clearly earned income, I would like to throw out for discussion my reading of the data on education and income from the Survey of Consumer Finances analyzed by Morgan, David, Cohen, and Brazer. Their published results suggested that by employing 3 variables, in addition to a combined age-education variable, they were able to explain 35 percent of the variance of observed incomes. As measured by the beta coefficients, their age-education variable accounted for only about a fifth of the explained variance, p.429. I am not prepared to undertake any detailed defense of this result. The SCF sample was small. Results for a later year published by Morgan suggested a higher income-education effect. If education improves, the effect could be higher, etc. I believe that if one starts with the apparent implication of the Michigan data, that about
7 percent of the income variance is explained by age-education, we could make a lot of statistical concessions and still conclude that not very much of the variance is explained by age-education.

I would combine with this statistical observation the observation that businesses do not often make contracts involving a share of the profit to provide inventory loans. In business, contracts in which an advancer of capital gets a piece of the action instead of fixed interest are rather limited to cases where the income is likely to be very strongly affected by the capital advanced. A share of all future income is an obligation not lightly assumed, as is recognized in the concern for a buy-out in the Zacharias Report.

The treatment of wives with education loans seems to involve dilemmas which can be avoided only at the expense of sacrificing economic income concepts and further reducing the technical efficiency of income as a measure of the marginal product of education. The problem is largely the case in which the wife has an education loan liability but no earned income. The choices appear to be to spread the burden of all no-income wives in some broad way or to link this burden to the husband's income.

The Zacharias Report would make any repayment dependent on family income. The practical advantages in this are two. One is that it avoids the undesirable announcement effects involved in telling girls that expect to retire from the labor force after marriage that their education loans
are probably free. The other advantage is that our income tax system does not require separation of the earnings of the respective spouses, and it would be preferable to use the family income data that our tax system produces.

Even if we accept repayment related to family income as a practical solution, there is no getting away from the fact that this further reduces the efficiency of subsequent income as a measure of liability for meeting college costs. The spouse's income may be a practical measuring rod, but it is not a theoretically satisfying one unless we regard a university as being in part an agency for arranging financially advantageous marriages.

The thrust of this argument is that an income tax on successful borrowers, as a means of covering losses of the loan fund, appears less fair than a general tax. Let me relate this to the broader questions involved.

Some Implications

The issue is still: How do we pay for higher education? The division of the cost between the student and society is still the fundamental question. It is obvious that a system of tax credits to parents is a most inefficient means of handling the problem. Outright public payment through free tuition raises the serious question of how to treat the private school, and it may not produce enough money.
The Zacharias Report argues that a reasonable solution is to provide the student with greatly increased purchasing power through loans that need not be repaid if the student's subsequent income experience is unfavorable. The immediate effect that is anticipated is an enormous increase in the willingness to undertake education loans and in the size of loans made and in the levels of tuition paid. This is supposed to make education more consumer oriented and freer of political constraints arising from unwillingness of state legislatures to underwrite improvements and to put education decisions more in the hands of the student rather than the parent.

The key to all this is the feature of cancelling repayment liability where subsequent income is bad. The prospect that a student will have to repay more than the full loan plus interest does nothing to make borrowing more attractive, a point which the Zacharias Report recognizes in its buy-out provision.

It seems to me that the key issues could be stated in this way:

(1) To deal with non-repayment of student loans, should we guarantee financial institutions against non-collectibility or resort to an income measure of liability for repayment?

(2) Should the non-repayment provision apply whenever income is below average or only when it is far below? How generous will it be?

(3) How shall we cover the losses involved in non-repayment? By payments from the Treasury or by higher taxes on successful borrowers?
Finally, the key educational question is: Should the loans be large, going up to, say, $15,000 for four years of college, or should they be smaller, going up to, say, the present program ceiling of $5,000 for four years?

These issues are interrelated. The objective of large loans for many students requires, I think, a generous provision for non-repayment. If we assume large loans and a generous non-repayment provision, we have large losses. If these are to be met by general taxes rather than by payments in excess of full repayment by successful borrowers, then the figure for total income on a family basis is quite satisfactory as a measure for non-repayment. In this case my argument that income does not provide a good measure of the marginal return on a college education is not relevant. There would be no need to separate earned and property income, and including the spouse's income is acceptable, because we are just using income to identify cases where full repayment is a hardship. My argument about the income measure was that it was not closely enough related to the fact of college education to justify covering the non-repayment losses by a levy on successful borrowers, as distinct from successful taxpayers.

On the other hand, if the loans are small there is probably no need for an elaborate income system to regulate repayment; and the informal procedures of non-collectibility might be good enough.
The key choice in all of this is what education goal you want to accomplish with the contingent payment plans. If it is to shift higher education financing on a rather massive scale to going through the student, the program has to involve generous forgiveness provisions, simply to get students to take large loans. This will involve large losses to the fund. There will be, I think, net losses to the fund, because of the practical need for a buy-out provision, and as I have argued, because a tax on successful borrowers is not very equitable. The losses will have to be met by general taxation.

The hope in the Zacharias Report to induce large loans then rests upon it resulting in large losses. In one sense it is a modified tuition grant proposal in which the tuition grant is very large (covering more than tuition) and is accompanied by the stricture "Repay if you can." The expected value of this grant in the probability sense is less than the face amount depending on the generosity of the non-repayment provision.

It differs from the present loan guarantee where the grant element is limited to the provision applicable in some cases, for less than market interest and to the uncertain possibility of non-collection.

Both of these versions seem preferable to flat tuition grants; but like any tuition grant, they raise the fundamental issue as to whether our education machinery would be better if money were given to the students to buy education or if money is given to institutions to meet the losses they incur in providing education.
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