# A New Approach to the Financing of Medical Education

by Karl Shell

THE cost of medical education is rising at a very rapid rate. How is this cost to be financed, while the independence of private medical schools is maintained? In the face of rising tuition charges, how can the number of practicing physicians be substantially increased? And how can we hope to increase substantially the participation in the American medical profession of our disadvantaged minorities?

I propose that the federal government establish a Contingent Repayment Loan Scheme for the purpose of financing the education of medical students. Following the Panel on Educational Innovation[1], we might refer to such a scheme as the Educational Opportunity Bank. The Bank would be authorized to borrow money at government rates and lend money to medical students, regardless of the student's resources. Ideally, the student should be able to borrow an amount sufficient to cover tuition, fees, and subsistence cost (including room and board charges). In exchange for the loan, the borrower would pledge a given percentage of his annual income for a fixed number of years after completion of his medical education. The Bank, when fully established, would co-ordinate its activities with the Internal Revenue Service in collecting repayments. The scheme would be designed so that in the long run the Bank would be selfsustaining and would require minimal, if any, subsidization by the federal government. For example, preliminary calculations suggest that if the repayment period is limited to the twenty years beginning with the physician's first year of practice, then the medical student should be able to borrow funds for the full cost of his medical education in return for a pledge to pay three percent (3%) of his medical earnings in each of his first twenty years of professional practice.[2]

Professor Shell is associate professor of economics at the Wharton School of the University of Pennsylvania.

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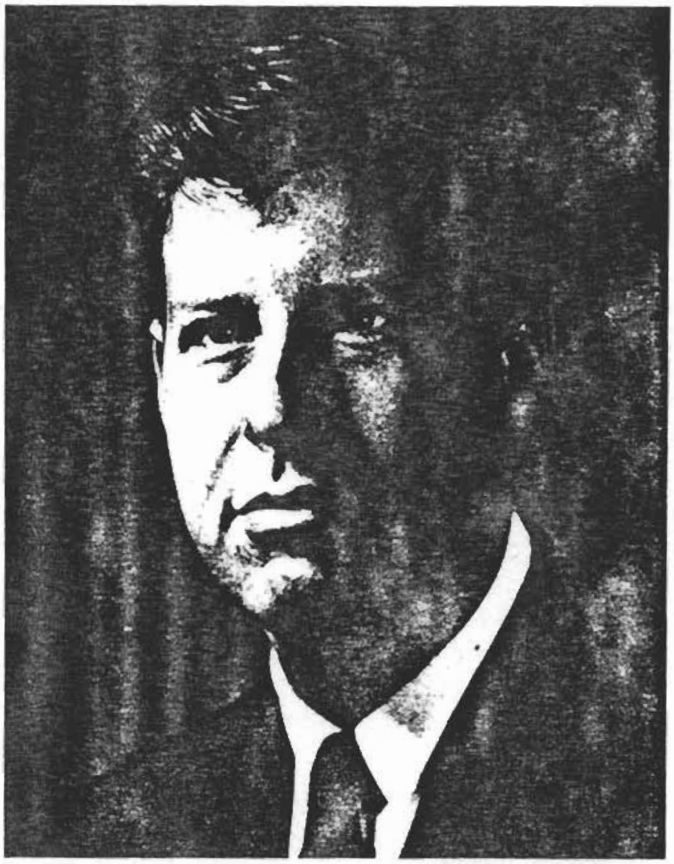
## Advantages of a Contingent Repayment Loan Program for Medical Education

In our society, investment in education cannot be financed on the same terms or with the same ease as investment in machines or in houses, or indeed, purchases of automobiles. The reason for this is quite simple. When one borrows to purchase a machine, the lender will get some security for his loan in the form of a residual claim upon the machine. If the borrower defaults on the loan, the lender can claim his machine. On the other hand, if a loan is made to finance an individual who does not possess any *tangible* assets, the lender possesses no such security. However, the Ed Op Bank would be able to make such loans because it would be able to employ taxation powers similar to those of the Internal Revenue Service to ensure that the pledge be fulfilled. (It is not merely that a conventional loan is "risky," it is almost an invitation to default. The individual with few tangible assets and large debts will



be quite tempted to declare himself bankrupt. Think about the case of a brilliant medical student who has amassed large conventional debts. His only *tangible* asset is that second-hand sofa in his student apartment. Even though his prospective income is quite dazzling, without strong moral fiber he must be tempted to declare himself bankrupt. He thus erases his conventional debts while only losing possession of his second-hand sofa. Parenthetically, we still "need bankruptcy laws in order to insure individual freedom. Without the possibility of bankruptcy, the danger of men entering involuntary servitude would be great.")

There is a further difficulty that we associate with the process of investment in education (or investment in human capital — as economists call it). That is the inherent riskiness of the return from the individual investment. Although the average anticipated return may be high, as in the case of medical education, there is still a large variation about this average. Thus, an individual who is reluctant to borrow money in the form of a conventional fixed money repayment loan may be prepared to borrow in the form of a contingent repayment loan where, if his lifetime income is low, repayments are small. I think this is especially true in the case of the financially poor high school or college student unfamiliar with professional salaries and their expected rates of growth. The Ed Op Bank mutualizes the risk of investment in education in the same way that fire insurance mutualizes the risks of investment in housing.

There are at least two advantages of a Contingent Repayment Loan scheme over a program relying heavily upon federal scholarships, or indeed over a program relying heavily on scholarships no matter what the source. (1) Many of the benefits of medical education accrue to the individual medical student. This makes it desirable that the [illegible] tion of his education. Of course, there are benefits from medical education that are diffused throughout society and do not accrue to the specific "buyer" of medical education. For this reason it may be desirable that the "average interest rate" charged by the Conditional Repayment Loan Scheme be lower than the market rate of interest. (2) Because of its immediate impact on the federal budget, any federal scholarship program is like to be limited in scope. If it is restricted to tuition and fees, financially poor students who cannot afford to pay for room and board and other subsistence costs will continue to be excluded from medical school. If it is restricted to academically elite students, then students who are not destined to be at the very top of the class, but may benefit a great deal from medical education, would be excluded. This might include students from disadvantaged areas, where currently medical care is the poorest in our country. In summation: Because the Ed Op Bank would improve an imperfect capital market while encouraging prospective students to balance costs and benefits in making decisions about education, the Bank is likely to promote a more economical use of our resources than a program relying heavily upon federal scholarships.

Similarly, the Ed Op Bank is to be preferred to a system relying heavily on federal income tax credits or deductions for parents of medical students. Tax credits and tax deductions may ease the burden on middle class families, but will not be very helpful to the financially poor student.

There are certain advantages of a Contingent Repayment Loan Scheme that derive from the fact that the program would be co-ordinated with the federal income tax. This coordination should allow for negligible costs of collection. But more important, it makes it possible to collect repayments over long periods (twenty or thirty years) and makes the contingent repayment feature feasible.

THE point is this: Our society possesses tolerably good institutions for investment in things (machines, structures, and so forth). Our institutions for allocating investment resources to people (especially in education) are substantially less than perfect. I would like to see us develop some institutions that will improve our society's ability to invest in people. I think that the Ed Op Bank will very much improve the allocation of resources to our post-secondary students. Such an arrangement is especially desirable for medical students, where the educational process is so long, the ultimate expected rewards are so high, the shortages of medical personnel are so great, and where it is especially imperative that we open our medical institutions to members of the black community and other disadvantaged groups.

It is my opinion that an Ed Op Bank would have enormous potential for financing medical education. (At the same time, I also feel that an Ed Op Bank for medical studies would be a useful social experiment, a pilot project for a larger scheme designed to cover all post-secondary students.) But what are the prospects that such a scheme will be initiated in the immediate future? There is, I must confess, substantial opposition to the general idea from administrators of public universities, who incorrectly believe that such a scheme is a threat to their continued contribution to American education. So I cannot say that the over-all prospects are extremely bright; on the other hand, the prospects are by no means dim. The idea is important and I believe will be widely accepted in the United States one day. In the meantime the advocates of such a program should improve the climate as best they can. There is no reason why (at least on an experimental basis) the scheme could not be privately sponsored at its inception. It might be supported initially by a consortium of medical schools or medical alumni associations. Conventional scholarship money could be multiplied in productivity if used as seed money for an Ed Op scheme. Indeed, a medical school could further multiply this seed money by employing it as a guarantee to a conventional lender. The possibilities for such action are quite abundant and are probably best left to the imagination of medical school deans and alumni associations.

## The "Opt-Out" Provision

I often encounter one particular technical question about the Educational Opportunity Bank.[3] There is the worry that because of expected high repayment rates, the most promising students will avoid incurring conditional repayment loan obligations. If this were to become the case, the program would be unstable, because the prospects of the remaining students might be poorer than average, requiring higher repayment-tax rates than would otherwise be the case. The Panel on Educational Innovation has recommended a remedy to this problem of adverse selection. The remedy, which I heartily endorse, is that a borrower be allowed to "buy out" of the program, treating his loan as a conventional six or six and a half percent loan, if that is to his advantage. For purposes of buying out (or "opting out"), a borrower's previous repayment taxes would be credited toward payment of interest (at say six percent) and reduction of the principal of the loan. This provision minimizes adverse selection of participants in the scheme.

Since a contingent repayment loan also provides life insurance, health insurance, and income insurance features, I think that such a loan at six percent rate of interest (or even somewhat higher) should be desirable even to those students who feel that they have exceptionally good prospects. Another closely related technical question that often arises: I envisage that the Internal Revenue Service would treat Ed Op loans in the same way it treats mortgages and other loans. For purposes of personal income taxation, payments to the Ed Op Bank which could be interpreted as interest on a 6 percent loan would be deductible from income. The remaining payments, if any, would be interpreted as reduction in the principal and would not be deductible from income.

## The Ghetto Student

I think that the social need to encourage black students (and other students of disadvantaged backgrounds) to enter the American professions, especially the medical profession, is very great indeed. The Educational Opportunity Bank, while facilitating the goal of fuller participation in American professional life, certainly cannot be expected to do this job alone. The point I wish to make is that a Contingent Repayment Loan scheme need not in any way interfere with programs designed to achieve this laudable goal. Indeed, following the Panel on Educational Innovation there is no reason why an Educational Opportunity Bank could not be complementary to an Educational Opportunity *Grant* scheme for medical students. Thus a student from a financially poor family might be given a grant depending upon family income while paying for the rest of his medical education from funds borrowed from the Educational Opportunity Bank.

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**FOOTNOTES**

1. *Educational Opportunity Bank: A Report of the Panel on Educational Innovation*, Washington, D. C.: U. S. Government Printing Office, 1967.

2. In the literature on the economics of education, loans in which repayment is made to depend upon future income are referred to as Contingent (or Conditional) Repayment Loans. The feasibility and desirability of various Contingent Repayment Loan schemes have been discussed by several authors including Milton Friedman. "The Role of Government in Education," in R. A. Solo (ed.), *Economics and the Public Interest*, New Brunswick: Rutgers University Press, 1955, pp. 135-143. For a detailed study on the feasibility and desirability of such a scheme for undergraduate education, see K. Shell, F. M. Fisher, D. K. Foley, A. F. Friedlaender, (in association with J. Behr, S. Fischer, R. Mosenson), "The Educational Opportunity Bank: An Economic Analysis of a Contingent Repayment Loan Program for Higher Education," *National Tax Journal*, Volume XXI, No. 1, March 1968, pp. 2-45.

3. For a full discussion of the myriad technical questions see Shell *et. al., op. cit.*.