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## DISCUSSION

*Includes comments by Alice M. Rivlin, of the Brookings Institution, and Gerald G. Somers, of the University of Wisconsin, who were the discussants. The recorded oral presentations were edited by, or with the cooperation of, the speakers. Remarks made during the open discussion period are not included.*

**Alice M. Rivlin:** Today, I would like to organize my remarks around three questions: (1) Does research in human resources make any difference to policy makers? (2) How much has it improved policy decisions so far? (3) How can it be made more useful?

First, does research in human capital or human resources matter at all to policy makers? Are they listening? Those of you who have worked in this complex and difficult new area must have occasionally wondered—as you labored over the measurement of foregone earnings or an allowance for ability differences or the choice of the proper discount rate—whether it mattered what you did and whether anyone was ever going to read your work and use it.

I would like to assure you that policy makers *are* listening, perhaps even too hard. They are grasping at shreds of evidence, including the very preliminary results that are coming out of research and seem to offer some guidance for policy decisions.

It is hard to document this judgment, but let me offer three examples of policy decisions that have at least been influenced by research in human capital. First, I believe that the research in human capital and human investment that began to appear in the late 1950's and early 1960's played a role in increasing federal funding for education, health services, manpower training, and other human investment programs, especially for the poor, in the middle 1960's. We probably would have had a war on poverty even if Theodore Schultz and Gary Becker had never written anything, but it might well have been a different kind of war, with far more emphasis on income transfers and less on human investment. The research dramatized the concept of human investment and gave people—even people not familiar with the details of the studies—the basic notion that such investment could pay off. It was this fundamental view of education, training, and health services as investments in people that influenced the thinking, not the rate of return

estimates themselves. The strategists of the war on poverty picked up the concept of human investment and jumped, perhaps too quickly, to the conclusion that these investment programs would be most effective in reducing poverty.

A second example, for which there is more evidence, is the disenchantment with human investment programs that took hold of Washington in the late 1960's as a result of disappointing evaluations of such programs as Title I of the Elementary and Secondary Education Act, manpower training, and Headstart. Hope had been high—too high—that human investment would produce dramatic results quickly. When studies did not bear out these hopes, there was an overreaction and a definite shift in federal strategy from investment programs to income transfer programs. There were, of course, other reasons for this shift. The Vietnam War and the threat of inflation were making it necessary to hold back as much as possible on nonmilitary spending. It was very difficult to stem the growth of transfer programs, so a tight lid had to be placed on the investment programs. Nevertheless, one of the contributing factors to this shift in strategy was clearly the evaluation results. Rightly or wrongly, policy makers from the President on down got the impression that human investment programs, especially in education, simply were not working. They decided to hold off on increasing expenditures for these programs until something could be learned about how to get results.

A third example of decisions affected by research in human capital is the impact of recent research on the distributional effects of higher education. The general finding of the researchers that public higher education involved a substantial public subsidy to middle- and upper-income groups should not have been startling or unexpected. Most of us knew that the poor were underrepresented in institutions of higher education, even publicly supported ones, and that, to the extent the poor went to college at all, they went to less costly public institutions, especially to junior colleges. Most of us also knew that the sons and daughters of the well-to-do attended more costly public institutions and stayed there longer. Nevertheless, the work of W. L. Hansen and Burton Weisbrod and others has caused policy makers to stop and think about the way higher education is supported, both at the state and the federal level. State policy makers are questioning whether a low tuition policy is such a good idea if it entails substantial public transfers to people who could afford to pay for higher education and would probably go to

college even if the subsidy were less. It is now respectable to argue that raising tuition in public institutions and using the money for student aid to the really poor would be preferable on distributional grounds to current policy.

At the federal level, these research results have influenced, or at least reinforced, the recent shift in federal strategy from institutional aid to student aid. The results have supported the contention that aiding students is a more effective way to ensure equality of opportunity in higher education than giving construction money or other institutional aid to colleges and universities. All political decisions are complicated, of course, but the research evidence on distributional effects of present state support for higher education has certainly been among the many factors which have influenced both this administration and the last one *not* to propose a program of general federal aid to higher education institutions.

My conclusion is, fellow researchers on human capital: Policy makers *are* listening. They are eager for help. They may even pick up your results and run with them before you think they are good enough to be used as a basis for action.

To the second question, "How much help has the research in human capital been?" my answer is "only a little." The work has thrown some light on the distribution of human capital. It is clear that human capital is quite unequally distributed, although not as unequally as non-human capital. The research in human capital has also been useful in predicting how changes in major types of human investment might be expected to affect economic growth and the distribution of income. It has not, however, been very useful in telling us specifically what we ought to be doing—how to invest in human capital most effectively. The microeconomic side, the production function, if you will, has not been greatly elucidated. Research has not yet told us much about how to organize a health system effectively, how to produce education efficiently, how best to retrain workers, how to promote migration, and so forth.

It is my view that these micro decisions will be crucial decisions of the 1970's. Public concern seems likely to focus more and more on the problem of how to produce effective public services. Research, if it is to be useful, must focus on these production problems as well.

**Gerald G. Somers:** My remarks will relate primarily to the manpower area, only one area of investment in human beings. I was interested in

Professor Schultz's stress on supply and demand in research on human capital and the implication that the demand for research and information is very great. At my university of late one comes to wonder whether the demand for our research is really that large, since our legislature and regents insist that professors should spend more time in the classroom. The pressure is growing, not only at Wisconsin but also at Michigan and a number of other universities, to reduce the research time of professors. With this happening, we have to be more concerned than ever with the allocation of scarce resources. We may not be able to do as much research as in the past. We have to be increasingly careful that research on human capital should be an investment with a positive rate of return.

The key question that came to my mind as I read through Ted Schultz's excellent paper (and here's where I argue a bit with Alice) is why the human capital tool of analysis, honed to a fine point in the 1960's, did not have a greater impact on manpower policy. Data and the computer became more readily available. All of the forces were right for a tremendous influence on the development of manpower policy, which also burgeoned in that decade. The thrusts in federal manpower policy that began in 1961-62 and evolved in a cumulative fashion as the decade progressed were closely related to the concept of human capital. I am not denying that the discussion of investments in human beings may have been connected with the general idea of training people, or of giving them basic education courses, or of helping them to realize their full potential through vocational education. But what interests me is that the manpower policy changes that occurred appeared to be coincidental. In the 1960's there was a manpower policy revolution, with continuing revisions and additions to manpower programs. However, the policy changes did not seem to reflect the theoretical and empirical work on investment in human capital, on the cost-benefit analysis, on the analysis of the rates of return to various kinds of training, and the returns to migration, mobility, or labor-market information. The question is why? This was a golden opportunity. At a time when Congress was eager to expand programs in this area and new policies were being forged, when we had a growing number of cost-benefit analyses in the manpower field, why did the analyses of investments in human capital fail to influence the policy makers?

For example, the shift in emphasis from institutional to on-the-job training began in the Johnson administration; and there was a major concentration in the Nixon administration on the NAB-JOBS program

(the National Alliance of Businessmen's training in the business sector), a program of subsidizing private employers. Employers are urged to hire and train the disadvantaged worker, and, if the job remains filled, the employer gets \$3,000. Presumably this is compensation for taking on someone whose marginal productivity is below the going wage, and there may be a sound economic basis for such a program. But why did manpower policy take this turn at this particular time? I can't recall anything in the cost-benefit analyses which would call for such a change in direction. The writing of Mincer showed a positive return to on-the-job training, but it was a broad concept of on-the-job training, including "learning by doing," with data derived neither directly from cost records of employers nor directly from opportunity costs of the trainees. This was an imaginative approach, given the lack of data. But it did not tell us that we ought to give employers a subsidy to hire the disadvantaged. Some might place a contrary interpretation on Mincer's results: that employers should not require a government subsidy because of the big payoff of on-the-job training. As it turned out, with higher unemployment in 1970-71, the NAB-JOBS funds were not fully used. Employers did not even want the subsidy. The times were such that the shift from institutional to on-the-job training proved to be not a very wise departure for manpower policy. Surely some of the cost-benefit analyses should have provided more guidance for the policy makers on this question.

Now the present major thrust of the Nixon administration is the Manpower Revenue Sharing Bill. Manpower funds are to be allocated to the states and to the localities which are to be given substantial freedom in planning and executing the manpower programs. I see nothing in the investment analyses of human capital or in the cost-benefit studies that leads us to that conclusion. In fact, on the basis of evidence, one might well conclude that this is a questionable policy at the present time. Regional and local authorities are no more able than federal agencies to run manpower programs. I agree with Alice that there has been a checkered career for manpower programs in the federal agencies; but the evaluations do not show that we would have done better if we had passed all of the manpower funds to the local communities to run the programs as they saw fit. Some proposed legislation is based on the current WIN program—Work Incentive Program for welfare recipients. What do we know through cost-benefit analyses, from research on investment in human beings, that suggests that it would be wise to insist that mothers on welfare take training programs? What leads us to believe

that this would pay off in terms of equity or efficiency? Some are being trained for low-level service jobs and others are being financed for a university education leading to teaching degrees. Given the possible family needs for the services of welfare mothers at home, the first type of training is a questionable type of investment. And given the growing surplus of teachers, one cannot be sure that the latter is the best investment. If we look at it purely as a consumption effect, most of us would take pleasure in a welfare mother's achievement of a bachelor's degree and a teaching certificate. However, is this a wise investment in human capital from the standpoints of employment and earnings? The evaluative research provides no proof that it is. Whereas Alice seemed to be impressed with the big impact research on human capital has had on policy formation, I am impressed with the small effect it has had on the variations in manpower policies and on the adoption of new programs.

The question raised by a reading of the Schultz paper is why research on human capital has had so little effect on the changes in manpower policy. One easy conclusion is that "it's all a matter of politics." If the administration decides that manpower programs should be concentrated in the private sector, this will be the direction of legislative change even when there is no evidence that the rate of return on private training of the disadvantaged is greater than that on public training. Similarly, if the administration has a political preference for revenue sharing and decentralization in the realm of social policy, manpower proposals will follow in this direction regardless of the conclusions reached by the analysts of human capital investments.

However, it is too easy to simply dismiss the limited role of human capital analyses by saying that manpower policies reflect the political climate. As Alice Rivlin has pointed out, congressmen are not oblivious to research findings and policy evaluations. If the facts and conclusions are presented clearly and persuasively, the analysts can have some impact on changes in manpower programs and other investments in human resources.

One is led to the conclusion that it is not only in the political system but in ourselves where we have failed to have a greater impact on the modes of investment in human capital. The deficiencies may well be in the theory of human capital and in its application to manpower policy. Professor Schultz has raised the question of the narrowness of the human capital concept. But he has not fully pursued the implications of that narrowness for the development of social policy. He has noted that human capital is an economic concept, dealing with costs and bene-

fits essentially in economic terms. He suggests that efforts should be made to broaden the social context of human capital analysis. In my view, the concept must be broadened if human capital analysis is to influence congressmen, administrators, and manpower policy.

In suggestions for further research, Professor Schultz might have gone much further in urging more research on procedures for expanding the concept of human capital. It is really a task for the theorists of human capital as well as for the research investigators, and I urge more theoretical work along these lines upon our chairman, Gary Becker, as well as upon those engaged in empirical studies.

Congressmen and administrators cannot be fully convinced by research on human capital when the findings are couched in terms of monetary benefits, while the needs of their constituents may be primarily social or psychological in nature. Professor Schultz has noted that investments in human capital lead to a stream of earnings and/or satisfactions. More must be done to incorporate measures of satisfactions and dissatisfactions in the costs and benefits of manpower programs. This requires a cooperative effort of economists, psychologists, and sociologists. The major advances in both the theory and practical application of investment in human capital are likely to be along these lines in the next few years. There have already been some good beginnings. There have already been some measures of satisfaction utilized as dependent and independent variables in regression analyses of manpower programs. These variables require further refinement. The recent analyses of leisure and other nonmarket activities as they relate to the investment in human resources will also help to broaden the concept of human capital and make it a more useful tool of analysis.

The second reason for the limited impact of human capital analysis on manpower policy derives from the heterogeneous nature of the investment in human capital, and in our failure to recognize the significance of this heterogeneity. As we all know, the weakness of some of the growth models lies in the fact that they usually aggregate all of the capital investments, assuming that the rates of return to all capital investments are equal. As Professor Schultz has pointed out, it is the very inequality in the rates of return to different kinds of capital investment which is the essence of economic growth. In many cases, the variation in rates of return to different investments in human capital is also the essence of the growth of human beings. We often tend to forget this point as we evaluate the investment in human capital as an aggregate with a single rate of return. Or, more frequently, we have separate evaluations

of the investment in a training program, in a vocational education program, in a labor mobility program, or in public education. There has been only a limited effort to analyze the interaction of these various investments when they impinge on the same human being. We know very little about the results of the interaction of manpower training and subsidized mobility, two programs in which the federal government has invested funds. We know little about the results of the interaction of preschool education, basic public education, and adult education. Nor do we know much about the relationship of these types of education to vocational training. Under what circumstances does an investment in basic literacy training for adults give a positive rate of return, both economic and noneconomic? Is it true, as one or two recent studies seem to show, that such literacy training for adults, when not accompanied by occupational training, provides little or no benefit for the recipient?

To what extent is one type of investment in human beings cancelled out by another? For example, do government subsidies to move workers from depressed rural areas to city employment opportunities make it more difficult to convince employers to hire and train the existing ghetto residents of that city? Professor Schultz has asked why the government hasn't done more to guide migration. Why has there not been greater public investment of this type? Perhaps if there were more research on the interaction of the investment in mobility with other types of public investment, such as those in training and education, a more convincing case could be made for relocation subsidies. Limited research has shown that employers in one large Midwestern city prefer the white Anglo-Saxons brought in from the rural areas to the minority disadvantaged whose employment the government is trying to promote. Other research has shown that the combined retraining and relocation of workers from depressed areas has a higher rate of return than either retraining or relocation carried out separately. Just as in the combination of basic literacy instruction and occupational training, certain combinations of investment produce a much higher rate of return than separate investments.

Why have we not had a greater impact on the development of manpower policy? The answer may well lie in the need for a theoretical broadening of the concept of human capital and for further empirical research on the interaction of the varying investments in human beings. If policy makers are to be influenced by the analysts of human capital, the analysts must make a more convincing case.

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